



 **ENTERED**



**Department of Energy**  
Carlsbad Field Office  
P. O. Box 3090  
Carlsbad, New Mexico 88221  
APR 28 2017

**Ms. Wren Stenger, Director**  
Multimedia Division  
Environmental Protection Agency, Region 6  
1445 Ross Avenue  
Suite 1200 – Mail Code: 6MM  
Dallas, TX 75202-2733

**Subject: Waste Isolation Pilot Plant Chemical Waste Landfill Reauthorization Application**

Dear Ms. Stenger:

The U.S. Department of Energy (DOE) Carlsbad Field Office (CBFO) is requesting reauthorization of the Waste Isolation Pilot Plant (WIPP) Conditions of Approval for land disposal of non-liquid polychlorinated biphenyls contaminated with transuranic waste (PCB/TRU) and PCB/TRU waste mixed with hazardous waste. The current Conditions of Approval were last modified and reauthorized by your office on May 21, 2013, and are set to expire on April 30, 2018. This reauthorization enclosed is being provided one year prior to the expiration date, as requested in your May 21, 2013 approval letter.

We are respectfully requesting that the waivers of the requirements related to hydrologic conditions, monitoring systems, and leachate collection granted in the May 15, 2003 approval continue to be included in any renewed authorization. For your convenience, we have included a copy of the current Conditions of Approval as updated to reflect the modifications stated above along with updates resulting from changes to the WIPP Hazardous Waste Facility Permit since the last approval. The WIPP continues to meet the most current terms and conditions set forth in the Conditions of Approval established by the Environmental Protection Agency, Region 6, on May 21, 2013.

If you have any questions regarding this notification please contact Mr. George T. Basabilvazo at (575) 234-7488.

Sincerely,

Todd Shrader, Manager  
Carlsbad Field Office

Enclosure

cc:  
J. Sales, EPA, Region 6 \*ED  
N. Stone, EPA, Region 6 ED  
J. Kieling, NMED ED  
CBFO M&RC  
\*ED denotes electronic distribution



**DISPOSAL OF PCB/TRU AND PCB/TRU MIXED WASTE  
AT THE  
U.S. DEPARTMENT OF ENERGY (DOE)  
WASTE ISOLATION PILOT PLANT (WIPP)  
CARLSBAD, NEW MEXICO**

**CONDITIONS OF APPROVAL**

The disposal of transuranic waste by the DOE is congressionally mandated in Public Law 102-579 (as amended by the National Defense Authorization Act for Fiscal Year 1997, Public Law 104-201, referred to as the WIPP Land Withdrawal Act [LWA]). Portions of the transuranic waste inventory contain hazardous waste constituents regulated in 40 C.F.R. Parts 260 through 279, and/or polychlorinated biphenyls (PCBs) and PCB Items regulated in 40 C.F.R. Part 761. The following conditions of approval address the safe disposal of transuranic PCB and PCB Items at the WIPP.

The terms and abbreviations in these conditions are in accordance with those defined in 40 CFR 761.3, unless otherwise noted. The term "Facility" hereinafter refers to the Waste Isolation Pilot Plant (WIPP), Carlsbad, New Mexico. The term "owner" refers to the DOE, and the term "operator" refers to DOE and Nuclear Waste Partnership LLC. The DOE owns the WIPP and is responsible for the development and day-to-day management of the WIPP Facility.

**I. LOCATION OF FACILITY**

The Facility is located approximately 26 miles southeast of Carlsbad, New Mexico in Eddy County. The geographic coordinates are 32 degrees, 22 minutes, 30 seconds N; 103 degrees, 47 minutes, 30 seconds W.

**II. PCB WASTE AND DISPOSAL UNITS AUTHORIZED**

**A. PCB WASTE AUTHORIZED**

1. PCB contaminated transuranic (PCB/TRU) and PCB contaminated transuranic waste mixed with a hazardous waste (PCB/TRU mixed waste), including PCB remediation waste, PCB Articles, and PCB bulk product waste, may be stored and disposed at this Facility. The terms "PCB/TRU" and "PCB/TRU mixed waste" are terms used by the Facility. For the purpose of this approval, PCB/TRU and PCB/TRU mixed waste shall be considered a "PCB Item(s)" in accordance with 40 CFR 761.3.

