



A division of the
Nevada Department of Conservation & Natural Resources

NEVADA DIVISION OF
**ENVIRONMENTAL
PROTECTION**

STATE OF NEVADA
Joe Lombardo, Governor
Vinson Guthreau, Director
Jennifer L. Carr, Administrator

901 S. Stewart Street, Suite 4001
Carson City, Nevada 89701
p: 775-687-4670 f: 775-687-5856
ndep.nv.gov

FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: TS POWER PLANT - NEVADA GOLD ENERGY LLC
914 DUNPHY RANCH ROAD
BEOWAWE, NV 89820

Permit Number: NS2004528

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: TS POWER PLANT, EUREKA
450 TS POWER PLANT ROAD, BATTLE MOUNTAIN, NV 89820
LATITUDE: 40.751944, LONGITUDE: -116.515556
TOWNSHIP: 33 N, RANGE: 48 E, SECTION: 12

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	EVAPORATION PONDS	External Outfall		40.7522	-116.5160	GROUNDWATER
002	DUST CONTROL	Land Application Site		40.75	-116.51	GROUNDWATER
003	OFFSITE LOCATIONS	Land Application Site		40.75	-116.51	GROUNDWATER
004	MONITORING WELL MW-1	Monitoring Well		40.7550	-116.5220	NOT APPLICABLE
005	MONITORING WELL MW-2	Monitoring Well		40.7490	-116.52	NOT APPLICABLE

Permit History/Description of Proposed Action

The Permittee, TS Power Plant - Nevada Gold Energy, LLC has applied for the renewal of Permit NS2004528 for the TS Power Plant (TSPP), at 450 TS Power Plant Road, which is located 3 miles north of the Dunphy I-80 Interchange (Exit #254), approximately 23 miles northeast of Battle Mountain, within Eureka County, Nevada. The Permittee proposes to continue to discharge plant process wastewater into either lined evaporation ponds or for applied dust control both on-site and for local haul roads.

This permit was first issued July 13, 2005. The most recent permit was issued on October 9, 2017, and expired on October 8, 2022; the permit has been administratively continued since.

Facility Overview

For the discharge of plant process wastewater, the facility is authorized to operate four double-lined evaporation ponds. Pond dimensions are 9½ ft. (basin depth) by 94-acres (total evaporative surface area). The primary (upper) liner is 80-mil high-density polyethylene (HDPE), and the secondary (lower) liner is 60-mil HDPE. Each cell is equipped with two leak detection and collection sumps where leakage (water) across the primary liner surface is collected, the volume of water measured, and the water pumped back into the ponds for evaporation. The evaporation pond cells were sized to contain the projected design water

balance of 216 gallons per minute (gpm). The net annual evaporation rate in this area is approximately 4 feet, taking into account the annual average of 7½ inches of precipitation.

The process wastewater from this facility consists mainly of non-contact cooling tower blow-down (98%) and lesser (intermittent) flow from the plant's makeup water treatment plant (e.g., condensate polisher, mixed-bed ion-exchange regeneration and potable water system backwash) and plant process sumps (2%). The cooling tower water is discharged to the pond after several cycles in order to regulate the conductivity level due to the buildup of salts (total dissolved solids) from the evaporation of water occurring in the cooling tower. Sanitary (domestic) wastewater is separately discharged to an on-site septic system. Discharge of process wastewater into the evaporation ponds is zero-discharge, and there is no permitted discharge to the groundwater (i.e., no infiltration basin).

To control fugitive dust emissions on the plant's haul road, coal stockpile and ash landfill, this permit allows the evaporation ponds' water to be drawn from a truck fill stand (currently located at the first pond) and applied by water trucks equipped with spray nozzles both onsite and on local haul roads. Since startup, approximately 99% of the pond water has been retained for evaporation in the ponds, and 1% of the flow was applied for dust control. The cells are equipped with staff gages for visual depth measurement. Since startup, there have been no reported capacity or freeboard issues. TSPP is required to maintain a minimum of two (2) feet of freeboard in the evaporation ponds.

Sediment and Sludge Management

Sediment and pond sludge will be disposed in the Class III ash landfill at TSPP, which is permitted for the disposal of coal combustion residuals (ash) and dewatered, water treatment sludge.

The TSPP's Operation and Maintenance (O&M) Manual was last reviewed and approved by the Division on December 13, 2017. The Technical, Compliance, and Enforcement Branch, of the Bureau of Water Pollution Control, requires O&M Manuals be updated every ten (10) years from the time of the last approved O&M Manual, with an updated O&M Manual due on December 13, 2027.

