 <b>SOLID WASTE DISPOSAL SITE</b> <b>PERMIT</b> <b>CLASS III</b>	<b>OWNER</b> <b>U.S DEPARTMENT OF ENERGY</b> <b>NEVADA FIELD OFFICE</b>	<b>PERMIT #</b> <b>SW 13 097 02</b> <b>REVISION 9</b>
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**1. FACILITY SUMMARY**

The Area 6 Class III Solid Waste Disposal Site (SWDS) is located on the western edge of Yucca Lake, in Area 6, Nevada National Security Site, Nye County, Nevada. The original land disposal site was designed by a federal engineer and constructed in 1988. The site opened in early 1989 and received waste until mid-1991, when it was made nonoperational due to consolidation of disposal operations into two regional sites. Approximately 4 million pounds of putrescible and non-putrescible waste were buried during this period, of which an estimated 70 percent of the total volume was putrescible waste. All waste, which entered the disposal site, was spread into layers, covered, and compacted using heavy equipment. A five-foot barrier layer of compacted soil was installed in late 1992 to segregate the two different portions of the disposal site and inhibit leachate through the waste. Three neutron monitoring tubes were also installed into the barrier layer to monitor the possible permeation of liquid into the compacted soil. In February 1993, Nevada Division of Environmental Protection approved the operation of the facility as a state of Nevada Class III Disposal Site.

**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 Solid Waste Management Authority, hereby referred to as the Nevada Division of Environmental Protection (NDEP). The Permit 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 and/or Operator will perform vadose zone monitoring, closure, and post closure care in accordance with this Permit and Facility Operating Plan.

There are no requirements for solid waste permits to have expiration dates within NAC 444. Solid waste permits have provisions under NAC 444.643 and NAC 444.6435 of when a permit modification is required.

**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: David R, Bowman, PhD  
Manager  
NNSS/NFO

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

Authorized Agent: John S. Contardi  
Senior Director  
Mission Support and Test Services, LLC

**1.3 FACILITY LOCATION**

Nevada National Security Site – Area 6, NNSS, Nye County



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**1.4 FACILITY DESIGN**

Permitted Design Summary

<i>Class III</i>	<i>Revision 9</i>
Disposal Area (acres)	3.2
Maximum Elevation (ft amsl)	3,938
Minimum Elevation (ft amsl)	3920
Disposal Capacity (yds <sup>3</sup> )	101,423

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, 444.9435, NRS 618.750, NRS 444.495(2).

“Asbestos” means asbestiform varieties of Chrysotile, Crocidolite, Amosite, Anthophyllite, Tremolite, or Actinolite.

“Industrial Solid Waste” means solid waste derived from industrial or manufacturing processes.

“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.


“Polychlorinated biphenyl” PCB and PCBs mean any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance. Refer to § 761.1(b) for applicable concentrations of PCBs. PCB and PCBs as contained in PCB items are defined in § 761.3. For any purposes under this part, inadvertently generated non-Aroclor PCBs are defined as the total PCBs calculated following division of the quantity of monochlorinated biphenyls by 50 and dichlorinated biphenyls by 5.

“Solid Waste Management Authority” means in all other areas of the state and pursuant to NRS 704.7318, the Division of Environmental Protection of the State Department of Conservation and Natural Resources.

**2.2 PERMIT ACTIONS (NAC 444.643)**

This Permit is based upon the information available to the NDEP and information submitted in the Permit Application. This Permit may be modified by the NDEP, 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 NDEP and the disposal site does not remain in



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compliance with the applicable statutes and regulations. The filing of a request by the Owner and/or Operator 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 Owner and/or Operator shall inform the NDEP of any deviation from or change in the operations as presented in the Permit Application, which may affect the Owner and/or Operator'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 NDEP approves the transfer based on documentation of financial responsibility provided by the new owner or operator.

**2.3 AVAILABILITY OF PERMIT DOCUMENTS**

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

**2.6 INCIDENT REPORTING**

The Owner and/or Operator shall report incidents to the NDEP as provided in the Operating Plan. In addition, the Owner and/or Operator 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 Owner and/or Operator 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 Owner and/or Operator in response to the incident.


**2.7 REPORTING ANTICIPATED NON-COMPLIANCE**

The Owner and/or Operator shall give advance notice to the NDEP of any planned changes in the permitted facility or activity that may result in noncompliance with Permit requirements.

**2.8 INSPECTION AND ENTRY**

The Owner and/or Operator shall allow the NDEP, or an authorized representative, upon the presentation of credentials or other documents as may be required by law to:



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- i. Enter at reasonable times upon the Owner and/or Operator'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 Owner and/or Operator and approved by the NDEP also describe and/or restrict the operation of this disposal site:

- i. Permit Application (October, 2023)
- ii. Operating Plan for Area 6 Class III Solid Waste Disposal Site Permit No. SW 13 097 02

### 4. WASTE ACCEPTANCE CRITERIA

Section 7 in the Permit Application.