2. The Facility term "TRU waste" means waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for (A) high-level radioactive waste; (B) waste that the DOE Secretary has determined, with the concurrence of the EPA Administrator, does not need the degree of isolation required by the disposal regulations; or (C) waste that the Nuclear Regulatory Commission (NRC) has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61.

3. The Facility term "TRU mixed waste" means TRU waste that is also a hazardous waste as defined by the Hazardous Waste Act and 20 New Mexico Administrative Code (NMAC) 20.4.1.200 (incorporating 40 CFR 261.3).
4. The term "PCB/TRU waste" shall hereinafter refer to both PCB/TRU and PCB/TRU mixed waste.
5. The term contact handled (CH) transuranic waste means transuranic waste with a surface dose rate not greater than 200 millirems per hour.
6. The term remote handled (RH) transuranic waste means transuranic waste with a surface dose rate of 200 millirem per hour or greater.
7. The disposal of free-flowing PCB liquids is prohibited at this Facility except that incidental liquids, such as, but not limited to, rainwater, groundwater, condensate, leachate, load separation and dust control liquid are allowed in PCB/TRU and PCB/TRU mixed bulk product waste containers up to one (1) percent of the container volume.
8. No ignitable waste as defined by 40 CFR 261.21 may be received at this Facility.

**B. PCB DISPOSAL UNITS AUTHORIZED**

Disposal Panels 2 through 8 are authorized for disposal of PCB/TRU waste.

**C. AUTHORIZATION TO OPERATE ADDITIONAL DISPOSAL UNITS**

For a new Panel, the owner/operator may not commence disposal until the Facility has notified in writing the EPA Region 6 Facility Assessment Section and received a written approval authorizing the new Panel for PCB disposal. The notification must include a description and a map of the new Panel. The description must include anticipated depth, length, and width of the new Panel and how it will be operated.

**D. EXPANSION IN SIZE OR CAPACITY OF AUTHORIZED DISPOSAL UNITS**

Any existing Facility modification or expansion in capacity from what was proposed in the PCB application of March 22, 2002, requires notification and response from EPA according to the procedures outlined in II.C of these conditions.

**III. PCB/TRU WASTE STORAGE**

**A. AUTHORIZED STORAGE AREAS**

PCB/TRU waste storage is limited to the following areas:

1. The Parking Area Container Storage Unit consisting of a 137,050 square foot asphalt and concrete surface providing storage space for loaded Nuclear Regulatory Commission (NRC) Type B Packages with up to 8,863 cubic feet of waste, and
2. The Waste Handling Building (WHB) Container Storage Unit consisting of 32,307 square feet of storage area for PCB/CH TRU waste management and provides a storage capacity of up to 6,466.3 cubic feet of PCB/CH TRU waste. The Waste Handling Building (WHB) Container Storage Unit also includes 17,402 square feet of storage area for the PCB/RH TRU waste management and provides a storage capacity of up to 387.7 cubic feet of PCB/RH TRU waste.

**B. AUTHORIZATION TO OPERATE ADDITIONAL STORAGE AREAS**

For a new PCB/TRU storage area, the owner/operator may not commence storage of PCBs until the Facility has notified in writing the EPA Region 6 Facility Assessment Section and received a written approval authorizing the new storage area. The notification must include a description and storage capacity of the proposed new area.

**C. EXPANSION IN SIZE OR CAPACITY OF AUTHORIZED STORAGE AREAS**

Any existing storage area modification or expansion in capacity over and above what is authorized in this approval requires notification and response from EPA according to the procedures outlined in III.B of these conditions.

