



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

**Permittee Name:** NEVADA GOLD MINES TURQUOISE RIDGE  
2055 GETCHELL MINE ROAD  
GOLCONDA, NV 89414

**Permit Number:** NV0021725

**Permit Type:** MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL FACILITY THAT DISCHARGES NON-PROCESS WASTEWATER

**Designation:** MAJOR NPDES

**New/Existing:** EXISTING

**Location:** TWIN CREEKS MINE, HUMBOLDT  
1505 TWIN CREEKS MINE ROAD, GOLCONDA, NV 89414  
LATITUDE: 41.224667, LONGITUDE: -117.151667  
TOWNSHIP: ELKO, RANGE: 43, SECTION: 31 & 32

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	FLUME 1 -WEST POND DISCHARGE	External Outfall		41.216753	-117.163363	HUMBOLDT RIVER VIA RABBIT CREEK AND KELLY CREEK
002	FLUME 2 -OLD PONDS DISCHARGE	External Outfall		41.217093	-117.163360	HUMBOLDT RIVER VIA RABBIT CREEK AND KELLY CREEK
003	FLUME 3 -EAST POND DISCHARGE	External Outfall		41.216745	-117.162385	HUMBOLDT RIVER VIA RABBIT CREEK AND KELLY CREEK
01D	RABBIT CREEK D/S OF FLUMES CONFLUENCE	Receiving Water - Ambient		41.211186	-117.160422	HUMBOLDT RIVER VIA RABBIT CREEK AND KELLY CREEK
SUM	SUM OF 3 FLUMES	Sum		41.211186	-117.160422	HUMBOLDT RIVER VIA RABBIT CREEK AND KELLY CREEK

**Permit History/Description of Proposed Action**

The Permittee, Nevada Gold Mines Turquoise Ridge, has applied for the renewal of National Pollutant Discharge Elimination System (NPDES) permit, NV0021725, for the Twin Creeks Mine located at 1505 Twin Creeks Mine Road in Golconda, Humboldt County, Nevada. The Permittee proposes to continue discharging treated groundwater to the Humboldt River via Rabbit Creek and Kelly Creek.

The permit was first issued in November of 1990. The permit was last renewed on May 20, 2011, and expired on May 19, 2016; the permit has been administratively continued since.

**Facility Overview**

A series of in-pit and perimeter groundwater dewatering wells lower the water table at the mine to ensure stability of the open-pit mine walls and to facilitate optimum recovery of the precious metal resources. Groundwater from the pit dewatering system is pumped to the facility's Water Distribution Pond (WDP), a seven (7) million gallon, 80-mil high density polyethylene lined (HDPE), pond which is also referred to as the Sky Pond. The WDP also includes a leak detection system comprised of a geo-composite underdrain system located between the liner and 6-inches of compacted, fine grained liner bedding material.

Groundwater intercepted by the dewatering wells, which is pumped to the WDP, can contain elevated levels of naturally occurring soluble arsenic with a concentration level greater than 50 parts per billion (ppb). To reduce the concentration of arsenic in the intercepted groundwater prior to discharge to Rabbit Creek, the water from the WDP is sent to the mine's Water Treatment Plant (WTP) (see Attachment A). The WTP is designed to treat discharge water (i.e., intercepted groundwater that is not used in the facility's process or for dust control) at a rate of up to 10,000 gallons per minute.

Discharge water is gravity fed from the WDP to the WTP where ferric salt (i.e., ferric sulfate) and a polymer are injected prior to the water entering an 80,000-gallon reaction tank. In the reaction tank, the arsenic binds to the ferric sulfate creating clumps known as "flocs" of ferric arsenate which then sink to the bottom of the tank. The treated water then overflows (i.e., decants) from the reaction tank to one of two WTP ponds, the West and East ponds. Both ponds are lined with 60-mil HDPE. The West Pond is designed to hold 4,200,000 gallons while the East Pond is designed to hold 4,050,000 gallons. In the event of an upset to either the East or West ponds, or during times of emergency maintenance, the original WTP ponds, consisting of one 800,000-gallon pond lined with 80-mil HDPE and one 600,000-gallon pond lined with 60-mil HDPE, may be utilized. The West, East, and the two older ponds allow adequate time for any remaining ferric arsenate to settle to the bottom before the treated water decants through two available Parshall flumes. The flumes measure the flow before the water discharges into a conveyance ditch which delivers the treated water to Rabbit Creek. The ponds are periodically cleaned out and the sludge from the settled floc is hauled to either the Juniper or Pinion Tailings Impoundments located within the footprint of the mine.

Mineral processing and the management of all mineral processing fluids at this site are permitted under Water Pollution Control Permits NEV86018 Twin Creeks Mine – North Project and NEV89035 Twin Creeks Mine – South Project issued by the Bureau of Mining Regulation and Reclamation (BMRR).

The facility's Operation and Maintenance (O&M) Manual was last approved in September of 2013. The Bureau of Water Pollution Control's (BWPC's) Technical, Compliance, and Enforcement Branch requires O&M Manuals be updated once every ten (10) years. Therefore, an updated O&M Manual will be due to the BWPC within three (3) months of permit reissuance.

### **Outfall Summary**

Outfall 001 – This outfall is for the discharge of treated groundwater through Flume 1 from the West Pond.

Outfall 002 – This outfall is for the discharge of treated groundwater through Flume 2 from the two old ponds.

Outfall 003 – This outfall is for the discharged of treated groundwater through Flume 3 from the East Pond.

Outfall 01D – This outfall is for the discharge of treated groundwater to Rabbit Creek downstream of the three (3) flumes.

Outfall SUM – This outfall is the sum of treated groundwater discharged from all three (3) flumes.

### **Effluent Characterization**

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from October 2020 to September 2025, was reviewed as part of this permit renewal process. The long-term daily average discharge flow rate from Outfall SUM from October 2020 to September 2025 was 5.12 million gallons per day (MGD). The daily maximum flow for Outfall SUM is limited to 19.872 MGD; there were no exceedances of this limit during the period reviewed.

During the 3rd quarter of 2023, the 30-day average total suspended solids (TSS) limit of 20 pounds per day (lbs/day) was exceeded with a reported value of 25 lbs/day. During the 2nd quarter of 2024 the 30-day average total dissolved solids (TDS) limit of 500 milligrams per liter (mg/L) was exceeded with a reported value of 590 mg/L. During the 4th Quarter of 2021, the daily minimum pH limit of 7.0 standard units (S.U.) was exceeded with a reported value of 6.6 S.U. During the 1st quarter of 2023 both the daily maximum iron

limits of 166 lbs/day and 1,000 micrograms per liter (ug/L) were exceeded with a reported value of 267.01 lbs/day and 2,900 ug/L, respectively.

There were no other exceedance of any permit limits from October 2020 to September 2025.

### **Pollutants of Concern**

Pollutants of concern are any pollutant, or parameters, that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological conditions of the receiving water. According to the Reasonable Potential Analysis (RPA) that was conducted, pollutants of concern associated with discharges authorized by this permit include iron, total phosphorus, and turbidity. Turbidity and iron are also pollutants of concern, per the 303(d) list for the Humboldt River at State Highway 789. Furthermore, per the Code of Federal Regulation (CFR) Part 440 Subpart J, other pollutants of concern are pH, copper, mercury, lead, and zinc.

