NEVADA DIVISION OF
ENVIRONMENTAL PROTECTION

A division of the
Nevada Department of Conservation & Natural Resources

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FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: Department of Energy
National Nuclear Security Administration
Nevada Field Office
232 Energy Way
North Las Vegas, NV 89030

Permit Number: GNEV93001

Location: Nevada National Security Site
Nye County, Nevada

General:

The Permittee, the National Nuclear Security Administration/Nevada Field Office (NNSA/NFO), owns, and operates, through their Management and Operating contractor, the Nevada National Security Site (NNSS), located approximately sixty-five miles northwest of Las Vegas, Nevada in Nye County, Nevada. This permit authorizes the Permittee to activate, construct, operate, maintain, and/or commission six wastewater treatment pond systems located on the NNSS.

The proposed influent limitations on existing and new pond systems or ancillaries covered under this permit prohibit the discharge of wastewater to the surface Waters of the State and the degradation of existing or potential underground sources of drinking water. Furthermore, the permit prohibits the Permittee from discharging waste containing constituents whose concentrations are defined or declared as hazardous waste, per 40 CFR 261.24, into a sewer main, pond, or basin.

The proposed standard of performance for pond systems and new construction in this permit is prescribed by regulation and is appropriately limited to the no-discharge standard. New or modified pond systems must comply with permit conditions and limitations upon commencement of wastewater treatment in the new or modified pond systems.

The permit requires monitoring on the liquid level of each pond, quarterly monitoring on the influent flow for pH (time- or flow-weighted composite) and BOD_5 (time- or flow-weighted composite). The permit requires quarterly BOD_5 (time- or flow-weighted composite) and total dissolved solids (time- or flow-weighted composite) monitoring on the influent flow, according to EPA accepted methods. In the event of accidental overflow, or catastrophic breach of a system part, NNSA/NFO will sample the influent and

analyze the spill area for constituents of concern as per 40 CFR 261.24, EPA Radionuclide Rule, and 40 CFR 133.102 (Table 1).

The water quality standards in NAC445A.121, "Standards applicable to all waters," apply to all surface waters of the state, regardless of designation or classifications, and to all groundwater.

The Nevada policy of "non-degradation of groundwater" is established by NRS445A.490.

Table 1: Proposed Water Quality-Based Influent Limitations:

The following parameters for constituents of concern are limited in accordance with 40 CFR 261.24, EPA Radionuclide Rule, and 40 CFR 133.102.

Organic Contaminants	[1] **Regulatory Level** (mg/L)	**Inorganic Metal Contaminants**	[1] **Regulatory Level** (mg/L)
Benzene	0.5	Arsenic	5.0
Carbon Tetrachloride	0.5	Barium	100
Chlorobenzene	100.0	Cadmium	1.0
Chloroform	6.0	Chromium	5.0
Cresol, Total	200.0	Lead	5.0
1,2-Dichloroethane	0.5	Mercury	0.2
1,1-Dichloroethylene	0.7	Selenium	1.0
2,4-Dinitrotoluene	0.13	Silver	5.0
Hexachlorobenzene	0.13		
Methyl Ethyl Ketone	200.0		
Nitrobenzene	2.0		
Pentrachlorophenol	100.0	**Radioactive Parameters & pH Limit**	
Pyridine	5.0	[2] Gross Alpha	15 pCi/L
Tetrachloroethylene	0.7	[2] Gross Beta	50 pCi/L
Trichloroethylene	0.5	[2] Tritium	20,000 pCi/L
Vinyl Chloride	0.2	[3] Hydrogen ion activity	in the range of 6.0 to 9.0 SU

Sources: [(1)] 40 CFR 261.24, [(2)] EPA Radionuclide Rule, and [(3)] 40 CFR 133.102

Discharge Characteristics:

The parameters monitored quarterly have the following reported average values from January 2026 to September 2026 for the Area 6 Yucca Lake, Area 6 DAF, and Area 23 Mercury Pond systems. Construction on the Area 1 PULSE Complex wastewater treatment system has been completed, but the wastewater treatment system is not currently in use. The Area 12 Camp and Area 25 Engine Test Stand 1 wastewater treatment systems are primarily utilized as drying beds for porta-potty septage and oil/grease from on-site cafeterias.