**D. GENERAL PCB/TRU STORAGE REQUIREMENTS**

1. Storage of PCB/TRU waste must comply with 40 CFR 761.65(c)(5) and (c)(6) (Storage for disposal).
2. The PCB/TRU waste must be received in sealed NRC Type B shipping casks containing sealed DOT Type 7A Package containers.
3. All PCB NRC Type B Packages, DOT Type 7A CH Packages, over the road transport vehicles, and storage areas must be properly marked in accordance with 40 CFR 761.40. An exception is granted for labeling PCB containers for PCB/RH TRU DOT Type 7A waste containers.
4. All PCB Items must be identified in the WIPP Waste Data System (WDS) to show the date of waste certification for disposal. This electronic database must show the date a PCB Item was removed from service for disposal and the date the PCB Item was sent to the Facility for disposal. This information must be provided to EPA upon request.
5. The Facility may store PCB Items for up to 60 days in the approved storage areas listed in condition III.A above except for storage of RH TRU waste in the Hot Cell which has a storage limit of 25 days.

#### **E. PCB/TRU STORAGE AREA OPERATING REQUIREMENTS**

1. If manifest discrepancies are noted, the PCB Items in a DOT Type 7A container must be placed either in a storage area of the WHB on a Facility pallet, or inside an approved NRC Type B Package, and placed either in the WHB or Parking Area Unit.
2. Adequate aisle space must be maintained in all WHB Unit PCB/TRU waste storage areas to allow unobstructed movement of fire-fighting personnel, spill-control equipment, and decontamination equipment.
3. Waste containers may not be stacked more than two containers high in the approved storage areas except for the Hot Cell, where waste containers may be stored three high in a Facility Canister. Waste containers may not be stacked more than three containers high in the Hot Cell or disposal Panels.

#### **IV. PCB/TRU DISPOSAL REQUIREMENTS**

##### **A. GENERAL OPERATING REQUIREMENTS**

The handling and disposal of PCB/TRU waste must comply with the applicable portions of 40 CFR Part 761 except where waivers or exemptions have been granted either through regulation, this approval, or in writing by EPA.

##### **B. PCB/TRU DISPOSAL OPERATING REQUIREMENTS**

1. PCB/CH TRU waste must be received into the WHB through one of the three air-lock entries. PCB/RH TRU waste must be received into the WHB through the RH Bay shield door.
2. In the event of a spill of PCB/TRU mixed waste, personnel in the area of the spill shall be evacuated immediately and the area posted in accordance with the radiological practices in effect at the Facility. Contaminated areas or potentially contaminated areas shall not be available for entry until the radiation control technicians determine that conditions for reentry and radiological cleanup are complete. Samples and/or surveys shall be taken to determine the presence of radiological materials. Radiological materials shall be removed in accordance with Facility requirements, and the concrete shall be treated with a double wash/rinse with an EPA approved solvent for potential PCB contamination removal. After cleanup and decontamination activities are complete, the Facility may reopen the area for normal activity in accordance with Facility requirements.
3. PCB/TRU waste must only be transported underground through the "waste shaft" vertical transport shaft from the WHB, and placed in the designated disposal Panel using standard procedures ~~as defined in the Hazardous Waste Facility Permit (HWFP).~~

4. The waste volumes authorized for disposal in Panels 2 through 8 are listed in the following table. The owner/operator may increase the CH TRU waste capacities of any given panel by 35,300 cubic feet (1,000 cubic meters) or less after providing EPA Region 6 with a written notification of the increase. Larger increases in capacity, up to a 25 percent increase to the CH TRU waste capacities identified for a panel in the table below requires the Facility to notify EPA, Region 6 of the proposed increase and receive written approval for the increased capacity. ~~The owner/operator may increase RH TRU waste capacities of Panel 4, 5, or 6 to 730 RH TRU Canisters after providing EPA, Region 6 with a written notification of the increase.~~

Panel Number	Maximum Capacity for CH Waste	Maximum Capacity for RH Waste
Panel 2	636,000 Cu. Ft.	N/A
Panel 3	662,150 Cu. Ft.	N/A
Panel 4	662,150 Cu. Ft.	12,575 Cu. Ft. 400 RH TRU Canisters
Panel 5	662,150 Cu. Ft.	15,720 Cu. Ft. 500 RH TRU Canisters
Panel 6	662,150 Cu. Ft.	18,860 Cu. Ft. 600 RH TRU Canisters
Panel 7	662,150 Cu. Ft.	22,950 Cu. Ft. 730 RH TRU Canisters
Panel 8	662,150 Cu. Ft.	22,950 Cu. Ft. 730 RH TRU Canisters

5. All PCB/TRU waste shipments that are not sampled must be considered to contain a PCB concentration greater than 500 parts per million (ppm).