### **Receiving Water**

The receiving water is the Humboldt River via Rabbit Creek and Kelly Creek.

### **Applicable Water Quality Standards/Beneficial Uses**

The water quality standards (WQSs) for the nearest downstream control point, "Humboldt River at State Highway 789" (Nevada Administrative Code (NAC) 445A.1444) apply. WQSs for the Humboldt River, from the Battle Mountain Gage to where State Highway 789 crosses the Humboldt River, includes beneficial uses for watering of livestock, irrigation, aquatic life, recreation involving contact with the water, recreation not involving contact with the water, municipal or domestic supply, industrial supply, and propagation of wildlife. Additional WQSs applicable to this section of the Humboldt River include toxic materials (NAC 445A.1236) and 40 CFR 131.36(d)(11)(ii) and criteria for total ammonia (NAC 445A.118). Furthermore, water quality narrative standards applicable to all surface waters (NAC 445A.121) apply.

### **303 (d) Listing Status**

Section 305(b) of the Clean Water Act (CWA) requires states to report on the overall condition of aquatic resources. Section 303(d) of the CWA requires states to develop lists of all impaired waterbodies and create a priority listing of waterbodies for which plans are needed to restore water quality. Combining the requirements of these two sections produces the integrated report, which provides an overall assessment of the quality of surface water resources within the State. This report, required biennially by the CWA, also describes the extent to which current conditions are protecting the designated beneficial uses of Nevada's surface waters. The Division's most recent integrated report is the Draft Nevada 2024 Water Quality Integrated Report (dated May 2025).

According to the draft report, the following beneficial uses for the Humboldt River at State Highway 789 are not supported:

- The aquatic life beneficial use is impaired by turbidity and 96-hour iron.

### **TMDL**

Per section 303(d)(1)(C) of the CWA, states are required to develop Total Maximum Daily Loads (TMDLs) for parameters that do not meet water quality standards for a waterbody. TMDLs are implemented during the permitting process by limiting the load of that parameter that may be discharged to the receiving water. TMDLs for total phosphorus, TSS, and TDS are applicable to the Humboldt River from Battle Mountain to Comus (NAC 445A.1444).

The existing TMDLs for phosphorus, TSS, and TDS applicable to the Humboldt River are included in Nevada's Non-designated Areas 208 Plan (1993). However, as described in Nevada's 2004 303(d) Impaired Waters List, the existing TMDLs oversimplify a complex situation and does little to characterize sources to the level needed for a meaningful implementation plan. The 2004 303(d) Impaired Waters List further states that additional work is needed to better identify sources in terms of their contributions and locations.

The 1993 208 Plan states, “Any discharge which improves the existing water quality and has permitted discharge limits as strict or stricter than the water quality standards can be considered in compliance with an established TMDL.”

**Waste Load Allocation**

The existing TMDL for phosphorus, TSS, and TDS does not define any waste load allocations for point source discharges.

**Compliance History**

The facility was considered to be in compliance during the 2020 to 2025 reporting period.

**Proposed Effluent Limitations**

The discharge shall be limited and monitored as specified below:

**Discharge Limitations Table for Sample Location 001 (Flume 1 - West Pond) To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER

**Discharge Limitations Table for Sample Location 002 (Flume 2 - Old Ponds) To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	METER

**Discharge Limitations Table for Sample Location 003 (Flume 3 - East Pond) To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	003	Continuous	METER

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Turbidity	Daily Maximum		<= 50 Nephelometric Turbidity Units (NTU)	Downstream Monitoring	01D	Monthly	DISCRT
pH, minimum	Daily Minimum		>= 7 Standard Units (SU)	Downstream Monitoring	01D	Monthly	DISCRT
pH, maximum	Daily Maximum		<= 8.7 Standard Units (SU)	Downstream Monitoring	01D	Monthly	DISCRT
Chloride (as Cl)	Daily Maximum		<= 110 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Chloride (as Cl)	30 Day Average		<= 110 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Solids, total dissolved	Daily Maximum	<= 92810 Pounds per Day (lb/d) <sup>[1]</sup>	<= 560 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Solids, total dissolved	30 Day Average	<= 82866 Pounds per Day (lb/d) <sup>[1]</sup>	<= 500 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Iron, total recoverable	Daily Maximum	<= 166 Pounds per Day (lb/d) <sup>[1]</sup>	<= 1000 Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Monthly	DISCRT
Solids, total suspended	Daily Maximum	<= 4972 Pounds per Day (lb/d) <sup>[1]</sup>	<= 30 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Solids, total suspended	30 Day Average	<= 3315 Pounds per Day (lb/d) <sup>[1]</sup>	<= 20 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Sodium adsorption ratio	Daily Maximum		M&R Ratio (Ratio)	Downstream Monitoring	01D	Monthly	DISCRT
Phosphorus, total (as P)	Average	<= 17 Pounds per Day (lb/d) <sup>[1]</sup>	<= 0.10 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Nitrogen, nitrate total (as N)	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, nitrate total (as N)	30 Day Average		<= 10 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Nitrogen, nitrite total (as N)	Daily Maximum		<= 1.0 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Nitrogen, nitrite total (as N)	30 Day Average		<= 1.0 Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Nitrogen, ammonia total (as NH <sub>4</sub> )	Daily Maximum		M&R Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Nitrogen, ammonia total (as NH <sub>4</sub> )	30 Day Average		M&R Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Monthly	DISCRT
Color, apparent (unfiltered sample)	Daily Maximum		<= 75 Color - Platinum Cobalt Unit (col unit (pc))	Downstream Monitoring	01D	Monthly	DISCRT
Color, apparent (unfiltered sample)	30 Day Average		<= 75 Color - Platinum Cobalt Unit (col unit (pc))	Downstream Monitoring	01D	Monthly	DISCRT
Temperature, water deg. centigrade	Daily Maximum		M&R Degrees Centigrade (deg C)	Downstream Monitoring	01D	Monthly	DISCRT
Arsenic, total (as As)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Monthly	DISCRT

**Notes (Discharge Limitations Table):**

- To calculate the pounds per day (lbs/day), the following formula shall be used: Effluent flow (MGD) X parameter concentration (mg/L) X 8.34.

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
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)	Downstream Monitoring	01D	Quarterly	DISCRT
Boron, total (as B)	Daily Maximum	<= 124 Pounds per Day (lb/d) <sup>[1]</sup>	<= 750 Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Quarterly	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Quarterly	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Downstream Monitoring	01D	Quarterly	DISCRT
Nickel, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Quarterly	DISCRT
Antimony, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Quarterly	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		<= 11 Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Quarterly	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		<= 3.0 Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Quarterly	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		<= 140 Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Quarterly	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Quarterly	DISCRT

**Notes (Discharge Limitations Table):**

1. To calculate the pounds per day (lbs/day), the following formula shall be used: Effluent flow (MGD) X parameter concentration (mg/L) X 8.34.