The TSPP's Reclaimed Water Management Plan (RWMP), previously the Effluent Management Plan (EMP), was last reviewed and approved by the Division in December 13, 2017. The Technical, Compliance, and Enforcement Branch, of the Bureau of Water Pollution Control, requires O&M Manuals be updated every ten (10) years from the time of the last approved O&M Manual, with an updated O&M Manual due on December 13, 2027.

Outfall Summary

Outfall 001: This external outfall is for measuring and monitoring the cooling water being discharged to the evaporation ponds.

Outfall 002: This land application site outfall is for measuring the cooling water being discharged for dust control onsite.

Outfall 003: This land application site outfall is for measuring the cooling water being discharged for dust control offsite which is diverted, via a standpipe, to water trucks for applied use on local haul roads.

Outfall 004: This monitoring well (MW-1) outfall is for monitoring groundwater quality downgradient of the evaporation ponds, located to the northwest.

Outfall 005: This monitoring well outfall (MW-2) is for monitoring groundwater quality downgradient of the evaporation ponds, located to the southwest.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from January 2021 through December 2025, was reviewed as part of this permit renewal process.

The following averages were taken from the period stated above:

Abbreviations/Acronyms:

C = Celsius

Depth = Depth to water level (feet below land surface)

Gal/d = Gallons per Day

µS/cm = Micromhos per centimeter

mg/L = Milligrams per Liter

Mgal/d = Million Gallons per Day

S.U. = Standard Units

Water Level = Water level relative to mean sea level

TDS = Total Dissolved Solids

TPH = Total Petroleum Hydrocarbons

Outfall 001:

Flow Rate: 0.72 Mgal/d

Freeboard: 4.11 Feet

Liner Leakage Rate: 13.68 gallons per Acre

Alkalinity, bicarbonate: 111.33 mg/L

Alkalinity, total: 163.33 mg/L

Aluminum: 3.96 mg/L

Antimony: 0.005 mg/L

Arsenic: 0.02 mg/L

Barium: 0.41 mg/L

Calcium: 72.54 mg/L

Chloride: 125.90 mg/L

Chromium: 0.01 mg/L

Conductivity: 5,958 µS/cm*

Copper: 0.02 mg/L

Fluoride: 2.36 mg/L

Iron: 2.17 mg/L

Lead: 0.01 mg/L

Magnesium: 12.26 mg/L

Manganese: 0.03 mg/L

Nitrite plus Nitrate total 1 det: 2.60 mg/L

Nitrogen: 4.28 mg/L

Oil and grease: 7.37 mg/L

pH: 8.66 S.U.

Phosphorus: 0.49 mg/L

Potassium: 36.02 mg/L

Selenium: 0.01 mg/L

Sodium: 472.25 mg/L

TDS: 5,302 mg/L

Sulfate: 1,373 mg/L

TPH – Diesel: 0.11 mg/L

TPH – Gasoline: 0.28 mg/L

Zinc: 0.14 mg/L

Outfall 002:

Flow Rate: 41,420 Gal/d (16 instances, 59 instances of no discharge)

TDS: 4,286 mg/L

Outfall 003:

Flow Rate: 14,774 Gal/d (1 instance, 74 instances of no discharge)

TDS: 5,170 mg/L

Outfall 004:

Alkalinity, bicarbonate: 211 mg/L
 Alkalinity, total: 211 mg/L
 Arsenic: 0.02 mg/L
 Barium: 0.04 mg/L
 Calcium: 122.08 mg/L
 Chloride: 164.74 mg/L
 Depth: 29.62 Feet
 Fluoride: 0.54 mg/L
 Magnesium: 38.40 mg/L
 Nitrite + Nitrate total 1 det.: 3.16 mg/L
 Nitrogen: 3.16 mg/L
 Potassium: 19 mg/L
 Selenium: 0.01 mg/L
 Sodium: 104.33 mg/L
 TDS: 901.17 mg/L
 Sulfate: 267.17 mg/L
 Specific Conductance: 1,334 $\mu\text{S}/\text{cm}^*$
 Water Level: 4,616 Feet

Outfall 005:

Alkalinity, bicarbonate: 266.40 mg/L
 Alkalinity, total: 266.40 mg/L
 Arsenic: 0.01 mg/L
 Barium: 0.04 mg/L
 Cadmium: 0.04 mg/L
 Calcium: 122.08 mg/L
 Chloride: 166.55 mg/L
 Depth: 15.13 Feet
 Fluoride: 0.30 mg/L
 Magnesium: 34.48 mg/L
 Nitrite + Nitrate det 1: 1.72 mg/L*
 Nitrogen: 1.72 mg/L
 Potassium: 22.92 mg/L
 Selenium: 0.01 mg/L
 Sodium: 118.92 mg/L
 Sulfate: 227.80 mg/L
 TDS: 913.17 mg/L
 Specific Conductance: 1,415 $\mu\text{S}/\text{cm}$
 Water Level: 4,615 Feet

For Outfall 001, the following parameters were non-detect during the period reviewed – Beryllium, Cadmium, Mercury, Nickel, Silver, and Thallium.

For Outfall 004, the following parameters were non-detect during the period reviewed - Aluminum, Antimony, Beryllium, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Phosphorus, Silver, Thallium, and Zinc.

For Outfall 005, the following parameters were non-detect during the period reviewed - Aluminum, Antimony, Beryllium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Phosphorus, Silver, Thallium, and Zinc.

*Notes:

1. Conductivity is a general measure of a material's, or solution's, ability to conduct electricity, while specific conductance is that same measurement adjusted or normalized to a specific standard temperature (usually

25°C).

2. Nitrite+nitrate total 1 det. - is a standard laboratory test code for a single determination (measurement) of the combined total concentration of both nitrite and nitrate in a water or environmental sample.

Pollutants of Concern

Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Common pollutants of concern for process wastewater are pH, TDS, and Profile 1 analytes.

For the Monitoring Wells (MW-1 and MW-2), pollutants of concern are Profile 1 analytes and Specific conductance*.

*Note: While specific conductance itself isn't directly a pollutant, it can be a useful indicator of potential water pollution or contamination. High specific conductance in the groundwater surrounding the TSPP can indicate the presence of dissolved minerals and ions, which can be detrimental to aquatic ecosystems and make the water unsuitable for human consumption or other uses.

Receiving Water

Receiving water is groundwater of the State. The TSPP's evaporation ponds are located approximately 3 miles north of the Humboldt River. The groundwater flow gradient direction is to the southwest away from these ponds. Monitoring wells MW-1 and MW-2 are separated by a north-south offset distance of approximately ½ mile and are located on the western periphery of the evaporation ponds.

Compliance History

The facility has been in compliance during the period reviewed (January 2021 through December 2025).

Proposed Effluent Limitations

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

Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Specific conductance	Daily Maximum		M&R Conductance-Micromhos per cm (uS/cm)	Groundwater	004	Quarterly	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Depth to water level ft below landsurface	Daily Minimum	M&R Feet (ft)		Groundwater	004	Quarterly	VISUAL
Water level relative to mean sea level	Daily Maximum	M&R Feet (ft)		Groundwater	004	Quarterly	CALCTD

Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Calcium, dissolved (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
			M&R				

Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Fluoride, total (as F) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
pH, maximum	Daily Maximum		M&R Standard Units (SU)	Effluent Gross	004	Annual	DISCRT
pH, minimum	Daily Minimum		M&R Standard Units (SU)	Effluent Gross	004	Annual	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT

Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Sodium, dissolved (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	004	Annual	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Samples to be taken in 4th Quarter.
2. Sampling and analysis shall be conducted on the dissolved fraction.

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Specific conductance	Daily Maximum		M&R Conductance-Micromhos per cm (uS/cm)	Groundwater	005	Quarterly	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Depth to water level ft below landsurface	Daily Minimum	M&R Feet (ft)		Groundwater	005	Quarterly	VISUAL
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Water level relative to mean sea level	Daily Maximum	M&R Feet (ft)		Groundwater	005	Quarterly	CALCTD

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Calcium, dissolved (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
			M&R				

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Fluoride, total (as F) ^[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
pH, maximum	Daily Maximum		M&R Standard Units (SU)	Effluent Gross	005	Annual	DISCRT
pH, minimum	Daily Minimum		M&R Standard Units (SU)	Effluent Gross	005	Annual	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Sodium, dissolved (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	005	Annual	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Samples to be taken in the 4th quarter.
2. Sampling and analysis shall be conducted on the dissolved fraction.

