



# STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

Colleen Cripps, Ph.D., Administrator

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

**Permittee Name:** NV ENERGY  
6226 WEST SAHARA AVENUE, MS # 30  
LAS VEGAS, NV - 89146

**Permit Number:** NS2001517

**Location:** NV ENERGY - CHUCK LENZIE STATION, CLARK  
13605 CHUCK LENZIE COURT, LAS VEGAS, NV - 89165  
LATITUDE: 36.383367, LONGITUDE: -114.921736  
TOWNSHIP: 18 S, RANGE: 63 E, SECTION: 15

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	POND 1	External Outfall		LAS VEGAS	NV	89146	CLARK	36.383367	-114.921736	GROUNDWATER
002	POND 2	External Outfall		LAS VEGAS	NV	89146	CLARK	36.383367	-114.921736	GROUNDWATER
LD1	LEAK DETECTION FOR POND 1	Internal Outfall		LAS VEGAS	NV	89146	CLARK	36.38	-114.92	GROUNDWATER
LD2	LEAK DETECTION FOR POND 2	Internal Outfall		LAS VEGAS	NV	89146	CLARK	36.38	-114.92	GROUNDWATER
SUM	SUM OF PONDS 1 AND 2	Sum		LAS VEGAS	NV	89146	CLARK	36.383367	-114.921736	GROUNDWATER

### General:

NV Energy operates the Chuck Lenzie Station (formerly the Moapa Energy Facility), at a site located approximately 20 miles northeast of Las Vegas, in the Apex Industrial Park. Access to the facility is via US Highway 93. The plant is a 1170 Megawatt combined cycle, natural gas fired, power generating facility. The permit is for the discharge of power plant generated waste streams to two on-site double-lined evaporation ponds. Water from the ponds is treated using a reverse osmosis (RO) process and reused for cooling. Waste water from the RO system is sent to the ponds.

### Discharge Characteristics:

Cooling tower blowdown water, reverse osmosis process wastewater, well flushing water, regeneration wastewater, and other process wastewaters are discharged to two double-lined ponds with leak detection. The water originates from 3 potable water wells.

### Receiving Water:

Groundwater below the plant and within a one mile radius of the plant is in excess of 550 feet below ground surface. The water supply wells on the property are approximately 1,200 to 1,500 feet deep, with a static water level near 500 feet.

### Summary of Changes From Previous Permit:

Total Petroleum Hydrocarbons (TPH) and Oil & Grease (O&G) monitoring has been removed from this permit. No effluent from this facility is used for dust control, so TPH and O&G monitoring is unnecessary.

Due to a new permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV2001517 to NS2001517. This change does not reflect a change in the type of permit being issued. NEV and NS permits are for discharges to groundwater of the state of Nevada. These are not to be confused with "NV" permits, which are reserved for NPDES permitting.

**NS OTHER - Discharge Limitations Table for Sample Location Ld1 (Leak Detection For North Pond) To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Monthly Average	<= 2500 Gallons per Day (gal/d) <sup>[1]</sup>		See Footnote <sup>[2]</sup>	LD1	Continuous	CALCTD

Notes (NS OTHER - Discharge Limitations Table):

1. Based on 500 gallons per acre per day for a 5-acre pond.
2. Report flow pumped from leak detection sump for North Pond (pond 001)

**NS OTHER - Discharge Limitations Table for Sample Location Ld2 (Leak Detection For South Pond) To Be Reported Monthly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Monthly Average	<= 2500 Gallons per Day (gal/d) <sup>[1]</sup>		See Footnote <sup>[2]</sup>	LD2	Continuous	CALCTD

Notes (NS OTHER - Discharge Limitations Table):

1. Based on 500 gallons per acre per day for a 5-acre pond.
2. Report flow pumped from leak detection sump for South Pond (Pond 002)

**Ponds / Rapid Infiltration Basins for Sample Location Sum (Sum Of Pond 1 And Pond 2) To Be Reported Monthly<sup>[1]</sup>**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 0.123 Million Gallons per Day (Mgal/d)		Effluent Gross	SUM	Continuous	METER
Flow rate	30 Day Average	<= 0.123 Million Gallons per Day (Mgal/d)		Effluent Gross	SUM	Continuous	METER

Notes (Ponds / Rapid Infiltration Basins):

1. Report the sum of the flows to both the North Pond (Pond 001) and the South Pond (Pond 002).

**Ponds / Rapid Infiltration Basins for Sample Location Sum (Sum Of Pond 1 And Pond 2) To Be Reported Quarterly**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
pH, maximum	Quarterly Maximum		M&R Standard Units (SU)	Effluent Gross	SUM	Quarterly	DISCRT
pH, minimum	Quarterly Minimum		M&R Standard Units (SU)	Effluent Gross	SUM	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Quarterly	DISCRT

**Ponds / Rapid Infiltration Basins for Sample Location Sum (Sum Of Pond 1 And Pond 2) To Be Reported Annually**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Beryllium, total (as Be)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Cadmium, total (as Cd)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Chromium, total (as Cr)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Copper, total (as Cu)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Lead, total (as Pb)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Antimony, total (as Sb)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Arsenic, total (as As)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Mercury, total (as Hg)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Nickel, total (as Ni)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Selenium, total (as Se)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Silver, total (as Ag)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
			M&R				

**Ponds / Rapid Infiltration Basins for Sample Location Sum (Sum Of Pond 1 And Pond 2) To Be Reported Annually**

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Thallium, total (as Tl)	Annual Maximum		Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT
Zinc, total (as Zn)	Annual Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	SUM	Annual	DISCRT

**Rationale for Permit Requirements:**

Monitoring is required to characterize the water quality contained in the evaporation ponds and the quantity discharged into the ponds.

The Permittee is in substantial compliance with the current permit.

**Special Conditions:**

SA – Special Approvals / Conditions Table

Item #	Description
1	Condition B.PB.10 does not apply to this facility; the freeboard requirement for the ponds is 2 feet, in accordance with calculations approved by NDEP.
2	Condition B.PB.9.6. applies only to the processes applicable to the permitted discharges (e.g. ponds, discharge points, leak detection sumps, etc.)

**Reasonable Potential Analysis and Antidegradation Review:**

Discharges in accordance with the permit will not degrade groundwater of the state of Nevada. Effluent is discharged to lined ponds to prevent the effluent from reaching the groundwater.

**Flow:**

The total flow limit to both ponds is 0.123 MGD, as requested by the Permittee. A flow of 0.078 MGD is the current operational maximum daily flow for disposal to the ponds; the current operational 30-day average flow is 0.054 MGD.

**Corrective Action Sites:**

There are no Bureau of Corrective Actions remediation sites within one mile of this facility.

**Wellhead Protection Program:**

The site is outside of the 3000-foot, but inside of the 6000-foot Drinking Water Protection Area, and no Wellhead Protection Area has been established.

**Schedule of Compliance:**

## SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies of a revised Operations and Maintenance (O&M) Manual for Division review and approval. The O&M shall be signed by a Nevada registered Professional Engineer, or other Division-approved qualified person. If there are no changes to the existing O&M Manual, the Permittee shall submit a letter stating so.	1/5/2015

**Deliverable Schedule:**

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	1/28/2015
2	Annual DMRs	Annually	1/28/2015
3	Annual Report	Annually	1/28/2015

**Procedures for Public Comment:**

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Las Vegas Review Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **9/29/2014**, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

**Proposed Determination:**

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

Prepared by: **Robert Wimer**

Date: **8/22/2014**

Title: **E.I.**