NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET

(Pursuant to NAC 445A.236)

Permittee Name: Newmont Nevada Energy Investment LLC
910 Dunphy Ranch Road
Battle Mountain, NV 89820

Permit Number: NEV2004528

Location: TS Power Plant, 450 TS Power Plant Road
Battle Mountain, NV 89820 (Eureka County)
3 mi. N of Exit 254 @ Dunphy I-80 Interchange

Evaporation Ponds:
Latitude: 40º 45' 07" N; Longitude: 116º 30' 56" W
Elevation: 4,630 ft above sea level
Township 33N, Range 48E, NW¼ Section 12

Introduction: Newmont Nevada Energy Investment LLC was issued discharge permit # NEV2004528 on July 13, 2005 and has applied for a five-year permit renewal. TS Power Plant commenced commercial power generation in June 2008 and the plant operates one 242-MW (gross output) pulverized coal combustor (boiler). 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 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 GPM (194 GPM average since startup). The net annual evaporation rate in this area is approximately 4 ft. taking into account the annual 7½ in. 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 onsite 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. Since startup, 99% of the pond water has been retained for evaporation in the ponds and 1% of the flow reclaimed (dust control). With this renewal, the Permittee also requests that its surplus water be allowed for offsite dust control.

The applicant requests the existing flow limit of 0.68 / 1.95 MGD (30-Day Average / Daily Maximum). A 1 ft. decrease in the minimum freeboard (i.e., 3 to 2 ft.) is requested by the applicant for this permit renewal. To justify the 2 ft. freeboard, the applicant's engineer provided a wave analysis study to NDEP to indicate that no cell overtopping would occur at wind generated waves of up to 150% of the maximum historical observed wind speed. The 2 ft. freeboard request is to provide operating capacity when individual cells are taken offline for maintenance tasks including cleaning and inspection. The cells are equipped with staff gages for visual depth measurement. Since startup, there have been no reported capacity or freeboard issues. Ponds #1-2 were individually taken offline since startup for liner inspection and repair (patching) to correct minor defects (e.g. pinhole leaks).

Offsite Water Usage: For the permit renewal, the Permittee has requested permission from NDEP to allow offsite use of its evaporation pond water for dust control. Usage of the TS Power Plant surplus water will not only conserve groundwater but will also increase the effectiveness of the local dust abatement program. Offsite usage of the evaporation pond effluent from the TS Power Plant is subject to prior written approval by the Division for each offsite location. The offsite water trucks are also subject to the restrictions specified in Parts I.A.8 through I.A.12, inclusively, at each respective offsite location.

Bureau of Corrective Actions Sites: There is no Bureau of Corrective Action (BCA) remediation site located within a one-mile radius of the TS Power Plant evaporation ponds.

Wellhead Protection Area: The TS Power Plant evaporation ponds are not located within a currently established Wellhead Protection Area. These ponds are located approximately 2,700 ft. from a non-transient, non-community well, which supplies potable water to the TS Power Plant. The power plant's potable water treatment system includes the removal of naturally occurring arsenic in the local groundwater aquifer. The nearest public supply well is located approximately 5½ miles away from the TS Power Plant facility and services an I-80 rest area at the Beowawe interstate exit. This public supply well is defined as a transient, non-community supply well.

Receiving Water Characteristics: The TS Power Plant evaporation ponds are located approximately 3⅓ 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. Key groundwater parameters are averaged and tabulated below including a recent heavy metals scan. 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. Past and current usage of the surrounding area for agricultural purposes including livestock grazing, seasonal cattle feedlots, and forage crop production may have impacted the existing groundwater nitrogen level.

Table 1 – Groundwater Monitoring

PARAMETER		LIMIT	AVERAGE
MW-1	TDS (mg/l)	M&R	780
	Chloride (mg/l)	M&R	128
	Conductivity (µS/cm)	M&R	1,200
	Depth to Groundwater (ft.)	M&R	27.9
MW-2	TDS (mg/l)	M&R	820
	Chloride (mg/l)	M&R	129
	Conductivity (µS/cm)	M&R	1,280
	Depth to Groundwater (ft.)	M&R	12.0

Table 2 – Groundwater Monitoring (continued)

METAL	LIMIT (mg/l)	MW-1 (mg/l)	MW-2 (mg/l)
Antimony	M&R	< 0.003	< 0.003
Arsenic	M&R	0.011	0.008
Beryllium	M&R	< 0.002	< 0.002
Cadmium	M&R	< 0.002	< 0.002
Chromium	M&R	< 0.006	< 0.006
Copper	M&R	< 0.01	< 0.01
Lead	M&R	< 0.003	< 0.003
Mercury	M&R	< 0.0002	< 0.0002
Nickel	M&R	< 0.01	< 0.01
Selenium	M&R	0.005	< 0.001
Silver	M&R	< 0.005	< 0.005
Thallium	M&R	< 0.001	< 0.001
Zinc	M&R	< 0.01	< 0.01

DMR Review: Key parameters for the wastewater discharge into the ponds are averaged and tabulated below along with a recent metals scan. The plant's makeup water for both industrial and potable supply is sourced from groundwater wells. Including one shutdown period since startup, the plant's process wastewater flow has averaged 194 GPM. The TS Power Plant water trucks (dust control) see lower demand in the cooler, wetter winter months so the 2,500 GPD daily reuse flow (average) equates to approximately two truckloads of dust abatement water applied in the warmer, drier summer months.