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Annually<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Mercury, dissolved (as Hg)	30 Day Average		<= 0.77 Micrograms per Liter (ug/L) <sup>[2]</sup>	Downstream Monitoring	01D	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		<= 1.4 Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Annual	DISCRT
Sodium adsorption ratio	Annual Average		<= 8 Ratio (Ratio)	Downstream Monitoring	01D	Annual	CALCTD <sup>[3]</sup>

Notes (Discharge Limitations Table):

1. Annual analysis is to be performed in the 4th quarter (October, November, or December).
2. A mercury concentration exceeding the 0.77 ug/L annual analysis limitation shall trigger monthly analyses with a daily maximum limit of 1.4 ug/L, the acute standard, until two consecutive analyses meet the chronic standard.
3. The results from the monthly sample (January - December) for Sodium Adsorption Ratio (SAR) shall be used to calculate the annual average SAR for the reporting year.

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Asbestos	Daily Maximum		M&R Fibers per Liter (Fib/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Barium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Beryllium, total recoverable (as Be)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Chromium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Chromium, Hexavalent [As CR] (Chromium (VI))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Chromium, Trivalent [As CR] (Chromium (III))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Cyanide, free available	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Manganese, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Molybdenum, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Sulfide, total (as S)	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Thallium, total recoverable	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Acrolein	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Acrylonitrile	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Aldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
.alpha.-BHC	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
.alpha.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Anthracene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
.beta.-BHC	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
.beta.-Endosulfan	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Benzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Benzidine	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Benzo(a)anthracene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Benzo(a)pyrene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Benzo(b)fluoranthene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Benzo(k)fluoranthene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Bis(2-chloroethyl) ether	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Bis(2-chloroisopropyl) ether	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Bis(2-ethylhexyl) phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Bromoform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Carbon Tetrachloride (Tetrachloromethane (Carbon Tetrachloride))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Chlordane (tech mix. and metabolites)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chlorobenzene	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Dibromochloromethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Vinyl Chloride (Chloroethylene (Vinyl))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Chloroform	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Chlorpyrifos	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Chrysene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
2,4-D Salts And Esters (2 4-D)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
4,4-DDD	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
4,4-DDT	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Demeton	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Diazinon	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Dibenzo(a,h)anthracene	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Dibutyl phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
1,2-Dichlorobenzene (O-Dichlorobenzene)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
1,3-Dichlorobenzene (M-Dichlorobenzene)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
1,4-Dichlorobenzene (P-Dichlorobenzene)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
3,3-Dichlorobenzidine	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Dichlorobromomethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
1,2-Dichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
1,1-Dichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Dieldrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Di-2-ethylhexyl phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Diethyl phthalate	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Dimethyl phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Di-n-butyl phthalate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
2-Methyl-4,6-Dinitrophenol (4,6-Dinitro-2-Methylphenol)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
2,4-Dinitrophenol (Dinitrophenols)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
2,4-Dinitrotoluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
1,2-Diphenylhydrazine	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Endosulfan, total	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Endosulfan sulfate	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Endrin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Endrin aldehyde	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Ethylbenzene	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Fluoranthene (Fluoranthene (Polynuclear Aromatic Hydrocarbon))	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Fluorene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
.gamma.-BHC	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Azinphos-Methyl (Guthion)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Heptachlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Heptachlor epoxide	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Hexachlorobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Hexachlorobutadiene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Hexachlorocyclopentadiene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Hexachloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Indeno(1,2,3-cd)pyrene	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Isophorone	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Lindane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Malathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Methoxychlor	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Methyl bromide (Bromomethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Methyl chloride (Chloromethane)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Methylene chloride	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Mirex	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Nitrobenzene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
N-Nitrosodimethylamine (NDMA)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
N-Nitrosodiphenylamine	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Nonylphenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Parathion	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Pentachlorophenol <sup>[2]</sup>	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Phenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Polychlorinated biphenyls (PCBs)	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Pyrene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
2,4,5-TP(silvex) acids/salts, whole water sample	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
2,3,7,8-Tetrachlorodibenzo-p-dioxin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Tetrachloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Toluene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
			M&R				

**Discharge Limitations Table for Sample Location 01D (Rabbit Creek D/S Of Flumes Confluence)  
To Be Reported Once During The Permit Term<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Toxaphene	Daily Maximum		Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Tributyltin	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
1,1,1-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
1,1,2-Trichloroethane	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Trichloroethylene	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
2,4,6-Trichlorophenol	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT
Trihalomethane, tot. <sup>[3]</sup>	Daily Maximum		M&R Micrograms per Liter (ug/L)	Downstream Monitoring	01D	Once Per Permit Term	DISCRT

**Notes (Discharge Limitations Table):**

1. Toxic materials (NAC 445A.1236 and 40 CFR 131.36(d)(11)(ii)).
2. To calculate pentachlorophenol, use the following:  $2.71^{(1.005(\text{pH})-5.134)}$  where pH is the pH value of the receiving water body.
3. Trihalomethane is the sum of the concentration of bromodichloromethane, dibromochloromethane, tribromomethane (bromoform), and trichloromethane (chloroform).

**Discharge Limitations Table for Sum Of All 3 Flumes' Discharge To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	<= 19.872 Million Gallons per Day (Mgal/d)		Effluent Gross	SUM	Continuous <sup>[1]</sup>	CALCTD
Flow rate	Daily Maximum	<= 19.872 Million Gallons per Day (Mgal/d)		Effluent Gross	SUM	Continuous <sup>[1]</sup>	CALCTD

Notes (Discharge Limitations Table):

1. Monitor flow from Outfalls 001, 002, and 003 continuously and report daily maximum and 30-day average total flow (sum {001+002+003}) on monthly DMRs, and submit reports quarterly.

**Summary of Changes From Previous Permit**

The proposed permit removes the daily maximum limit for sulfate, antimony, fluoride, total nitrogen, and nickel from the quarterly table for Outfall 01D and establishes the requirement to monitor and report these parameters.

The proposed permit removes the daily maximum limit for arsenic from the monthly table for Outfall 01D and establishes the requirement to monitor and report this parameter.

The proposed permit establishes the requirement to sample for nitrate, nitrite, color, and chloride each month from Outfall 01D; the applicable WQS limits have been applied.

The proposed permit establishes the requirement to sample for the sodium adsorption ratio (SAR) each month from Outfall 01D and establishes the requirement to monitor and report this parameter.

The proposed permit establishes the requirement to report the annual average SAR each year for Outfall 01D and establishes a limit of 8 SAR.

The proposed permit establishes an updated daily maximum and 30-day average mass-based limit for TSS.

The proposed permit establishes a daily maximum mass-based limit for TDS.

The proposed permit establishes an updated mass-based limit for phosphorus and changes the daily maximum limit to an average limit.

The proposed permit increases the sampling frequency for phosphorus, iron, and turbidity from quarterly to monthly for Outfall 01D.

The proposed permit removes the requirement to report the 30-day maximum for chromium from the monthly table for Outfall 01D.

The proposed permit establishes the requirement to sample for copper, lead, and zinc each quarter for Outfall 01D; the applicable WQS limits have been applied.

The proposed permit establishes the requirement to sample for toxic materials per NAC 445A.1236 and 40 CFR 131.36(d)(11)(ii).