NS OTHER - Discharge Limitations Table for Sample Location 002 (Dust Control) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate ^[1]	Event Total	M&R Gallons per Day (gal/d)		Effluent Gross ^[2]	002	Once Per Batch ^[3]	CALCTD ^[4]
Solids, total dissolved	Single Sample ^[5]		<= 10000 Milligrams per Liter (mg/L)	Effluent Gross	002	Daily When Discharging	DISCRT

Notes (NS OTHER - Discharge Limitations Table):

1. Onsite reuse flow (Gal/d).
2. Truck fill stand.
3. Each Water Truck.
4. Load Count Records.
5. Add note to DMR if water was mixed to achieve limit.

NS OTHER - Discharge Limitations Table for Sample Location 003 (Offsite Dust Control) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate ^[1]	Event Total	M&R Gallons per Day (gal/d)		Effluent Gross ^[2]	003	Once Per Batch ^[3]	CALCTD ^[4]
Solids, total dissolved	Single Sample ^[5]		<= 10000 Milligrams per Liter (mg/L)	Effluent Gross	003	Daily When Discharging	DISCRT

Notes (NS OTHER - Discharge Limitations Table):

1. Offsite reuse flow (Gal/d).
2. Truck Fill Stand.
3. Each Water Truck.
4. Load Count Records.
5. Add note to DMR if water was mixed to achieve limit.

Ponds / Rapid Infiltration Basins for Sample Location 001 (Evaporation 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	<= 1.95 Million Gallons per Day (Mgal/d)		Effluent Gross ^[3]	001	Continuous	METER
Flow rate	30 Day Average	<= 0.68 Million Gallons per Day (Mgal/d)		Effluent Gross ^[3]	001	Continuous	METER
Freeboard ^[4]	Daily Minimum		>= 2.0 Feet (ft)	Effluent Gross ^[1]	001	Weekly	VISUAL ^[5]
Liner Leakage Rate	Daily Maximum	<= 500 Gallons per Acre per Day (gal/acre/d)		Effluent Gross ^[1]	001	Monthly	VISUAL ^[2]

Notes (Ponds / Rapid Infiltration Basins):

1. Each Pond (Ponds # 1-4).
2. Field measurement.
3. Discharge line.
4. Pond Freeboard, ft. - each pond.
5. Staff Gauge or Level Sensor.

Ponds / Rapid Infiltration Basins for Sample Location 001 (Evaporation Ponds) To Be Reported Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
pH, maximum	Daily Maximum		<= 10.0 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	001	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Quarterly	DISCRT
Specific conductance	Daily Maximum		M&R Conductance-Micromhos per cm (uS/cm)	Effluent Gross	001	Quarterly	DISCRT

Ponds / Rapid Infiltration Basins for Sample Location 001 (Evaporation Ponds) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Oil & grease	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Total Petroleum Hydrocarbons - Diesel	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Total Petroleum Hydrocarbons - Gasoline	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Alkalinity, bicarbonate (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

Ponds / Rapid Infiltration Basins for Sample Location 001 (Evaporation Ponds) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Calcium, dissolved (as Ca)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Copper, dissolved (as Cu)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Fluoride, total (as F) [2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
			M&R				

Ponds / Rapid Infiltration Basins for Sample Location 001 (Evaporation Ponds) To Be Reported Annually^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Nitrogen, total	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Sodium, dissolved (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Annual	DISCRT

Notes (Ponds / Rapid Infiltration Basins):

1. Samples to be taken in the 4th quarter.
2. Sampling and analysis shall be conducted on the dissolved fraction.

Summary of Changes From Previous Permit

Under the Permittee's Information Page, of the Permit, the mailing address was updated to: 914 Dunphy Ranch Road, Battle Mountain, NV 89820

Under Outfall 001, To Be Reported Quarterly, the following changes were made:

CHANGED - pH maximum and Total dissolved solids from a "Quarterly Maximum" Base to a "Daily Maximum" Base, with the remaining monitoring requirements being the same as the previous permit.

CHANGED - pH minimum, with a "Quarterly Minimum" Base to a "Daily Minimum" Base, with the remaining monitoring requirements being the same as the previous permit.

CHANGED - Conductivity parameter to a "Specific conductance" parameter and from a "Quarterly Maximum" Base to a "Daily Maximum" Base, with the remaining monitoring requirements being unchanged from the previous permit.