6. PCB/TRU waste disposal records and reports must be prepared and maintained in accordance with the regulations appropriate to the Facility pursuant to Part 761, Subpart K (PCB Waste Disposal Records and Reports).

7. Management and disposal of PCB/TRU waste at the Facility must be consistent with the disposal operations for TRU mixed waste as defined by Parts 1, 2, 3, and 4 of the effective HWFP issued by the New Mexico Environment Department (NMED) pursuant to ~~20.4.1.500-900~~ 20.4.1.500-900 NMAC incorporating 40 CFR ~~264.600, 270~~ (EPA Administered Permit Programs: The Hazardous Waste Permit Program) ~~Subpart X (Miscellaneous Units)~~ of the Resource Conservation and Recovery Act (RCRA).

## **V. CLOSURE AND POST-CLOSURE CARE**

### **A. CLOSURE PLAN REQUIREMENTS**

1. The owner/operator must comply with the Closure Plan requirements pursuant to 40 CFR 761.65(d)(3)(viii).

2. Closure must comply with requirements for closure as specified by the HWFP issued by the NMED.

#### **B. NOTICE OF CLOSURE**

The owner/operator must notify the EPA Region 6 Facility Assessment Section 30-days before closure of a disposal Panel is to begin along with any proposed changes to the closure plan.

#### **C. POST-CLOSURE CARE**

1. Records required under 40 CFR 761.180(d) and (f) must be maintained for the times specified for closed disposal Panels.

2. Post-closure care of closed Panels must comply with the requirements of the effective HWFP issued by the NMED.

### **VI. STANDARD APPROVAL CONDITIONS**

#### **A. SEVERABILITY**

The conditions of this authorization are severable, and if any provision of this authorization, or any application of any provision, is held invalid, the remainder of this authorization shall not be affected thereby.

#### **B. DUTY TO COMPLY**

The owner/operator must comply with ~~all~~ applicable Federal, State, and local regulations, approvals, and permits, including the effective HWFP issued by the NMED.

#### **C. PERSONNEL SAFETY**

The Facility personnel safety requirements and procedures for PCB handling, storage, transport, and disposal must comply with applicable federal occupational safety and health OSHA requirements.

#### **D. DUTY TO MITIGATE**

The owner/operator must correct any adverse impact on the environment resulting from noncompliance with this approval.

#### **E. OPERATION AND MAINTENANCE**

1. The owner/operator must at all times properly operate and maintain all systems of treatment and control (and related appurtenances) which are installed and used to

achieve compliance with these Conditions of Approval. Proper operation and maintenance include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures.

2. The owner/operator must provide training for employees that handle, transport, store, and/or dispose of PCB TRU waste. Training must include the kind described in Attachment F of the HWFP from the NMED as modified to include PCBs, the General Employee Training (GET) course as modified to include PCBs, and the Hazardous Waste Worker and Hazardous Waste Responder training as modified to include PCBs.

#### **F. TRANSPORT**

1. All transport vehicles owned or contracted by the owner/operator used for the transport of PCBs must be properly maintained, inspected, and certified in writing by a responsible official as meeting applicable safety standards under the DOT regulations before PCBs are transported on public highways. Copies of all safety certifications must be kept by the Facility or by the contracted carrier, and shall be available to EPA for review upon request. Transporters of PCB waste must notify EPA of their PCB waste activities by filing EPA Form 7710-53, "Notification of PCB Activity," prior to engaging in PCB waste handling activities.

2. All PCB waste must be shipped in NRC Type B Packages licensed by the Nuclear Regulatory Commission (NRC) with various configurations of containers meeting the DOT Type 7A drums and containers or other containers authorized by the NRC packaging Certificate of Compliance.

#### **G. DUTY TO PROVIDE INFORMATION**

1. The owner/operator must provide any relevant information which EPA may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this approval, or to determine compliance with this approval.

2. Upon request, the owner/operator must provide copies of records required to be prepared and maintained by the TSCA PCB regulations at this Facility.