Area 6 Yucca Lake Pond System:

- Biological Oxygen Demand (BOD_5) (mg/L): 266.6
- TSS (mg/L): 206.6
- pH (SU): 8.37
- January 2026 Flow (gal/day): 657, Limit: 10,850
- February 2026 Flow (gal/day): 1,234, Limit: 10,850
- March 2026 Flow (gal/day): 478, Limit: 10,850
- April 2026 Flow (gal/day): 1,700, Limit: 10,850
- May 2026 Flow (gal/day): 2,293, Limit: 10,850
- June 2026 Flow (gal/day): 441, Limit: 10,850
- July 2026 Flow (gal/day): 712, Limit: 10,850
- August 2026 Flow (gal/day): 490, Limit: 10,850
- September 2026 Flow (gal/day): 724, Limit: 10,850

Area 6 DAF Pond System:

- BOD_5 (mg/L): 189.3
- TSS (mg/L): 185
- pH (SU): 8.63
- January 2026 Flow (gal/day): 302, Limit: 7,640
- February 2026 Flow (gal/day): 397, Limit: 7,640
- March 2026 Flow (gal/day): 446, Limit: 7,640
- April 2026 Flow (gal/day) 483, Limit: 7,640
- May 2026 Flow (gal/day): 401, Limit: 7,640
- June 2026 Flow (gal/day): 656, Limit: 7,640
- July 2026 Flow (gal/day): 651, Limit: 7,640
- August 2026 Flow (gal/day): 558, Limit: 7,640
- September 2026 Flow (gal/day): 438, Limit: 7,640

Note: On August 4, 2015, NDEP granted a waiver for the calculated flow limit for the Device Assembly Facility (DAF) wastewater treatment ponds.

Area 23 Mercury Pond System:

- BOD_5 (mg/L): 270
- TSS (mg/L): 334.6
- pH (SU): 8.36
- January 2026 Flow (gal/day): 7,569, Limit: 73,407
- February 2026 Flow (gal/day): 15,149, Limit: 73,407
- March 2026 Flow (gal/day): 14,181, Limit: 73,407
- April 2026 Flow (gal/day): 10,827, Limit: 73,407
- May 2026 Flow (gal/day): 6,794, Limit: 73,407
- June 2026 Flow (gal/day): 5,436, Limit: 73,407
- July 2026 Flow (gal/day): 6,556, Limit: 73,407
- August 2026 Flow (gal/day): 23,508, Limit: 73,407
- September 2026 Flow (gal/day): 19,652, Limit: 73,407

Receiving Water:

The receiving water is groundwater of the State.

Summary of Changes from Previous Permit:

- Updated the name of the U1a Complex to PULSE Complex.

Sampling Locations for Wastewater Treatment Ponds:

During the period beginning on the effective date of permit GNEV93001, and lasting until the permit expires, the Permittee is authorized to receive domestic wastewater from NNSS facilities and discharge treated effluent to groundwaters of the State via evaporation and infiltration from wastewater treatment ponds located on site.

Influent samples and measurements taken in compliance with the monitoring requirements specified in permit GNEV93001 shall be taken at the sample locations listed in Table 1.

Table 1: Wastewater Treatment Pond Sample Locations

Sample Locations			
Area	Pond Facility	Sample Loc	Location Description
1	PULSE Complex	001	Influent Headworks
6	Yucca Lake	002	Influent Headworks
6	DAF	003	Influent Headworks
12	Camp	004	Influent Headworks
23	Mercury	005	Influent Headworks
25	ETS 1	006	Influent Outfall

Proposed Discharge Limitation Tables for Wastewater Treatment Pond Systems:

The discharge shall be limited and monitored by the Permittee for each sample location. The tables below describe the discharge limitations and monitoring requirements for each sample location that shall be taken either monthly or quarterly to ensure permit compliance (NAC 445a.243).

Discharge Limitation Table for Sample Location 001

AREA 1			
Discharge Limitations & Monitoring Requirements			
PULSE Complex (Primary and Secondary)	Limit	Reporting Frequency	Sample Type
Monitoring			
BOD_5 (mg/l)	M&R[1]	Quarterly	Composite[2]
Total Suspended Solids (mg/l)	M&R	Quarterly	Composite
pH (SU)	6.0-9.0	Quarterly	Composite
Measurements			
Metered Flow (gal/day)	22,650	Monthly	Influent Meter
Distance from Freeboard (feet)	≥2	Quarterly	Observation
Leakage Rates (gal/acre/day)	M&R	Quarterly	Meter
Calculated			
Organic Loading Rate (lb/day)	32.00	Quarterly	Calculated

1 M&R: Monitoring and Reporting

2 Composite Samples: Will be flow-weighted (6 hours during normal business hours) for those systems equipped with an ultrasonic flow meter. Samples from systems without flow meters, but which utilize automatic samplers, shall be composited in a time-weighted (6 hours) basis. Any method of comparable reliability can be employed in place of continuous flow meter-

driven automatic samplers. Those headworks which have no flow for the entire quarter cannot be sampled; consequently, the no flow condition shall be recorded and reported. In the event there are two consecutive quarters of low flows at a system impacting the ability to collect time or flow weighted samples, the permittee may propose alternative methods for measuring flow rates or obtaining representative samples.