The proposed permit removes the requirement to sample Outfall 01D for total hardness.

Where applicable, both a maximum and an average limit have been established per the CFR section 122.45(d)(1).

Special Approvals / Conditions Item #1, 2, 4, 5, and 7 have been removed.

Special Approvals / Conditions Item #3 and 6 were renumbered to #1 and 2, respectively.

### **Technology Based Effluent Limitations**

Technology based effluent limitations (TBELs) are based on effluent guidelines which are national wastewater discharge standards that are developed by the U.S. EPA on an industry-by-industry basis. The facility falls under the following industry type:

- 40 CFR Part 440 Subpart J - Subcategory Copper, Lead, Zinc, Gold, Silver, and Molybdenum of the Ore Mining and Dressing Point Source Category

The following technology-based effluent limitations are based on the limitations prescribed in 40 CFR Part 440, Subpart J for discharges of mine drainage from mines operated to obtain copper bearing ores, lead bearing ores, zinc bearing ores, gold bearing ores, or silver bearing ores as adopted by the State of Nevada:

- Copper: The daily maximum threshold is limited to 300 ug/L.  
The 30-day average threshold is limited to 150 ug/L.
- Mercury: The daily maximum threshold is limited to 2 ug/L.  
The 30-day average threshold is limited to 1 ug/L.
- Lead: The daily maximum threshold is limited to 600 ug/L.  
The 30-day average threshold is limited to 300 ug/L.
- Zinc: The daily maximum threshold is limited to 1,500 ug/L.  
The 30-day average threshold is limited to 750 ug/L.
- TSS: The daily maximum threshold is limited to 30 mg/L.  
The 30-day average threshold is limited to 20 mg/L.
- pH: The pH range shall be maintained between 6.0 Standard Units (S.U.) and 9.0 S.U.

The proposed permit retains TBELs for TSS from the previous permit based on the effluent guidelines prescribed in 40 CFR Part 440 Subpart J. A monthly sampling frequency is retained to determine compliance with the TBEL.

The proposed permit establishes more stringent effluent limitations for copper, mercury, lead, and zinc, consistent with the WQSs prescribed in NAC 445A.1236 and more stringent effluent limitations for pH, consistent with the WQSs prescribed in NAC 445A.1444.

### **Water Quality Based Effluent Limitations**

The proposed permit retains effluent limits for pH and turbidity at Outfall 01D in accordance with the WQSs for designated beneficial uses listed at NAC 445A.1444.

The proposed permit retains the concentration effluent limit for total phosphorus at Outfall 01D in accordance with the WQSs for designated beneficial uses listed at NAC 445A.1444.

The proposed permit retains the 30-day average (concentration) effluent limit and establishes a daily maximum (concentration) effluent limit for TDS at Outfall 01D in accordance with the WQSs for designated

beneficial uses listed at NAC 445A.1444.

The proposed permit retains the requirement to monitor and report the temperature and ammonia at Outfall 01D in accordance with the WQSs for designated beneficial uses listed at NAC 445A.1444 and NAC 445A.118.

The proposed permit establishes effluent limits for nitrate, nitrite, color, chloride, and SAR at Outfall 01D in accordance with the WQSs for designated beneficial uses listed at NAC 445A.1444.

The proposed permit establishes the requirement to sample for toxic materials applicable to designated waters at NAC 445A.1236 and 40 CFR 131.36(d)(11)(ii).

### **Reasonable Potential Analysis (RPA)**

Section 301(b)(1)(c) of the CWA requires effluent limitations necessary to meet WQSs, and 40 CFR section 122.44(d) requires permits to include conditions that are necessary to achieve WQSs established under section 303 of the CWA, including state narrative criteria for water quality. Federal regulations at 40 CFR section 122.44(d)(1)(i) state, "Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." The process to determine whether a WQBEL is required as described in 40 CFR 122.44(d)(1)(i) is referred to as a reasonable potential analysis, or RPA. Furthermore, NAC 445A.243 requires the Division to consider the establishment of effluent limitations necessary to meet WQSs.

For conducting the RPA, the Division used a mass-balanced approach to statistically calculate the projected maximum concentration and the expected critical downstream receiving water concentration using the guidance and recommendations from the U.S. EPA Technical Support Document for Water Quality Based Toxics Control (EPA/505/2 90 001) (TSD) (i.e., Table 31 of the TSD using the 99 percent probability basis and 99 percent confidence interval). For the purposes of the RPA, the critical receiving water flow was assumed to be zero (i.e., no dilution); therefore, the critical effluent pollutant concentrations were compared with the most restrictive water quality criteria and requirements to maintain RMHQs in NAC 445A.1236, NAC 445A.1444, and NAC 445A.118 to determine if the discharge has reasonable potential to cause or contribute to an excursion above a state WQS. Criteria found at 40 CFR 131.36(d)(11)(ii) was not included in the RPA as constituents listed under this regulation were not included in the previous permit.

Based on the RPA, Outfall 01D exhibited reasonable potential to cause, or contribute to, in-stream excursions above the applicable water quality criteria for iron, phosphorus, and turbidity (see Attachment B for a summary of the RPA findings). Therefore, limits for these constituents have been retained from the previous permit. If, during the next renewal review process, the water quality data shows a reasonable potential (via an RPA) for any constituent, the Division will retain that constituent with a limit and may increase the sampling frequency for that constituent. Limits for constituents that prove no reasonable potential may be removed and the sampling frequency may be decreased in future permits, unless new information proves otherwise.

### **Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)**

State regulations require that point source discharges not cause a violation of any applicable WQSs in the receiving water, nor interfere with the attainment or maintenance of beneficial uses. The following water quality based effluent limit (WQBEL) requirements, based on NAC 445A.1444, are included in the proposed permit to ensure that the discharge does not cause WQS violations. In addition, the proposed permit requires monitoring and reporting of constituents that are subject of WQSs and may be present in the discharge.

Per NAC 445A.1444, sampling is required for dissolved oxygen (D.O.), *Escherichia coli* (*E. coli*), and fecal coliform. The discharge from this facility will travel approximately 14 miles before reaching the Humboldt River. It is anticipated that the D.O. level will change during the time it takes the water to reach the Humboldt

River. During the travel time, the Permittee will have no control over the change in D.O. levels; therefore, sampling the discharge for D.O. is irrelevant in this instance. Furthermore, as the discharge is not associated with treated domestic wastewater, sampling for fecal coliform and *E. coli* are not required.

NAC 445A.1444 includes a requirement to maintain existing higher quality (RMHQ) limit of 0 degrees Celsius and a beneficial use limit of less than or equal to 2 degrees Celsius for the maximum allowable increase in temperature above the receiving water's temperature. As mentioned previously, the discharge from this facility will travel approximately 14 miles before reaching the Humboldt River. It is anticipated that the temperature of the discharged water will change during the time it takes it to reach the Humboldt River. During the travel time, the Permittee will have no control over the change in temperature. Therefore, although a limit has not been established, the proposed permit retains the requirement to monitor and report the temperature of the discharged water once a month.

