



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

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NEVADA DIVISION OF ENVIRONMENTAL PROTECTION FACT SHEET

(pursuant to NAC 445A.236)

Applicant: National Nuclear Security Administration/Nevada Site Office (NNSA/NSO)
P.O. Box 98518
Las Vegas, Nevada 89193

Permit: NV0023507

Location: NNSA/NSO North Las Vegas Facility (NLVF)
2621 Losee Road
North Las Vegas, Clark County, Nevada 89030
Latitude: 36° 12' 32.5" N, Longitude: 115° 08' 15.4" W
(Guard Gate; Outfall 001)
Latitude: 36° 12' 29.9" N, Longitude: 115° 8' 3.6" W
(Storm Drain; Outfall 002)
Township 20S, Range 61E, Section 15 MDB&M

Flow: The Applicant has requested a daily maximum flow of 0.0052 MGD.

Public Water Supply: There are no public supply wells within one mile of this facility.

Corrective Action Sites: There is one Bureau of Corrective Actions (BCA) remediation site located within a one-mile radius from the center-point of the property. BCA had no issues with discharges from this facility when performed in accordance with the permit.

Wellhead Protection Area: This facility is located outside of the 6,000 feet Drinking Water Protection Area (DWPA) and is not within a delineated wellhead capture zone for any public supply well.

General: The Applicant has applied for a renewal National Pollutant Discharge Elimination System (NPDES) permit, NV0023507, to discharge dewatering groundwater to the Las Vegas Wash via the City of North Las Vegas stormdrain system. The stormdrain system inlet is located at the corner of Losee Road and Atlas Drive, North Las Vegas, Nevada. An NPDES permit is required because the dewatering system is to be a permanent installation and the Applicant intends to add a point of discharge to include waters of the United States, i.e., the Las Vegas Wash. Groundwater discharges will continue via landscape irrigation and dust suppression. Drawdown wells (NLVF-12s, NLVF-13s, NLVF-15, NLVF-16 and NLVF-17) have been installed to address rising groundwater that could adversely impact the building foundations at the NLVF. Groundwater has been encroaching on the NLVF since 1999, concurrent with the injection program instituted by the Las Vegas Valley Water District. Up to five (5) wells (NLVF-12s, NLVF-13s, NLVF-15, NLVF-16 and NLVF-17) may be used as dewatering wells to control the rising groundwater. Each well

will produce up to one (1) gallon per minute. Current daily maximum flow is 5184 gallons per day (0.005184 MGD). All pumped water is piped into a 10,000 gallon above ground holding tank. From the holding tank the water can be pumped to a tanker truck (for dust suppression and landscape irrigation, Outfall 001), or hard piped directly to the North Las Vegas stormdrain (Outfall 002). The dewatering water may also be used for purposes that do not require a groundwater discharge or an NPDES permit, e.g., evaporative cooling.

Receiving Water Characteristics: The receiving waters are the groundwater of the State via landscape irrigation and dust suppression and the Las Vegas Wash via the North Las Vegas stormdrain system. Groundwater at the NLVF meets drinking water quality standards. Water quality standards for the Upper Las Vegas Wash are specified in NAC 445A.2156.

Water quality characteristics of the discharged water in December 2011 were as follows: TPH, 0.3 mg/L (limit 1.0 mg/L); TSS, non-detect (limit 135 mg/L; 5.84 lbs/day); TDS, 1130 mg/L (limit 1900mg/L; 82.2 lbs/day); Total Nitrogen as N, 1.22 mg/L (limit 20.0 mg/L); pH, 7.94 SU (limit 6.5 to 9.0 SU); Tritium, non-detect (Safe Drinking Water limit 20,000 pCi/L).

The beneficial uses of the Upper Las Vegas Wash, as designated in NAC 445A.2156, are propagation of aquatic life, excluding fish; propagation of wildlife; irrigation; recreation not involving contact with water; maintenance of a freshwater marsh; and watering of livestock.

Table 1: Discharge Limitations

Parameter	Discharge Limitations		Monitoring Requirements	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD	---	0.0052	Continuous	Flow Meter
Total Petroleum Hydrocarbons	---	1.0 mg/L	Annually (4 th quarter)	Discrete
Total Suspended Solids	---	135 mg/L 5.84 lbs/day	Quarterly	Discrete
Total Dissolved Solids	---	1900 mg/L 82.15 lbs/day	Quarterly	Discrete
Total Inorganic Nitrogen as N	---	20.0 mg/L 0.86 lbs/day	Quarterly	Discrete
pH, SU	6.5 ≤ pH ≤ 9.0		Quarterly	Discrete
Tritium (pCi/L)	Monitor & Report		Annually (4 th quarter)	Discrete
Attachment A	Monitor & Report		Biennial	Discrete

Table Definitions:

MGD: Million Gallons per Day as N: As Nitrogen
 TPH: Total Petroleum Hydrocarbons SU: Standard Units
 mg/L: milligrams per Liter pCi/L: pico Curie per Liter
 lb/day: pounds per day = concentration (mg/L) x flow (MGD) x 8.34

Rationale for Permit Requirements: Monitoring requirements for the parameters specified in Table 1 above have been established to ensure that the receiving waters, the groundwaters of the State and surface waters of the United States, i.e., the Las Vegas Wash, are not degraded as a result of the dewatering of the Applicant's NLVF.

Flow: The Applicant has requested a maximum daily flow of 0.0052 MGD.

Total Petroleum Hydrocarbons (TPH): The Applicant stores some fuel products at the NLVF site. This parameter is monitored to ensure that no petroleum products are leaking into the groundwater.

Total Dissolved Solids (TDS): NAC 445A.2156 includes a single value at 180°C TDS standard for requirements to maintain existing higher quality for 95% of samples $\leq 1,900$ mg/L.

Total Inorganic Nitrogen as Nitrogen (TIN): NAC 445A.2156 includes a requirement to maintain existing higher quality TIN standard of 95% of the samples ≤ 20.0 mg/L.

pH: NAC 445A.2156 includes a single value pH water quality standard for beneficial uses within the range of 6.5 - 9.0 SU.

Total Suspended Solids (TSS): NAC 445A.2156 includes a TSS water quality standard for beneficial uses of ≤ 135 mg/L.

Tritium: Tritium had been stored at the NLVF in the past and some leakage in the shallow groundwater aquifer had been previously detected.

Attachment A Parameters: These parameters are monitored to ensure that no chemicals stored on site have leaked into the groundwater.

Schedule of Compliance: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.

- a. The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.
- b. Within 45 days of the effective date of the permit (**MM DD, 2012**), the Permittee shall submit two copies of an updated O&M Manual to the Division for review and approval.
- c. The Permittee shall submit reports illustrating compliance or noncompliance with specified compliance dates within 14 days of any respective scheduled compliance date.

Proposed Determination: The Division has made the tentative determination to re-issue the proposed permit for a period of five (5) years.

Procedures for Public Comment: The Notice of the Division's intent to re-issue a permit authorizing the discharge of dewatering water to the Las Vegas Wash, 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 for a period of thirty (30) days following 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, time-stamped faxes, e-mails, or hand-delivered items) to the Division is **5:00 PM on June 11, 2012**.

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.

Prepared by: Rob Wimer
Date: May 2012