#### **H. INSPECTION AND ENTRY**

The owner/operator must allow an authorized representative, including contractors of EPA, upon presentation of credentials and/or other documents as may be required by law, to:

1. enter the Facility where PCBs are being handled, stored, or disposed,
2. have access to and copy, at reasonable times, any records that must be prepared and maintained by the TSCA PCB regulations or these Conditions of Approval,



3. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations required under these Conditions of Approval or the TSCA PCB regulations, and
4. sample or monitor for the purpose of assuring that the Facility is operating in compliance with these Conditions of Approval or the TSCA PCB regulations.

**I. MONITORING AND RECORDS**

1. All PCB records, documents, and reports required to be prepared and maintained by these Conditions of Approval and the PCB regulations must be maintained at the Facility, and must be made available for inspection by authorized EPA representatives.
2. The owner/operator must maintain records of PCB/TRU waste in accordance with 40 CFR 761.180(b).
3. Facility operating records of PCB/TRU waste disposal must be maintained as defined in the WIPP HWFP Part 1 – Section 1.13 and Part 4 – Section 4.8.2. All records required by 40 CFR Part 761 and this approval must be written in ink, typed, or put into electronic format. Any modification or correction of the records must be initialed and dated by the supervisor in charge.

**J. NOTICE OF TRANSFER OF OWNERSHIP**

The owner/operator must notify EPA at least thirty (30) days before transferring ownership of the Facility. The owner/operator must also submit to EPA at least thirty (30) days before such transfer, a notarized affidavit signed by the transferee stating that the transferee shall abide by the terms of this approval.

**K. TWENTY-FOUR HOUR REPORTING OF NONCOMPLIANCE**

1. If at any time the owner/operator finds it is in non-compliance with these Conditions of Approval, and that non-compliance may pose a risk to human health or the environment, it must notify the EPA Region 6 Facility Assessment Section by telephone within 24 hours, and must submit a written report within five (5) work days.
2. If at any time the owner/operator finds it is in non-compliance with these Conditions of Approval, and that non-compliance does not pose a risk to human health or the environment, it must notify the EPA Region 6 PCB Coordinator by telephone or e-mail within 24 hours, and must submit a written report within five (5) work days. E-mail messages must confirm successful delivery by return e-mail.

**L. OTHER INFORMATION**

If the owner/operator finds that it has failed to submit any relevant facts in its application, or submitted incorrect information in any report to EPA, it must

promptly submit such facts or information to the EPA Region 6 Facility Assessment Section.

**M. EMERGENCY PROCEDURES**

1. The owner/operator must maintain an adequately trained onsite RCRA emergency coordinator to direct emergency procedures which could result from fires, explosions or releases of PCB containing waste at the Facility. The owner/operator must submit the name and qualifications of the emergency coordinator within sixty (60) days of the effective date of this approval.
2. The owner/operator must maintain in good working order any equipment required to deal with onsite emergencies.
3. The owner/operator must comply with the WIPP RCRA Contingency Plan included in Attachment D of the HWFP, which describes detailed emergency response actions to incidents involving TRU waste as modified to include incidents involving PCB/TRU waste.
4. The owner/operator must provide emergency response training to its emergency response personnel as required by Attachment F of the Facility HWFP.

**N. SPILLS**

1. PCB spills occurring at the Facility or from any onsite transport vehicle must be cleaned up according to IV.B.2 of these Conditions of Approval for PCB/TRU mixed waste.
2. If spills cannot be cleaned up within the time required by the PCB Spill Cleanup Policy, the owner/operator must notify the EPA Region 6 PCB Coordinator of the circumstance of the spill, the estimated time of cleanup, and a justification for the delay of the cleanup. The EPA may order cessation of PCB disposal at the Facility if spills are not cleaned up in accordance with the PCB Spill Cleanup Policy.

**O. DUTY TO NOTIFY**

The owner/operator must notify the EPA Region 6 Facility Assessment Section in writing at least thirty (30) days prior to any planned physical or operational change related to PCB handling and disposal that may require modification of this approval.

**P. EFFECTIVE DATE**

This approval becomes effective on the date of this letter, and expires at midnight, April 30, ~~2018~~ 2023.

**END OF APPROVAL CONDITIONS**