The TBELs established under 40 CFR Part 440 Subpart J, under the BPT section, includes a pH limit of 6.0 S.U. to 9.0 S.U. However, NAC 445A.1444 includes a RMHQ single value limit of 7.0 S.U. to 8.7 S.U. As the single value limit of 7.0 S.U. to 8.7 S.U. is more restrictive than the limits established under the TBELs, the proposed permit retains a daily minimum limit of greater than or equal to 7.0 S.U. and a daily maximum of less than or equal to 8.7 S.U. for pH. A monthly sampling frequency is deemed sufficient to determine compliance with the effluent limits.

Per NAC 445A.1444 the seasonal average, from April to November, is limited to 0.1 mg/L for total phosphorus to protect the aquatic life and contact designated beneficial uses. As total phosphorus is considered a pollutant of concern due to there being a reasonable potential to cause, or contribute to an excursion above the WQS, and because there is a TMDL for phosphorus, the proposed permit retains a limit of 0.1 mg/L for total phosphorus. However, the proposed permit changes the daily maximum to an average to conform to the seasonal average from April to November. Furthermore, the proposed permit increases the sampling frequency from once a quarter to once a month due to the results of the RPA and the existing TMDL.

The proposed permit removes the daily maximum limit of 2.9 mg/L for total nitrogen as the RPA proved no reasonable potential to cause or contribute to an excursion above the WQS. The proposed permit establishes the requirement to monitor and report the daily maximum value for total nitrogen and retains a sampling frequency of once a quarter.

NAC 445A.1444 includes a single value limit of 10 mg/L and 1.0 mg/L for nitrate and nitrite, respectively, to protect the aquatic life designated beneficial use. As the previous permit did not require the Permittee sample for nitrate or nitrite, the proposed permit establishes a daily maximum limit of 10 mg/L and 1.0 mg/L for nitrate and nitrite, respectively, with a monthly sampling frequency. Furthermore, per 40 CFR 122.45(d) (1), the proposed permit establishes a 30-day average limit for both parameters.

NAC 445A.118 includes water quality criteria for ammonia to protect the aquatic life beneficial use. Per the RPA, there is no reasonable potential to cause or contribute to an excursion above the WQS for ammonia. Therefore, the proposed permit retains the requirement to monitor and report the daily maximum and 30-day average values for ammonia with a monthly sampling frequency.

Per NAC 445A.1444, the annual median limit for TSS is 80 mg/L to protect the aquatic life beneficial use. The TBELs established under 40 CFR Part 440 Subpart J, under the BPT section, lists the maximum limit for any one (1) day to 30 mg/L and the average of daily values for 30 consecutive days to 20 mg/L for TSS. As the requirements found under 40 CFR Part 440 are more stringent than that listed in NAC 445A.1444, the proposed permit retains a daily maximum limit of 30 mg/L and a 30-day average limit of 20 mg/L for TSS as well as a monthly sampling frequency.

The proposed permit retains a daily maximum limit of 50 nephelometric turbidity unit (NTU) for turbidity to protect the aquatic life designated beneficial use, per NAC 445A.1444, as the RPA proved there is reasonable potential to cause or contribute to an excursion above the WQS for turbidity. Furthermore, the proposed permit increases the sampling frequency from quarterly to monthly due to the results of the RPA.

NAC 445A.1444 includes a single value limit of 75 platinum cobalt units (PCU) for color to protect the municipal or drinking water beneficial use. As the previous permit did not require the Permittee sample for color, the proposed permit establishes a daily maximum limit of 75 PCU. Furthermore, per 40 CFR 122.45(d)(1), the proposed permit establishes a 30-day average limit for color.

Although the RPA proved there is no reasonable potential to cause or contribute to an excursion above the WQS for TDS, the Humboldt River includes a TMDL for TDS. The WQSs at NAC 445A.1444 include an RMHQ annual average limit of 500 mg/L and a single value limit of 560 mg/L for TDS. The previous permit listed the limit of 500 mg/L as a 30-day average in lieu of an annual average. Due to the existing TMDL for TDS, the proposed permit retains a 30-day average limit of 500 mg/L, per anti-backsliding requirements, and establishes a daily maximum limit of 560 mg/L to protect the municipal or drinking water beneficial use. A monthly sampling frequency is deemed sufficient to determine compliance with the effluent limits.

NAC 445A.1444 includes a single value limit of 110 mg/L for chloride to protect the municipal or drinking water beneficial use. As the previous permit did not require the Permittee sample for chloride, the proposed permit establishes a daily maximum limit of 110 mg/L along with a monthly sampling frequency. Furthermore, per 40 CFR 122.45(d)(1), the proposed permit establishes a 30-day average limit as well.

The proposed permit removes the daily maximum limit of 250 mg/L, per NAC 445A.1444 to protect the municipal or drinking water beneficial use, for sulfate as the RPA proved no reasonable potential to cause or contribute to an excursion above the WQS. The proposed permit establishes the requirement to monitor and report the daily maximum value for sulfate.

NAC 445A.1444 includes an annual average limit of 8 SAR for sodium to protect the irrigation designated beneficial use. As the previous permit did not require the Permittee sample for sodium, the proposed permit establishes an annual average limit of 8 SAR. Additionally, the proposed permit requires the Permittee monitor and report SAR once a month to calculate the annual average for SAR which will be reported on an annual basis.

Per NAC 445A.1236 and 40 CFR 131.36(d)(11)(ii), the standards for toxic materials apply. Most of the parameters have not been sampled for; however, the ones that have been sampled for and have shown no reasonable potential to cause or contribute to an excursion above the WQS do not have established limits, instead those parameters will be monitored and reported. Parameters that showed reasonable potential to cause or contribute to an excursion above the WQS, include established limits. Furthermore, taking the discharge flow rate into consideration, the 96-hour limits listed in NAC 445A.1236 are used, unless there was no 96-hour limit listed for that parameter in which case the 1-hour limit was used.

The proposed permit removes the daily maximum limit of 50 ug/L, per NAC 445A.1236 to protect the municipal or domestic supply designated beneficial use, for arsenic as the RPA proved no reasonable potential to cause or contribute to an excursion above the WQS. The proposed permit establishes the requirement to monitor and report the daily maximum value for arsenic. Although the RPA showed no reasonable potential to cause or contribute to an excursion above the WQS, the proposed permit maintains a monthly sampling frequency due to the elevated levels of arsenic found in the source water.

The proposed permit removes the daily maximum limit of 1,000 ug/L, per NAC 445A.1236 to protect the municipal or domestic supply designated beneficial use, for fluoride as the RPA proved no reasonable potential to cause or contribute to an excursion above the WQS. The proposed permit establishes the requirement to monitor and report the daily maximum value for fluoride but retains a once per quarter sampling frequency.

The proposed permit removes the daily maximum limit of 146 ug/L, per NAC 445A.1236 to protect the municipal or domestic supply designated beneficial use, for antimony as the RPA proved no reasonable potential to cause or contribute to an excursion above the WQS. The proposed permit establishes the requirement to monitor and report the daily maximum value for antimony but retains a once per quarter sampling frequency.