Under Outfall 001, To Be Reported Annually, the following change and addition were made:

CHANGED - Profile 1 analytes from "Total" or "Total Recoverable" analytes to "Dissolved" analytes, based on current Division reporting standards, along with the inclusion of Cyanide and Uranium as reportable parameters under the updated Profile1 list.

ADDED - Cyanide, weak acid, dissociable, with a "Daily Maximum" Base, a "M&R Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, a "001" Sample Location, and a "Discret" Sample Type.

ADDED - Uranium, with a "Daily Maximum" Base, an "M&R Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, an "001" Sample Location, an "Annual" Measurement Frequency, and a "Discret" Sample Type.

DELETED - pH, maximum, with a "Daily Maximum" Base. It is being sampled quarterly.

DELETED - pH, minimum, with a "Daily Minimum" Base. It is being sampled quarterly.

DELETED - Solids, total dissolved, with a "Daily Maximum" Base. It is being sampled quarterly.

ADDED - Footnotes 1 and 2.

1. Samples to be taken in the 4th quarter.
2. Sampling and analysis shall be conducted on the dissolved fraction.

Under Outfall 002 Dust Control), To be Reported Monthly, the following change was made:

CHANGED - Footnote 1.

From: 1. Onsite Reuse flow, GPD.

To: 1. Onsite reuse flow (Gal/d).

Under Outfall 003 (Offsite Dust Control), To be Reported Monthly, the following change was made:

CHANGED - Footnote 1.

From: 1. Offsite Reuse flow, GPD.

To: 1. Offsite reuse flow (Gal/d).

Under Outfalls 004 and 005 (MW-1 and MW-2), to be reported quarterly the following changes were made:

CHANGED - Chloride, TDS, Specific conductance, and Water level relative to mean sea level - were changed from a "Quarterly Maximum" Base to a "Daily Maximum" Base, with the remaining monitoring requirements remaining the same as the previous permit.

CHANGED - Depth to water level ft below landsurface, with a "Quarterly Maximum" Base to a "Daily Minimum" Base, with the remaining monitoring requirements remaining the same as the previous permit.

Under Outfalls 004 and 005 (MW-1 and MW-2), To Be Reported Annually, the following changes or additions were made:

CHANGED - Profile 1 analytes from "Total" or "Total Recoverable" analytes to "Dissolved" analytes, based on current Division reporting standards, along with the inclusion of Cyanide and Uranium as reportable parameters under the updated Profile1 list.

ADDED - Cyanide, weak acid, dissociable, with a "Daily Maximum" Base, a "M&R Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, a "001" Sample Location, and a "Discret" Sample Type.

ADDED - Uranium, with a "Daily Maximum" Base, an "M&R Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, an "001" Sample Location, an "Annual" Measurement Frequency, and a "Discret" Sample Type.

ADDED - Footnotes 1 and 2.

1. Samples to be taken in the 4th quarter.
2. Sampling and analysis shall be conducted on the dissolved fraction.

Under SOC - Schedule of Compliance, the following compliance plan requirements were added:

Item 1. The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow Division's guidance document, *WTS-2 Minimum Information Required for an Operation and Maintenance Manual*, prepared and wet-stamped by a Nevada-licensed professional engineer (P.E.).

Due date: December 13, 2027

Item 2. The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of a Reclaimed Water Management Plan (RWMP) to the Division for review and approval. The RWMP shall follow the Division's guidance document *WTS-1B: General Design Criteria for Preparing a Reclaimed Water Management Plan*.

Due date: December 13, 2027

Technology Based Effluent Limitations

Technology based effluent limitations are not applicable to this permit.

Water Quality Based Effluent Limitations

Water quality based effluent limitations are not applicable to this permit.

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

Water quality based effluent limitations are not applicable to this permit.

Basis for Effluent Limitations

There are currently no specific water quality standards that have been formally adopted by the State for groundwater. However, the Division has the discretion to implement effluent limitations outside water quality standards per Nevada Administrative Code (NAC) 445A.243, which states, "In establishing an effluent limitation to carry out the policy of this State set forth in Nevada Revised Statutes (NRS) 445A.305, consideration must be given to, but is not limited by, the following: ... (2) the need for standards that specify by chemical, physical, biological or other characteristics the extent to which pollution by various substances will not be tolerated." The constituents listed in the parameters of concern have been vetted by the Division and have been included in groundwater discharge permits for many years as a means of regulating groundwater quality. Per NRS 445A.490, "No permit may be issued which authorizes any

discharge or injection of fluids through a well into any waters of the State: (3) which would result in the degradation of existing or potential underground sources of drinking water.”

