

**1. FACILITY SUMMARY**

The Area 9 Class III Solid Waste Disposal Site (SWDS) in the northeast corner of the Nevada National Security Site (NNSS) in a subsidence crater created by two underground nuclear events. The facility originally opened in 1971 for the disposal of rubbish, refuse, pathological waste, asbestos-containing material, and industrial solid waste. A Notice of Intent to operate as a Class II site was submitted on January 26, 1994, and was acknowledged on February 8, 1994. The disposal site operated as a Class II SWDS until it closed for retrofit as a Class III SWDS on October 5, 1995. The retrofit consisted of the installation of a minimum four-foot compacted soil layer to segregate the different waste types and function as a liner to inhibit leachate and water flow into the lower waste zone. Five neutron monitoring tubes were installed in this layer to monitor possible leachate production and water activity. The site reopened in January 1996 as a Class III SWDS for the disposal of industrial solid waste and other inert waste.

**1.1 GENERAL DESCRIPTION**

The Permit authorizes the operation of a Class III disposal site, consisting of one industrial solid waste landfill unit, contiguous land, structures, and other appurtenances and improvements for the disposal of industrial waste as approved by the Nevada Division of Environmental Protection (Division). The Application provides that an interim cover will be installed with ongoing operations, with a final cover to be installed at time of closure. The Owner/Operator will perform vadose zone monitoring, closure, and post closure care in accordance with this Permit.

**1.2 OWNER/OPERATOR**

Owner: U.S. Department of Energy  
National Nuclear Security Administration  
Nevada Field Office  
P.O. Box 98518  
Las Vegas, NV 89193-8518

Authorized Agent: Scott A. Wade  
Senior Advisor for Environmental Management

Operator: Mission Support and Test Services, LLC  
P. O.Box 98521  
Las Vegas, Nevada 89193-8521

Authorized Agent: Mark W. Martinez  
President

**1.3 FACILITY LOCATION**

Nevada National Security Site – Area 9, NNSS, Nye County

**1.4 FACILITY DESIGN**

Permitted Design Summary

Class III	Revision 11
Disposal Area (acres)	28
Maximum Elevation (ft amsl)	4,260
Minimum Elevation (ft amsl)	4,220
Disposal Capacity (yds <sup>3</sup> )	467,074

ft amsl = feet above mean sea level

yds<sup>3</sup> = cubic yards

**2. GENERAL PERMIT CONDITIONS**

**2.1 DEFINITIONS**

Unless the context otherwise requires, the definitions used in this Permit have the meanings ascribed to them in NAC 444.5701 to 444.631.

“Landfill volume” means the quantity of space contained above the bottom liner and including the final cover of a landfill design.

“Landfill disposal capacity” means the quantity of solid waste, by volume, that can be placed in a landfill, given its landfill volume and plan of operations.

**2.2 PERMIT ACTIONS (NAC 444.643)**

This Permit is based upon the information submitted in the Permit application, and as approved by the Nevada Division of Environmental Protection. This Permit may be modified by the Division, for cause, in accordance with NAC 444.643 or if there is a change in the statutes or regulations upon which the issuance of the Permit is based, or if a modification is otherwise necessary to protect public health, safety and the environment. This Permit may be revoked or suspended if written notice is given by the solid waste management authority and the disposal site does not remain in compliance with the applicable statutes and regulations. The filing of a request by the Permittee for a Permit modification or termination, or a notification of planned changes or anticipated noncompliance, or termination of activities authorized in the Permit does not stay any Permit condition. The Permittee shall inform the Division of any deviation from or change in the operations as presented in the application, which may affect the Permittee's ability to comply with applicable regulations or conditions of this Permit. This Permit may be transferred to a subsequent owner or operator only if the solid waste management authority approves the transfer based on documentation of financial responsibility provided by the new owner or operator.

**2.3 AVAILABILITY OF PERMIT DOCUMENTS**

The Permittee shall keep, at the disposal site, a complete copy of this Permit and incorporated documents, as identified herein.

**2.4 COMPLIANCE WITH STATUTES AND REGULATIONS**

The Permittee shall comply with NRS 444.440 through 444.620, and NAC 444.570 through 444.7499, as applicable.