The TBELs established under 40 CFR Part 440 Subpart J, under the BPT section, lists the maximum limit

for any one (1) day to 2.0 ug/L and the average of daily values for 30 consecutive days to 1.0 ug/L for mercury. However, per NAC 445A.1236 the daily maximum limit for the 1-hour aquatic life beneficial use is 1.4 ug/L. As the limit found at NAC 445A.1236 is more stringent than that listed in 40 CFR Part 440 Subpart J, the proposed permit retains a daily maximum limit of 1.4 ug/L for mercury. Additionally, a 30-day average limit of 0.77 ug/L, per the 96-hour limit found at NAC 445A.1236 and as previously established in the previous permit, is retained to satisfy anti-backsliding requirements. Retaining an annual sampling frequency is deemed sufficient to determine compliance with the effluent limit as DMR data from September 2020 to October 2025 showed the long term daily maximum concentration averaged 0.06 ug/L.

The proposed permit retains a daily maximum limit of 1,000 ug/L for iron; however, due to the results of the RPA, the sampling frequency has been increased from quarterly to monthly.

NAC 445A.1236 lists water quality criteria for seven (7) metals that vary as a function of hardness. The lower the hardness, the lower the water quality criteria. The metals with hardness dependent criteria include cadmium, chromium (III), copper, lead, nickel, silver, and zinc. The BWQP recommends calculating a 10th percentile receiving water hardness value to determine water quality criteria for hardness dependent metals that are sufficiently protective of aquatic life. Based on five (5) hardness samples collected upstream from the facility's discharge point at a water quality station located in the Humboldt River at Comus from 2020 to 2025, the 10th percentile hardness value is 194 mg/L. Therefore, the proposed permit uses the 10th percentile value of 194 mg/L to calculate the applicable water quality criteria for hardness-dependent metals listed at NAC 445A.1236.

The TBELs established under 40 CFR Part 440 Subpart J, under the BPT section, lists the maximum limit for any one (1) day to 300 ug/L and the average of daily values for 30 consecutive days to 150 ug/L for copper. However, using a hardness value of 194, the daily maximum limit for the 96-hour aquatic life beneficial use is 11 ug/L, per NAC 445A.1236. As the limit found at NAC 445A.1236 is more stringent than that listed in 40 CFR Part 440 Subpart J, the proposed permit establishes a daily maximum limit of 11 ug/L for copper. A quarterly sampling frequency is deemed sufficient to determine compliance with the effluent limit.

The TBELs established under 40 CFR Part 440 Subpart J, under the BPT section, lists the maximum limit for any one (1) day to 600 ug/L and the average of daily values for 30 consecutive days to 300 ug/L for lead. However, using a hardness value of 194 mg/L, the daily maximum limit for the 96-hour aquatic life beneficial use is 3.0 ug/L, per NAC 445A.1236. As the limit found at NAC 445A.1236 is more stringent than that listed in 40 CFR Part 440 Subpart J, the proposed permit establishes a daily maximum limit of 3.0 ug/L for lead. A quarterly sampling frequency is deemed sufficient to determine compliance with the effluent limit.

The TBELs established under 40 CFR Part 440 Subpart J, under the BPT section, lists the maximum limit for any one (1) day to 1,500 ug/L and the average of daily values for 30 consecutive days to 750 ug/L for zinc. However, using a hardness value of 194 mg/L, the daily maximum limit for the 96-hour aquatic life beneficial use is 140 ug/L, per NAC 445A.1236. As the limit found at NAC 445A.1236 is more stringent than that listed in 40 CFR Part 440 Subpart J, the proposed permit establishes a daily maximum limit of 140 ug/L for zinc. A quarterly sampling frequency is deemed sufficient to determine compliance with the effluent limit.

The proposed permit removes the daily maximum limit of 13.4 ug/L, per NAC 445A.1236 to protect the municipal or domestic supply designated beneficial use, for nickel as the RPA proved no reasonable potential to cause or contribute to an excursion above the WQS. The proposed permit establishes the requirement to monitor and report the daily maximum value for nickel but retains a once per quarter sampling frequency.

The proposed permit removes the requirement to report the 30-day average for cadmium as there is no established daily maximum limit and because the RPA showed no reasonable potential to cause or contribute to an excursion above the WQS. The proposed permit retains the requirement to report the daily maximum value for cadmium and decreases the sampling frequency from once a month to once a quarter due to the results of the RPA.

The proposed permit establishes the requirement to sample toxic materials that were not sampled previously. These parameters shall be monitored and reported and shall be sampled for once during the term of the permit.

### Mass-Based Limits (If Applicable)

Mass-based limits were included in the previous permit for phosphorus, TDS, TSS, boron, and iron. Phosphorus, TDS, and TSS were limited due to the applicable TMDL for the Humboldt River while boron and iron were limited due to their presence in the 303(d) list.

Although the existing TMDL for phosphorus, TSS, and TDS does not define any waste load allocations for point source discharges, the proposed permit retains the mass-based loads for these constituents in accordance with anti-backsliding requirements and establishes a mass-based daily maximum limit for TDS. The mass-based loading limits are calculated using the maximum permitted flow rate of 19.872 MGD, the applicable WQS limit, and a conversion factor of 8.34 lbs/gal. The final limits have been rounded up to the nearest whole number.

- Phosphorus:  $19.872 \text{ MGD} * 0.1 \text{ mg/L} * 8.34 \text{ lbs/gal} = \mathbf{17 \text{ lbs/day Seasonal Average Limit}}$
- TSS:  $19.872 \text{ MGD} * 30 \text{ mg/L} * 8.34 \text{ lbs/gal} = \mathbf{4,972 \text{ lbs/day Daily Maximum Limit}}$
- TSS:  $19.872 \text{ MGD} * 20 \text{ mg/L} * 8.34 \text{ lbs/gal} = \mathbf{3,315 \text{ lbs/day 30-Day Average Limit}}$
- TDS:  $19.872 \text{ MGD} * 560 \text{ mg/L} * 8.34 \text{ lbs/gal} = \mathbf{92,810 \text{ lbs/day Daily Maximum Limit}}$
- TDS:  $19.872 \text{ MGD} * 500 \text{ mg/L} * 8.34 \text{ lbs/gal} = \mathbf{82,866 \text{ lbs/day 30-Day Average Limit}}$

Although boron is no longer included in the most recent 303(d) list, the proposed permit retains the mass-based limit for boron, as well as iron, in accordance with anti-backsliding requirements. The mass-based loading limits are calculated using the maximum permitted flow rate of 19.872 MGD, the applicable WQS limit which has been converted from micrograms per liter (ug/L) to milligrams per liter (mg/L) for calculation purposes, and a conversion factor of 8.34 lbs/gal. The final limits have been rounded up to the nearest whole number.

- Boron:  $19.872 \text{ MGD} * 0.75 \text{ mg/L} * 8.34 = \mathbf{124 \text{ lbs/day Daily Maximum Limit}}$
- Iron:  $19.872 \text{ MGD} * 1.0 \text{ mg/L} * 8.34 = \mathbf{166 \text{ lbs/day Daily Maximum Limit}}$

### Basis for Effluent Limitations

At the request of the Permittee, the proposed permit retains a daily maximum and 30-day average discharge flow rate limit of 19.872 MGD.