The requirement to monitor the effluent for Profile 1 analytes annually has been maintained to continue to evaluate the quality of the effluent and determine whether the effluent has potential to impact the receiving water.

Leak Detection Systems: based on information received from the Permittee, the leak detection system operates continuously by removing any leaked volume and recirculating it back into the receiving pond. The Permittee will continue to sample the pond contents to comply with the quarterly and annual sampling requirements.

Freeboard: The Division requires that a visual confirmation of the amount of freeboard (in feet) be done to deter any overtopping issues.

Oil & grease: The requirement to sample oil & grease has been maintained due to its ability to cause system damage, may have toxic heavy metals and benzene (which is of concern if there is a failure or leak and the wastewater reaches the groundwater).

The proposed permit retains the requirement to sample TPH which is a mixture of chemicals found in crude oil and petroleum products like gasoline, diesel, and motor oil. Due to the facility being a known active BCA remediation site, that had a release of gasoline, and the constituent previously detected in the discharge. Continued monitoring is required, even if the levels have been non-detect during the past five years, with a monthly sampling requirement. A 10,000 mg/L TDS limit for non-process cooling water in a power generating station marks the operational boundary between brackish water and saline water.

Water Balance: A monthly water balance serves as a check on any unaccounted losses (e.g., leakage) from the ponds.

The requirement to sample pH has been maintained, with a standard unit (S.U.) limit variation of 6.5 S.U. to 10.0 S.U., which can eliminate, or sharply reduce, hazardous acid handling at the plant. The use of advanced high-performance antiscalants and polymer-based crystal modifiers allow cooling water systems to safely operate at those higher limits, without inducing calcium carbonate precipitation also.

The groundwater quality meets the drinking water Maximum Contaminant Levels (MCLs) except for naturally occurring arsenic (As). The arsenic MCL for potable use is 0.01 mg/l. Since domestic (sanitary) wastewater is not discharged into these evaporation ponds, nitrogenous waste matter is not identified in the process wastewater stream, but verification of the Division's Total Nitrogen (TN) standard will be made with an annual NDEP Profile 1 Analysis.

Anti-backsliding

None of the proposed permit limits were changed to a less restrictive limit as compared to those in the previous permit.

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 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.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable.

Special Conditions

See the Special Approvals/Conditions Table below:

SA – Special Approvals / Conditions Table

Item #	Description
1	Dust control can be done at off site locations (Outfall 003), which are approved in advance by the Division.
2	B.NSO.8. states that a minimum 3 feet of freeboard is required. Based on an engineering analysis submitted to the Division, this facility has been approved for a minimum requirement of 2 feet of freeboard.

Discharges From Future Outfalls/ Planned Facility Changes

There are no planned future outfalls or facility changes for the proposed permit.

Corrective Action Sites

There are no active Bureau of Corrective Actions (BCA) remediation sites located within a one-mile radius of the TSPP site.

Wellhead Protection Program

One public water supply (PWS) well is located cross gradient to the evaporation ponds. The well is located approximately 2,530 feet southwest on the ponds. The direction of groundwater flow is generally to the Southwest. The well supplies water to the permitted discharge facility. No impacts to the well are anticipated because of the distance from the discharge facility, the confined aquifer in which the well is completed, and the well construction (60-foot sanitary seal and top of well screens at 380 feet, below ground surface). All other PWS wells are greater than 15,000 foot distance from the facility.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow Division's guidance document, <i>WTS-2 Minimum Information Required for an Operation and Maintenance Manual</i> , prepared and wet-stamped by a Nevada-licensed professional engineer (P.E.).	12/13/2027
2	The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of a Reclaimed Water Management Plan (RWMP) to the Division for review and approval. The RWMP shall follow the Division's guidance document WTS-1B: General Design Criteria for Preparing a Reclaimed Water Management Plan. Note: Coordination with, and approval by, the Division may allow for the RWMP to be included as part of the O&M Manual.	12/13/2027

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	1/28/2027
2	Annual DMRs	Annually	1/28/2027
3	Annual Report	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. **11/3/2026**, 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.

