



FACT SHEET

(Pursuant to the Solid Waste Disposal Regulations of the Nevada Administrative Code [NAC] 444.641.3[b])

Permittee Name: NV Energy

Facility Name: North Valmy Power Plant Landfill

Permit Number: SW174R03

Description of Proposed Permit Modification

None at this time

Location Information

Township/Range/Section– 35, 43 East, 20, 21, 28 & 29 MDB&M, approximately 240 miles east of Reno in Humboldt County, Nevada.

Proposed Action

None at this time

Facility Summary

Site Location Description

The North Valmy Power Plant (NVPP) is located in Humboldt County, Nevada, approximately fifteen miles northwest of Battle Mountain, Nevada. NVPP is a coal fired electric power generating facility jointly owned (50/50) by NVenergy and Idaho Power Company. The power station consists of two coal-fired steam turbine generators. Unit 1 is rated at 254 megawatts. Unit 2 is rated at 264 megawatts. Coal is transported to the site by rail and stockpiled northeast of Units 1 and 2. Other facilities at the site include transformers, a dry scrubber, baghouses, warehouses, office buildings, water aboveground storage tanks (ASTs), an ignition oil AST, cooling towers, and switchyard.

Geological Description

NVPP is in the Humboldt valley within the Basin and Range of geomorphic province. Quaternary alluvium underlies the site (Stewart and Carlson, 1978). Quaternary basalt bedrock exists approximately 65 feet below ground surface (bgs), (CH2M Hill, 1998). The unnamed valley is bounded to the northeast by the Snowstorm Mountains, which are composed of primarily Tertiary volcanic and shallow intrusive rocks (Stewart and Carlson, 1978). The Humboldt River Valley in this area is bounded to the west, north, and south by the Osgood Mountains and Battle Mountain, respectively, which are composed of primarily Paleozoic sedimentary rocks. Treaty Hill, located adjacent to and south of the NVPP, is composed of Permian chert, argillite, shale and greenstone, and Quaternary and Tertiary basalt flows.

Landfill Design

The Class III landfill is sited within the fenced perimeter of the NVPP and is not accessible to the general public and is accessible only to NVPP employees for the disposal of waste (described within this application) which is generated only at NVPP. Groundwater in the near vicinity of the ash disposal area moves from areas of recharge to areas of discharge. In the Humboldt River basin the groundwater movement is generally from the mountains toward the lowlands, although local conditions cause variations from this general pattern. In general, the floodplains along the Humboldt River act both as an area of recharge and discharge depending on the river stage. At lowflow conditions, the ground water movement is toward the river, and at high-flow conditions, water moves from the higher water level of the river to the groundwater. Studies of specific characteristics of the site area, reveal that the presence of tight clays and silts restricts the movement of water from the Humboldt River to groundwater. Under flooding conditions, most of the flood plain is inundated and water percolates downward to the water table. Evapotranspiration and evaporation draw from the groundwater and within several months the general pattern of flow toward the river is reestablished.



FACT SHEET

(Pursuant to the Solid Waste Disposal Regulations of the Nevada Administrative Code [NAC] 444.641.3[b])

Waste Streams

Bottom ash (coarse ash collected at the bottom of the boiler) and pulverizer rejects (pyrites) are sluiced from the plant and dewatered to approximately 12 to 20 percent water by volume before being trucked to the landfill. Because this material is coarse it is not subject to blowing or dusting and is easily landfilled.

Fly ash (light portion of the coal ash carried up the flue) is collected in the bag houses and economizers and transported dry to the fly ash silo. At the bottom of the silo a drum type unloader allows for "dustless" discharge to trucks for disposal.

Site Life

NVPP landfill has a minimum design life of thirty years thereby generating an estimated .8 million cubic yards of bottom ash and 5 million cubic yards of fly ash in total. Approximately 150 acres of privately owned land will be affected. In the event that it becomes necessary to utilize Unit 3, approximately 180 total acres will be affected. The Nevada Division of Environmental Protection will be notified before construction begins on Unit 3.

Configuration

Approximately 150 acres (includes Units 1 and 2) of privately owned land has been designated as the fly ash and bottom ash disposal area. If Unit 3 is utilized approximately 180 acres of privately owned land will be disturbed.

Fly ash and Bottom ash Landfill Development

The NVPP fly ash and bottom ash landfill is being constructed utilizing 100 foot borrow lanes. The phased approach involves the excavation of topsoil and common material. The topsoil and common material is composed mostly of fine sandy barns existing to depths varying from 1 to 6.5 feet below top of ground. This topsoil and common material is placed directly adjacent to the excavation and is used later as cover material.

Document Availability

The ADMINISTRATIVE RECORD, which includes the DRAFT PERMIT, and correspondence are available for public review by appointment between 8:00 AM and 5:00 PM, Monday through Friday, at the Division offices located at: 901 S. Stewart St., Suite 4001, Carson City, NV 89701-5249.

Contact: Paul Eckert at (775) 687-9477, or by e-mail at: PEckert@ndep.nv.gov

Procedure for Public Review

Questions or comments may be submitted on or before the end of the public comment period.

In writing: Paul Eckert, P.E.
Nevada Division of Environmental Protection
Bureau of Waste Management
901 S. Stewart St., Suite 4001
Carson City, NV 89701-5249

Phone: (775) 687-9477; fax: (775) 687-5856; e-mail: PEckert@ndep.nv.gov; or
web: [News and Public Notices](#)

The Division's Notice of Intent to approve the modified Permit for this facility, subject to the conditions contained in the Permit, will be published in a local newspaper. Additionally, the Public Notice will be mailed to interested persons on our mailing list. The Division will accept written comments on the proposed draft permit from all interested persons until the end of the public comment period.



FACT SHEET

(Pursuant to the Solid Waste Disposal Regulations of the Nevada Administrative Code [NAC] 444.641.3[b])

Will there be a public hearing?

N/A

When does the comment period end?

N/A