Although boron is no longer included in the most recent 303(d) list, the proposed permit retains a daily maximum limit of 750 ug/L for boron per anti-backsliding requirements.

Special Approvals / Conditions Item #1, which stated, "**Dewatering Well List:** A list indicating which dewater wells were operated each day shall be submitted with each quarterly report." has been removed. This item was removed as the information was no longer pertinent to the Bureau.

Special Approvals / Conditions Item #2, which stated, "**Annual Sampling Dewatering Wells/Inpit Sumps:** Annual sampling and analyses shall be conducted from each of the dewatering wells or sumps that discharge during the calendar year in accordance with Attachment A Well and Sump Reporting. Each separate well or sump requires a separate report. Annual analysis shall be performed in the 4th Quarter and submitted with annual permit reports." has been removed. This item was removed as the constituents that were included in Attachment A are sampled for at the downstream monitoring point which is the point of compliance.

Special Approvals / Conditions Item #4, which stated, "**East Pond/Flume 3:** Prior to discharging a 30-day average of more than 14.4 MGD from the East Pond/Flume 3, the Permittee shall submit to the Division, for review and approval, an Engineering Report showing a discharge rate greater than 14.4 MGD is not likely to result in discharge that exceeds the current permit limits for the parameters listed in the 01D Outfall

Discharge Limitations tables. Within fourteen (14) days of discharging more than 14.4 MGD from the East Pond/Flume 3, the Permittee shall notify the Division of the date of first exceeding a discharge flow rate of 14.4 MGD from the East Pond/Flume 3." has been removed. This item was removed as the Permittee is required to meet permit limits regardless of the amount of flow discharged from the East Pond / Flume 3.

Special Approvals / Conditions Item #5, which stated, "**West Pond/Flume 1:** Prior to discharging a 30day average of more than 10.8 MGD from the West Pond/Flume 1, the Permittee shall submit to the Division for review and approval an Engineering Report showing a discharge rate greater than 10.8 MGD is not likely to result in discharge that exceeds the current permit limits for the parameters listed in the 01D Outfall Discharge Limitations tables. Within fourteen (14) days of discharging more than 10.8 MGD from the West Pond/Flume 1, the Permittee shall notify the Division of the date of first exceeding a discharge flow rate of 10.8 MGD from the West Pond/Flume 1." has been removed. This item was removed as the Permittee is required to meet permit limits regardless of the amount of flow discharged from the West Pond / Flume 1.

Special Approvals / Conditions Item #7, which stated, "Part C.13 Solid Waste Screening/Sewage Sludge: does not apply to this permit." has been removed. This item was removed as 'Part C.13' has been removed from the boilerplate of the permit.

### **Anti-backsliding**

Sections 402(o) and 303(d)(4) of the CWA and federal regulations of 40 CFR 122.44(l) prohibit backsliding and require effluent limitations in a reissued permit to be as stringent as those in the previous permit with some exceptions.

The previous permit included mass-based limits for TSS, TDS, iron, phosphorus, and boron. During the drafting process for this renewal, the calculations for the mass-based limits for these constituents were reviewed. Calculations for iron, phosphorus, and boron were verified to be accurate; however, calculations for TSS and TDS were found to be miscalculated. Hence the limits for these two parameters were recalculated (and rounded to the nearest whole number); the corrected limits are being established in the proposed permit. The newly calculated 30-day average limit for TDS was made more restrictive; however, the recalculation for TSS increased both the daily maximum and 30-day average limits from 4,790 lbs/day to 4,792 lbs/day and 3,310 lbs/day to 3,315 lbs/day, respectively (see the Mass-Based Limits section of the Fact Sheet for further information). Furthermore, although the mass-based limit for phosphorus was calculated correctly, the limit was rounded to the nearest whole number, increasing the limit from 16.6 lbs/day to 17 lbs/day, in staying consistent with the other mass-based limits. The Division has determined that the previous calculations for TSS and TDS were technical mistakes; therefore, the increase in mass-based limits for TSS and TDS are consistent with the anti-backsliding conditions specified at CWA section 402(o)(2)(B)(ii).

The previous permit included the requirement to sample for total hardness once a month for Outfall 01D. As there are no WQSs for total hardness it is assumed this parameter was added to assist with calculating values for the seven (7) metals that vary as a function of hardness. However, to correctly calculate these values, total hardness must be collected from a point upstream from the discharge and not in the discharge itself. Therefore, the proposed permit removes the requirement to sample for total hardness which is consistent with the anti-backsliding conditions specified at CAW section 402(o)(2)(B)(ii).

With the exception of total nitrogen, sulfate, antimony, arsenic, fluoride, cadmium, and nickel, all other effluent limitations in the proposed permit are at least as stringent as the effluent limitations in the previous permit. See the Proposed Water Quality Based Effluent Limits (monthly/weekly/daily) section of the Fact Sheet for information regarding the removal of the daily maximum limits for total nitrogen, sulfate, antimony, arsenic, fluoride, and nickel and the decrease in sampling frequency for cadmium.

### **Antidegradation**

The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at 40

CFR 131.12. The objective of the Division’s antidegradation regulation is to prevent degradation of Nevada’s surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters. This objective is achieved through the implementation of procedures to ensure that waters are protected from regulated activities that have the potential to degrade the water quality. The regulation uses four (4) tiers of antidegradation protection. Tier 1 protects water quality for beneficial uses of the water on a parameter-by-parameter basis. Tier 2 protects high-quality waters where data show the water quality is better than levels needed to protect beneficial uses (on a parameter-by-parameter basis). Tier 2.5 and Teir 3 protect water quality and the special characteristics of waterbodies designated with the beneficial uses of “extraordinary, ecological, aesthetic or recreational value” (NAC 445A.122). The Division will conduct an antidegradation review only when a permit application is submitted for a new or expanding point source discharge to a surface water or for a new or altered zone of mixing.

Since the proposed renewal of this permit does not include a new or expanding point source discharge or a new or altered zone of mixing, the antidegradation review is not required.

**WET Testing**

NAC 445A.121(4) states that all surface waters of the State, “...must be free from high temperature, biocides, organisms pathogenic to human beings, toxic, corrosive or other deleterious substances attributable to domestic or industrial waste or other controllable sources at levels or combinations sufficient to be toxic to human, animal, plant or aquatic life or in amounts sufficient to interfere with any beneficial uses of the water.”

The facility treats groundwater containing naturally occurring arsenic and discharges the treated groundwater into the Rabbit Creek which is a tributary to the Humboldt River. Accordingly, and consistent with the previous permit, the proposed permit requires acute whole effluent toxicity (WET) testing once during the term of the permit.

**Special Conditions**

See the Special Approvals / Conditions Table below.

SA – Special Approvals / Conditions Table

Item #	Description
1	<b>Exception for Section B.WET.1:</b> The Permittee shall conduct an acute toxicity test during the 4th Quarter of 2026. If the effluent is determined to be acutely toxic, the WET testing shall be repeated each quarter for the term of the permit. If the effluent is not determined to be acutely toxic, no additional WET testing is required on the effluent for the term of the permit.
2	<b>PROSYS Microfiltration System:</b> Thirty (30) days prior to the start up of the PROSYS microfiltration system, the Permittee shall submit to the Division, for review and approval, 2 copies of a Revised Operation and Maintenance Manual covering the microfiltration portion of the arsenic treatment system. Within fourteen (14) days of PROSYS microfiltration system startup, the Permittee shall notify the Division of the startup date.