**2.5 DUTY TO PROVIDE INFORMATION**

The Permittee shall furnish to the Division, within a reasonable time, any relevant information which the Division may request to determine compliance with this Permit or to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit. The Permittee shall also furnish to the Division, upon request, copies of records required to be kept by this Permit.

**2.6 INCIDENT REPORTING**

The Permittee shall report incidents to the Division as provided in the *Operating Plan*. In addition, the Permittee shall report any noncompliance, imminent or existing hazard from a release of waste or hazardous constituents, or from a fire or explosion at the facility, which may endanger human health or the environment. Such information shall be reported by telephone to 888-331-6337 within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. A written report shall be submitted within 15 days of the incident and shall include the following:

- i. Name and title of person making report;
- ii. Date, time, and type of incident;
- iii. Name and quantity of material(s) involved;
- iv. A complete description of the occurrence and its cause;
- v. The extent of injuries, if any;
- vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable;
- vii. Estimated quantity and disposition of recovered material that resulted from the incident; and
- viii. Actions taken by the Permittee in response to the incident.

**2.7 REPORTING ANTICIPATED NON-COMPLIANCE**

The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity that may result in noncompliance with Permit requirements.

**2.8 INSPECTION AND ENTRY**

The Permittee shall allow the Nevada Division of Environmental Protection, or an authorized representative, upon the presentation of credentials or other documents as may be required by law to:

- i. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- iii. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- iv. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized, any substances or parameters at any location subject to the Permit.

**3. PERMIT DOCUMENTS**

The following documents, as submitted by the Permittee and approved by the Division also describe and/or restrict the operation of this disposal site:

- i. Permit Application (Revision 2, February, 2018)

**4. WASTE ACCEPTANCE CRITERIA**

Exhibit 3 in the Permit Application.

**4.1 SOLID WASTES PERMITTED FOR DISPOSAL**

1. Industrial Waste
  2. Construction Waste
  3. Hydrocarbon-burdened Soil, limited to only one truckload per day, not to exceed 50 cubic yards per week. Larger amounts will require approval from Division on a case-by-case basis.
  4. Hydrocarbon-burdened Demolition and Construction, limited to only one truckload per day, not to exceed 50 cubic yards per week. Larger amounts will require approval from Division on a case-by case basis.
  5. Regulated Asbestos Containing Material (RACM)
  6. Polychlorinated biphenyl (PCB) < 50 ppm
  7. Polychlorinated biphenyl (PCB) Bulk product waste on a case-by-case basis, with concurrence from the Division
  8. Beryllium from off-site NNSA/NFO facilities on a case-by-case basis, with concurrence from the Division
- Other wastes as listed in the Waste Acceptance Criteria (WAC) (Exhibit 3)  
Other waste not listed in the WAC on a case-by-case basis, with concurrence from the Division (Exhibit 3)

**4.2 PROHIBITED SOLID WASTES**

1. Liquid waste as defined by NAC 444.692(4)
2. Hazardous waste, as defined by NAC 444.580 & State and Federal Regulations
3. Household waste as defined by NAC 444.581
4. Garbage as defined by NAC 444.578
5. Pathological waste as define by NAC 444.600
6. Waste not listed in the WAC without concurrence from the Division.

**5. RECORDKEEPING**

The Permittee shall maintain records at the site as described in Exhibit 1 of the Permit Application. The owner or operator shall notify the solid waste management authority when documentation listed in section 5.1 of this permit has been placed in or added to the operating records. All information contained in the operating records must be furnished upon request to the solid waste management authority or be made available at all reasonable times for inspection by the solid waste management authority.

**5.1 CLASS III FACILITY RECORDS:**

- i. Plans for closure and postclosure care and any monitoring, testing or analytical data required pursuant to NAC 444.6891 to 444.6896, inclusive; and
- ii. How the site conforms to the restrictions on location set forth in NAC 444.735; and
- iii. Any plan to characterize solid waste required pursuant to NAC 444.737; and
- iv. Any demonstration, certification, finding, monitoring, testing or analytical data from the program for monitoring ground water required pursuant to NAC 444.7481 to 444.7499, inclusive; and
- v. The owner or operator shall promptly notify the solid waste management authority after the owner or operator has placed the information in the operating record of its facility pursuant to this subsection. The information must be furnished upon request to the solid waste management authority or be made available for inspection by the solid waste management authority at any reasonable time.