Discharge Limitation Table for Sample Location 002

AREA 6			
Discharge Limitations & Monitoring Requirements			
Yucca Lake Pond System (Primary and Secondary)	Limit	Reporting Frequency	Sample Type
Monitoring			
BOD_5 (mg/l)	M&R[1]	Quarterly	Composite[2]
Total Suspended Solids (mg/l)	M&R	Quarterly	Composite
pH (SU)	6.0-9.0	Quarterly	Composite
Measurements			
Metered Flow (gal/day)	10,850	Monthly	Influent Meter
Distance from Freeboard (feet)	≥2	Quarterly	Observation
Calculated			
Organic Loading Rate (lb/day)	75.90	Quarterly	Calculated

Discharge Limitation Table for Sample Location 003

AREA 6			
Discharge Limitations & Monitoring Requirements			
DAF Pond System (Primary and Secondary)	Limit	Reporting Frequency	Sample Type
Monitoring			
BOD_5 (mg/l)	M&R[1]	Quarterly	Composite[2]
Total Suspended Solids (mg/l)	M&R	Quarterly	Composite
pH (SU)	6.0-9.0	Quarterly	Composite
Measurements			
Metered Flow (gal/day)	7,640	Monthly	Influent Meter
Distance from Freeboard (feet)	≥2	Quarterly	Observation
Calculated			
Organic Loading Rate (lb/day)	33.73	Quarterly	Calculated

Discharge Limitation Table for Sample Location 004

AREA 12			
Discharge Limitations & Monitoring Requirements			
Area 12 Camp (Primary and Drying Bed)	Limit	Reporting Frequency	Sample Type
Measurements			
Metered Flow (gal/day)	16,800	Monthly	Calculated
Distance from Freeboard (feet)	≥3	Quarterly	Observation

Discharge Limitation Table for Sample Location 005

AREA 23			
Discharge Limitations & Monitoring Requirements			
Mercury Pond System (Primary, Secondary, and Tertiary)	Limit	Reporting Frequency	Sample Type
Monitoring			
BOD_5 (mg/l)	M&R[1]	Quarterly	Composite[2]
Total Suspended Solids (mg/l)	M&R	Quarterly	Composite
pH (SU)	6.0-9.0	Quarterly	Composite
Measurements			
Metered Flow (gal/day)	73,407	Monthly	Influent Meter
Distance from Freeboard (feet)	≥3	Quarterly	Observation
Calculated			
Organic Loading Rate (lb/day)	274.05	Quarterly	Calculated

Discharge Limitation Table for Sample Location 006

AREA 25			
Discharge Limitations & Monitoring Requirements			
Engine Test Stand 1 (Primary and Drying Bed)	Limit	Reporting Frequency	Sample Type
Measurements			
Metered Flow (gal/day)	1,428	Monthly	Calculated
Distance from Freeboard (feet)	≥2	Quarterly	Observation

Rationale for Permit Requirements:

Flow: Limitations set on flow rate per pond system are calculated from the maximum designed holding capacity. The permitted limits are made to ensure overtopping of the basin embankments does not occur, as an overflow of the berms is considered an unauthorized discharge into the surrounding environment.

BOD_5: Biological oxygen demand is measured to determine the health of the aerobic bacteria population. Pond treatment systems function as organic waste decomposers due to these bacteria.

pH: pH is limited to 6.0 to 9.0 SU in accordance with the water quality standards for beneficial uses listed in NAC 445A.2156.

Total Suspended Solids: TSS is measured in accordance with the water quality standards for beneficial uses listed NAC 445A.2156. The 30-day average is used to calculate the organic load limit in pounds per day per pond system.

Flow:

The daily maximum and the 30-day average flow rate for the Area 6 Yucca Lake system is limited to 10,850 gallons per day.

The daily maximum and the 30-day average flow rate for the Area 6 DAF system is limited to 7,640 gallons per day.

The daily maximum and the 30-day average flow rate for the Area 23 Mercury system is limited to 73,407 gallons per day.

The Area 12 Camp and Area 25 Engine Test Stand do not have influent flow meters. The volume of septage released in the drying bed will be calculated by the size of the septic pumper tank.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies of an updated O&M (Operations and Maintenance) Manual for review by the NDEP within thirty days of permit issuance. The O&M Manual shall be prepared by a Nevada Registered Professional Engineer or other Division approved qualified person.	**February 3, 2027**

Deliverable Schedule:

DLV – Deliverable schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	April 28, 2027
2	Annual DMRs	Annually	January 28, 2028

Procedures for Public Comment:

The Notice of the Nevada Division of Environmental Protection's intent to issue a permit authorizing the facility to discharge to waters of the U.S. subject to the conditions contained within the permit, is being published electronically. The notice is being posted on the NDEP website and emailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until **December 10, 2026,** at **5:00 P.M**., 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 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.

The draft renewal permit and the renewal application will be available for public review and comment for a period of thirty (30) days beginning November 10, 2026 and ending December 10, 2026. All interested parties may review the documents during standard business hours at:

Bureau of Federal Facilities
Nevada Division of Environmental Protection
375 E. Warm Springs Road Suite #200
Las Vegas, Nevada 89119
tel. (702) 668-3900

Proposed Determination:

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

Prepared by: **Meghan J. Lyle**
Date: **November 10, 2026**
Title: **Chief, Federal Facilities**