**Discharges From Future Outfalls/ Planned Facility Changes**

The Permittee does not anticipate any planned facility changes or the addition of future outfalls.

**Corrective Action Sites**

There are no active Bureau of Corrective Actions remediation sites located within a one-mile radius of the mine.

**Wellhead Protection Program**

The outfalls are located 2040 to 2170 feet North downgradient of a Public Water Supply (PWS) well placing the outfall in the Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well. The outfalls are not located in a Wellhead Protection Area (WHPA), which represents an approximate 10-

year capture zone of a well. The well is located in a unconfined aquifer at a depth of 424 feet with a sanitary seal of 50 feet. Based on the distance, direction and gradient of the well to the outfalls and the well structure, the well is at minimal risk of contamination.

**Schedule of Compliance:**

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies (one (1) hard copy and one (1) electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall be prepared and stamped by a Nevada Registered Professional Engineer and shall follow guidance document WTS - 2: <i>Minimum Information Required for an Operation and Maintenance Manual</i> .	8/1/2026

**Deliverable Schedule:**

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Reports (including dewatering well list)	Quarterly	7/28/2026
2	Annual Report (including Attachment A Well/Sump Reporting)	Annually	1/28/2027

**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 mailed to interested persons on our mailing list and will be posted on our website at <https://ndep.nv.gov/posts>. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **4/17/2026**, 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 in 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.

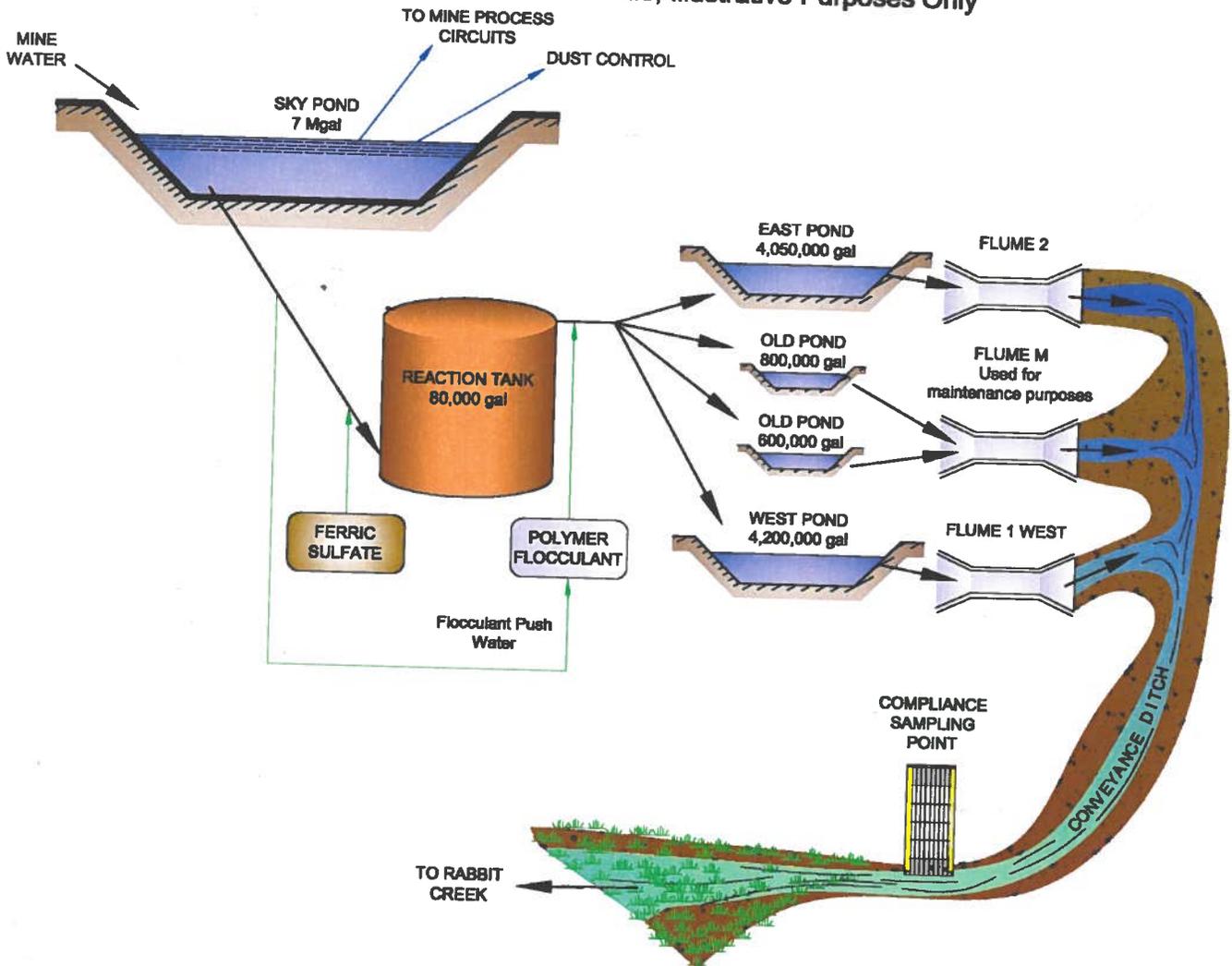
Prepared by: **Bonnie Hartley**

Date: **3/11/2026**

Title: **Staff II, Associate Engineer**

# Attachment A

## WATER TREATMENT FLOW SHEET Twin Creeks Mine - Not to Scale, Illustrative Purposes Only



## Attachment B

### Summary of Reasonable Potential Analysis

Parameter	Units	No. of Effluent Samples	Critical Effluent Concentration	Most Stringent Criterion	Criterion Basis	Does RP Exist?
<b>Metals (Total Recoverable), Cyanide and Phenols</b>						
Antimony, Total Recoverable	ug/L	21	20.3	146	Municipal or Domestic	No
Arsenic, Total Recoverable	ug/L	55	15.7	50	Municipal or Domestic	No
Iron, Total Recoverable	ug/L	21	17,390.7	1,000	Chronic Aquatic Life	Yes
Mercury, Total Recoverable	ug/L	4	0.6	1	Chronic Aquatic Life	No
<b>Other Pollutants</b>						
Ammonia, Total (as N)	mg/L	54	0.17	0.49	Chronic Aquatic Life	No
Boron	ug/L	21	195.22	750	Irrigation	No
Fluoride	ug/L	21	0.71	1000	Irrigation	No
Phosphorus, Total (as P)	mg/L	21	0.23	0.1	WQC to Protect Beneficial Uses	Yes
Sulfate	mg/L	21	105.86	250	WQC to Protect Beneficial Uses	No
Total Dissolved Solids	mg/L	54	361.76	560	RMHQ	No
Solids, Total Suspended	mg/L	54	41.94	80	WQC to Protect Beneficial Uses	No
Turbidity	mg/L	23	229.40	50	WQC to Protect Beneficial Uses	Yes