**6. REPORTING**

1. The Permittee shall submit annually to the Division a report of the solid waste received at the site. The report is due 30 days following the end of each calendar year:
  - i. All off-normal conditions experienced during the prior calendar year.
  - ii. The weight and volume of waste disposed of in both annual and quarterly totals.
  - iii. All exceptions to the Waste Acceptance Criteria (as found in the Permit Application).
2. The Permittee shall submit online (<https://nvwastemanagementreports.ndep.nv.gov/submitdisposal/>) annually the weight and volume of waste disposed of the solid waste received at the site. The online reporting is due 30 days following the end of each calendar year.
3. The Permittee shall by December 31, 2018 and at least once every 5 years thereafter until the site is closed.
  - i. Indicate the remaining volume and disposal capacity of the site;
  - ii. Indicate the volume used and waste disposed of since the original report of design; and
  - iii. Calculate the remaining life of the site, in years
4. The Permittee shall submit biennial to the Division a Neutron Monitoring Report. The report must be submitted by the last Friday of the second quarter of the calendar year.

**6.1 FINANCIAL ASSURANCE REPORTING. THE PERMITTEE SHALL:**

1. Nevada Administrative Code 444.685 exempts entities of the federal government from the financial assurance requirements outlined in the state of Nevada solid waste disposal regulations.

**6.2 NOTIFICATION OF NEW CELL CONSTRUCTION**

In accordance with NRS 444.556, the Permittee shall notify the Division in writing within 10 days following the commencement of construction of a new cell.

**6.3** All reports, notifications, or other submissions which are required by this Permit must be submitted by the specified due date to:

---

Bureau of Federal Facilities  
Nevada Division of Environmental Protection  
2030 East Flamingo Road, Suite 230  
Las Vegas, NV 89119

---

**7. NEUTRON MONITORING**

A minimum 1.2 m (4 ft) compacted soil barrier was installed in late 1995 before opening the site for the disposal of permissible waste. The purpose of the soil layer is to segregate the two different portions of the disposal site and inhibit leachate through the barrier, thus acting as a liner for the permissible waste. A monitoring system designed to detect leachate and moisture mobility through the four-foot layer of compacted soil, as well as monitor changes in the industrial solid waste, was installed. The Action Level requiring Division notification will be the midpoint between the existing baseline data (representing dry conditions) and saturated conditions measured at a point approximately 0.3 m (1 ft) above the bottom of the monitoring.

As an indicator of the amount of water and hydrocarbon leachate entering into the soil barrier, four neutron monitoring tubes have been placed three feet into the layer, and one control tube was placed outside of the landfill. A fifth tube in the center of the landfill was removed from monitoring requirements in March 2011. A

neutron soil moisture gauge is used to monitor for changes in the soil moisture content within the 1.2-m (4-ft) engineered barrier. All data will be reported as percent soil moisture content. Initial neutron logging started in January 1996 and annual readings were performed until 2017 to determine if water has entered this barrier.

In 2017, the Division and Permittee agreed to change the minimum monitoring frequency of the neutron tubes from annual to biennial. Monitoring will occur anytime within a 2-year time frame with the first monitoring period spanning 2017–2018. Additional monitoring will be conducted within 3 months following a 24-hour rain event exceeding 1.5 inches. The Permittee will notify the Division of any Action Level reached or exceeded within 21 days of the confirmation. Logging will continue biennially throughout the active life of the disposal site.

**8. AUTHORIZATION**

<i>Signature of Approving Officer</i>	<i>Name and Title of Approving Officer</i>	<i>Date of Issuance</i>
	<i>Christine D. Andres, Chief Bureau of Federal Facilities</i>	<i>10/8/18</i> <i>Date</i>