Table 3 – Discharge Monitoring (Process Wastewater)

Parameter	Limit	Ave.
Flow (into ponds)	0.68 MGD	0.28 MGD
Reuse (dust control)	M&R	2,500 GPD
TDS	M&R	4,000 mg/l
pH	6.0 – 10.0 S.U.	7.8 S.U.
Calcium	M&R	130 mg/l
Chloride	M&R	245 mg/l
Sulfate	M&R	2,300 mg/l
Hydrocarbons (TPH)	M&R	< 0.5 mg/l
Oil & Grease	M&R	< 1.0 mg/l

Table 4 – Discharge Monitoring (Process Wastewater continued)

METAL	LIMIT (mg/l)	Level (mg/l)
Antimony	M&R	0.008
Arsenic	M&R	0.021
Beryllium	M&R	< 0.002
Cadmium	M&R	< 0.002
Chromium	M&R	0.014
Copper	M&R	< 0.01
Lead	M&R	< 0.003
Mercury	M&R	< 0.0002
Nickel	M&R	< 0.01
Selenium	M&R	0.017
Silver	M&R	< 0.005
Thallium	M&R	< 0.001
Zinc	M&R	0.262

Proposed Permit Requirements:

TABLE 1: DISCHARGE LIMITATIONS

PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	30-Day Average	**Daily Maximum**	**Sample Location**	**Measurement Frequency**	**Sample Type**
001 – Total Pond Flow, MGD (Million Gallons per Day)	0.68	1.95	Discharge Line - **001**	Continuous	Flow Meter
002 – Onsite Reuse Flow, GPD (Gallons per Day)	M&R	M&R	Truck Fill Stand - **002**	Each Water Truck	Load Count Records
003 – Offsite Reuse Flow, GPD (Gallons per Day)[1]	M&R	M&R	Truck Fill Stand - **002**	Each Water Truck	Load Count Records
001 - pH, Standard Units (S.U.)	6.0 to 10.0		Discharge Line – **001**	Quarterly	Discrete
001 - NDEP Profile 1, Mg/l	M&R		Discharge Line – **001**	Quarterly	Discrete
001 - Full-Range TPH, mg/l (Purge & Extract)	M&R		Discharge Line – **001**	Quarterly	Discrete
001 - Oil and Grease, mg/l	M&R		Discharge Line – **001**	Quarterly	Discrete
Pond Freeboard, ft.	≥ 2.0		Each Pond (Ponds #1-4)	Weekly	Staff Gage or Level Sensor
Primary Liner Leakage Rate, gallons/day-acre[2]	500		Each Pond (Ponds #1-4)	Monthly	Field Measurement

1. Offsite Reuse - see Permit Part I.A.13.
1. Primary Liner Leakage - see Permit Part I.A.22.

Table 2: Groundwater Monitoring

PARAMETER	GROUNDWATER LIMITATIONS		MONITORING REQUIREMENTS	
	Sample Location	Daily Maximum	Daily Maximum	Sample Type
Groundwater Elevation, ft. above sea level	Each Well	M&R	Quarterly	Field Measurement
Depth to Groundwater, ft.	Each Well	M&R	Quarterly	Field Measurement
TDS, mg/L	Each Well	M&R	Quarterly	Discrete
Chlorides, mg/L	Each Well	M&R	Quarterly	Discrete
Specific Conductivity, µS/cm	Each Well	M&R	Quarterly	Discrete
Total Nitrogen as N, mg/l	Each Well	10.0	Annually (4th Quarter)	Discrete
NDEP Profile 1, mg/l	Each Well	M&R	Annually (4th Quarter)	Discrete

Schedule of Compliance: (all compliance deliverables shall be addressed to the attention of the Compliance Coordinator, Bureau of Water Pollution Control):

- Within ninety (90) days of the permit issuance date (by XX/XX/2010), the Permittee submit an updated Operations & Maintenance (O&M) Manual for the evaporation pond system, prepared in accordance with the Division's WTS-2 guidance document: *Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant*.

- Within ninety (90) days of the permit issuance date (by XX/XX/2010), the Permittee shall submit an Effluent Management Plan (EMP) to address the operation of the effluent fill stand and dust control water trucks, prepared in accordance with the Division's WTS-1B guidance document: *General Design Criteria for Preparing and Effluent Management Plan*.

Procedures for Public Comment: The Notice of the Division's intent to renew this discharge permit is being sent to the **Eureka Sentinel** and **Reno Gazette-Journal** newspapers for publication. The notice is also being electronically mailed to all interested persons requesting listing on our public notification mailing list. Anyone wishing to comment on the proposed permit can do so in writing within a period of thirty (30) calendar days of the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **Friday, March 18, 2011, by 5:00 P.M. PST.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator 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 determines 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 (renew) the proposed water pollution control discharge permit for a period of five (5) years.

Prepared by: Clifford M. Lawson, P.E.
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Bureau of Water Pollution Control

Date Revised: February 14, 2011