

**NEVADA DIVISION OF ENVIRONMENTAL PROTECTION**

**FACT SHEET**

(pursuant to NAC 445A.236)

**Permittee Name:** NV Energy (formerly Nevada Power Company)  
Chuck Lenzie Station (formerly Moapa Energy Facility)  
11405 U.S. Highway 93  
Las Vegas, Nevada 89124

**Permit Number:** NEV2001517

**Description of Discharge:** Wastewater is generated primarily from the cooling towers, with small quantities of brine from a reverse osmosis water treatment system and cooling system regeneration. These treatment systems allow the water to be recycled and reused many times prior to discharge into the two double-lined (80-mil and 40-mil HDPE) evaporation ponds. Small amounts of service water from floor drains, washdown water, and effluent from an oil-water separator are also discharged into the evaporation ponds. Incident stormwater and runoff from the facility is drained to the evaporation ponds. The permit is a zero discharge permit.

**Location:** The Chuck Lenzie Station is located within the Apex Industrial Park at 11405 U.S. Highway 93, approximately 20 miles northeast of Las Vegas, in Dry Lake Valley, Clark County, Nevada. US Highway I-15 East is about 2 miles east of the plant site, and State Route 93 is about 2 miles northeast of the facility. The site is accessed from SR 93 by a light duty asphalt road that serves a nearby industrial facility.

Latitude: 36° 23' 00"N.; Longitude: 114° 55' 00"W  
Section 15, T. 18S., R. 63E. MDB&M

**Characteristics:**

**Flow:** Monitor and Report. A flow of 0.043 MGD (30 GPM) is the maximum daily flow for disposal to the ponds; the 30-day average flow is 0.033 MGD (23 GPM). Current operational flow is 0.027 MGD, (19 GPM).

**Parameters:** Monitored and Reported Quarterly: TDS, pH, Temperature, and TPH

Monitored and Reported Annually: Oil and Grease, 13 Priority Pollutant Metals

**General:** NV Energy operates the Chuck Lenzie Station, an 1170 Megawatt (MW) combined cycle natural gas fired power plant. The power generation facility consists of four (4) GE Frame 7 combustion turbine generators with inlet air chillers, four (4) heat recovery steam generators (HRSGs),

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and two (2) GE 300 MW steam turbine generators with air-cooled condensers. There are two auxiliary boilers, a diesel emergency generator, a diesel fired water pump and other ancillary equipment.

Water used for the Chuck Lenzie Station is provided by two onsite water supply wells. Recycled water undergoes enhanced recovery water treatment with chemicals to control biological growth, scaling and corrosion during use in the cooling towers, inlet chillers and evaporative cooler. Some of this water is demineralized by a reverse osmosis treatment system prior to use as boiler feed water for the steam turbines and HRSGs. A mixture of potable water and demineralized water is used as make-up water to the cooling tower, inlet chillers and evaporative coolers.

The two evaporation ponds together have approximately 9.8 acres of surface area with a 3-foot freeboard. Each pond is individually lined with two liners, an 80-mil HDPE geomembrane primary liner and a 40-mil HDPE secondary liner with a leak detection system between the two, and a soil moisture detection system under the secondary liner. The inner secondary liner is covered with a HDPE drainage net. A 12-inch thick layer of protective sand cover material is in place on the primary liner to prevent wind uplift, mechanical damage and other types of damage. The dike areas surrounding the ponds are wide enough to provide access or inspection, monitoring and maintenance. The end of each cell has a "walk out" to enable egress by man or animal in case they fall into the pond. The influent system is designed so each pond can operate independently should a cell be required to be shut down for maintenance. The entire pond area is fenced with a 6-foot high chain link fence topped with barbed wire. Tortoise protection fences will be installed at the base of the chain link fencing.

The Permittee has applied for renewal the permit to discharge the facility wastestreams to the evaporation ponds. **This is a zero discharge permit.**

**Receiving Water Characteristics:** 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. Water quality is generally good with the exception of elevated Strontium, TDS, Sulfate, and Sodium.

**Procedures for Public Comment:** The notice of the Division's intent to issue a permit authorizing the facility to discharge to the evaporation pond cells 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 or by phone/FAX for a period of 30 days following the date of the public notice, by 06/27/2009. The comment period can be extended at the discretion of the Administrator.

any affected interstate agency, 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 scheduled by the Administrator 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 reissue the proposed permit for a 5-year period.

**Proposed Effluent Limitations, Schedule of Compliance and Special Conditions:**

Flow:	No limit, Monitor and Report.
TDS:	Monitor and Report
pH:	Monitor and Report
Oil & Grease:	Monitor and Report
TPH:	Monitor and Report
TEMPERATURE:	Monitor and Report

Any revisions to the approved Operations and Maintenance Manual (O&M) shall be submitted to the Division for review and approval within 90 days of permit issuance.

**Rationale for Permit Requirements:** Monitoring is required to characterize the water quality contained in the evaporation ponds and the quantity disposed into the ponds.

Prepared by: Jeryl Gardner  
(05/09)