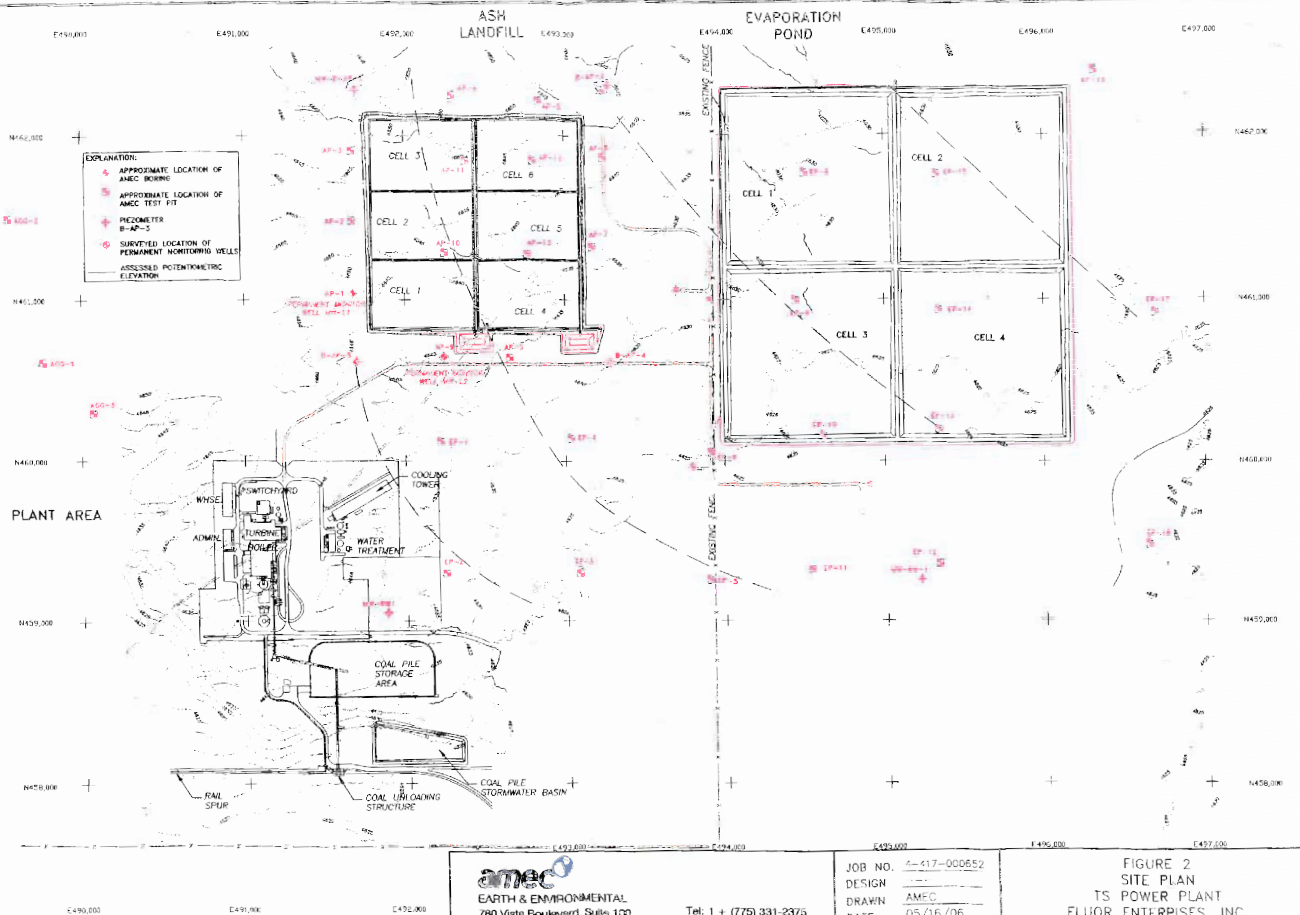
Proposed Determination:

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

Prepared by: **Melissa Hanson**

Date: **9/29/2026**

Title: **Staff II Engineer**



EARTH & ENVIRONMENTAL
 780 Vista Boulevard, Suite 100
 Sparks, Nevada
 USA 89434-6366

Tel: 1 + (775) 331-2375
 Fax: 1 + (775) 331-1153
 WWW.AMEC.COM

JOB NO. 4-417-000552
DESIGN
DRAWN AMEC
DATE 05/16/06
SCALE graphical

FIGURE 2
SITE PLAN
TS POWER PLANT
FLUOR ENTERPRISES, INC.
EUREKA COUNTY, NEVADA

AMEC DRAWING NO. 417-000552-01