#### 4.1 SOLID WASTES PERMITTED FOR DISPOSAL

1. Industrial Solid Waste
2. Demolition and Construction waste
3. Non-liquid hydrocarbon-contaminated waste
4. Polychlorinated biphenyl (PCB)
  - a. PCB Articles
    - i. PCB Small Capacitors 40 CFR 761.60(b)(2)(ii)
    - ii. PCB Hydraulic Machines, drained (<1000 ppm PCB) 40 CFR 761.60(b)(3)(i)(B)
    - iii. PCB Hydraulic Machines, flushed (>1000 ppm PCB) 40 CFR 761.60(b)(3)(i)(B)
    - iv. PCB-Contaminated Electrical Equipment (>50 ppm but <500 ppm PCB) 40 CFR 761.60(b)(4)
    - v. Other PCB Article <500 ppm PCB 40 CFR 761.60(b)(6)(ii)(A)(2)
    - vi. PCB light ballast with PCBs in nonleaking capacitor 40 CFR 761.50(b)(2)(i)
    - vii. Empty PCB Containers (<500 ppm) 40 CFR 761.60 (c)(2)
  - b. PCB Bulk Product Waste
    - i. 40 CFR 761.62(b)(1)(i)
    - ii. 40 CFR 761.62(b)(1)(ii)
5. Other waste(s) on a case-by-case basis, with concurrence from the NDEP

#### 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. Medical Waste as defined by NAC 444.589
5. Garbage as defined by NAC 444.578
6. Pathological waste as defined by NAC 444.600
7. PCBs
  - a. Liquid PCBs
  - b. PCB transformers with PCB concentrations greater than 500 ppm



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- c. PCB articles with PCB concentrations greater than 500 ppm
- d. Unflushed PCB hydraulic machines with PCB concentrations greater than 1000 ppm
- e. Empty PCB containers with PCB concentrations greater than 500 ppm
- f. Large Capacitors with PCB concentrations greater than 500 ppm
- 8. Friable and Nonfriable Asbestos Waste
- 9. Other prohibited wastes as stated in Section 7.6 of the Operating Plan

**5. RECORDKEEPING**

The Owner and/or Operator shall maintain records at the site as described in Section 10.3 of the Operating Plan. The owner or operator shall notify the NDEP 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 NDEP or be made available at all reasonable times for inspection by the NDEP.


**5.1 CLASS III FACILITY RECORDS:**

- 1. Plans for closure and post closure care and any monitoring, testing or analytical data required pursuant to NAC 444.6891 to 444.6896, inclusive; and
- 2. How the site conforms to the restrictions on location set forth in NAC 444.735; and
- 3. Any plan to characterize solid waste required pursuant to NAC 444.737; and
- 4. 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
- 5. The Owner and/or Operator shall promptly notify NDEP after the Owner and/or Operator has placed the information in the operating record of its facility pursuant to this subsection. The information must be furnished upon request, or be made available for inspection by the NDEP at any reasonable time.

**6. REPORTING**

- 1. The Owner and/or Operator shall submit annually to the NDEP a report of the solid waste received at the site. The report is due 30 days following the end of each calendar year and should include:
  - 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 Characterization Acceptance Criteria (as found in Section 7.0 of the Operating Plan).
- 2. The Owner and/or Operator shall submit online (<https://nvwastemanagementreports.ndep.nv.gov/submitdisposal/>) annually the weight and volume of waste disposed. The online reporting is due 30 days following the end of each calendar year.
- 3. The Owner and/or Operator shall by December 31, 2028 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 Owner and/or Operator shall submit biennially to the NDEP a Neutron Monitoring Report. The report must be submitted by the last Friday of the second quarter of the calendar year.



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

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Bureau of Federal Facilities  
Nevada Division of Environmental Protection  
375 East Warm Springs Road,  
Suite 200  
Las Vegas, NV 89119

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**7. FINANCIAL ASSURANCE REPORTING. THE OWNER AND/OR OPERATOR SHALL:**

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.

**8. NOTIFICATION OF NEW CELL CONSTRUCTION**

In accordance with NAC 444.733 (NRS 444.560) and Section 6 Reporting, Number 5, the Owner and/or Operator shall notify NDEP in writing or electronic communication within 10 days following the commencement of construction of a new cell.


**9. NEUTRON MONITORING (ALTERNATIVE FOR GROUNDWATER MONITORING)**

In order to comply with the requirements of NAC 444.741, the vadose zone (i.e., the unsaturated zone) is monitored via neutron monitoring tubes. The biennial report submitted to NDEP will be titled Neutron Monitoring Report

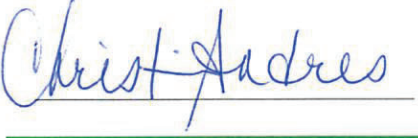
A minimum 1.5 m (5 ft) compacted soil barrier was installed in late 1992 before opening the site for the disposal of permissible waste under this Permit. The purpose of the soil layer is to segregate the two different portions of the disposal site and inhibit leaching through the barrier, thus acting 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.

As an indicator of the amount of water and leachate entering into the soil barrier, three neutron access tubes were installed in the Area 6 Landfill floor to monitor the moisture content of the compacted soil barrier that separates the former sanitary landfill disposal operation from the current operation. These access tubes were situated to optimize the areal coverage of the monitoring system within the compacted soil layer. A neutron soil moisture gauge is used to monitor for changes in the soil moisture content within the 1.2-m (5-ft) engineered barrier. All data will be reported as percent soil moisture content. Initial neutron logging started in January 1993 and annual readings were performed until 2017 to determine if water has entered this barrier.

In 2017, the NDEP and Owner and/or Operator 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 Owner and/or Operator will notify the NDEP 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.

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**10. AUTHORIZATION**

<i>Signature of Approving Officer</i>	<i>Name and Title of Approving Officer</i>	<i>Date of Issuance</i>
	<b>Christine D. Andres, Chief</b> <b>Bureau of Federal Facilities</b>	<b>February 13, 2024</b> <i>Date</i>

