Waste Isolation Pilot Plant Hazardous Waste Facility Permit Ten-Year Renewal Application

Pre-Application Public Meetings

Santa Fe, NM, January 23, 2020
Carlsbad, NM, January 30, 2020
Purpose of Meeting

• Pursuant to NMAC 20.4.1.901 C(1), incorporating 40 CFR §124.31
• Inform the community of proposed hazardous waste management activities and to solicit questions from the community
Comments

The Permittees will accept written comments regarding the draft Renewal Application through Monday, February 3, 2020. Comments may be sent to:

Mr. Bobby St. John
P.O. Box 2078
Carlsbad, NM 88221

WIPP Information Center:
infocntr@wipp.ws
Requirements for Ten-Year Renewal Application

• Permit Part 1, Section 1.7.2., Permit Term
  “This Permit shall be effective for a fixed term not to exceed ten years from the effective date…” [20.4.1.900 NMAC, incorporating 40 CFR §270.50(a)]

• Permit Part 1, Section 1.7.3., Duty to Reapply
  “If the Permittees wish to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittees shall apply for and obtain a new Permit. The Permittees shall submit an application for a new Permit at least 180 calendar days before the expiration date of this Permit.” [20.4.1.900 NMAC, incorporating 40 CFR §§270.10(h) and 270.30(b)]
  – The current Permit was issued on November 30, 2010, and became effective on December 30, 2010
  – A new Permit application must be submitted no later than July 3, 2020
  – The Permittees plan to submit the Renewal Application by March 31, 2020
Renewal Application Scoping Meetings

• Public information meetings were held by the Permittees to present the planned scope of the Renewal Application
  – September 10, 2019, Carlsbad, New Mexico
  – September 12, 2019, Santa Fe, New Mexico

• Topics included:
  – Objective of Ten-Year Renewal Application
  – Regulatory Overview
  – Required Content of the Renewal Application
  – Renewal Application Scope
  – Renewal Application Timeline

• Permittees accepted written comments
Description of Proposed Hazardous Waste Management Activities

• The Waste Isolation Pilot Plant (WIPP) facility is located 26 miles east of Carlsbad, New Mexico in Eddy County
• The WIPP facility is designed, constructed, and operated for the management, storage, and disposal of transuranic (TRU) mixed waste
• TRU mixed waste means TRU waste that is also a hazardous waste as defined by the New Mexico Hazardous Waste Act and 20.4.1.200 NMAC (incorporating 40 CFR §261.3)
• Proposed hazardous waste management activities include:
  – Receiving, handling, and storing TRU mixed waste on the surface of the WIPP facility
  – Disposing TRU mixed waste in a geologic repository located 2,150 feet underground in a bedded-salt formation
Proposed Permitted Units

• Hazardous Waste Management Units
  – 20.4.1.500 NMAC, incorporating 40 CFR Part 264 Subpart I, *Use and Management of Containers*
  – Container Storage Units
    • Waste Handling Building Unit
    • Parking Area Unit

• Hazardous Waste Disposal Units
  – 20.4.1.500 NMAC, incorporating 40 CFR Part 264 Subpart X, *Miscellaneous Units*
  – Underground Panels 1 through 8
Draft Renewal Application

• Draft WIPP Hazardous Waste Facility Permit Ten-Year Renewal Application posted on WIPP web site http://www.wipp.energy.gov on December 20, 2019

• Links to documents used as references provided as Supplemental Information

• Changes to Permit text (Renewal Application Attachments)
  – Identified in “tracked change” redline/strikeout form
  – Tabulated in **Summary of Proposed Changes**
    • Global editorial/formatting changes summarized
    • Other changes summarized by attachment, with brief discussion of the change

• Draft Renewal Application does not include the Permit Parts
  – These are the responsibility of the New Mexico Environment Department
Draft Renewal Application

• Introduction
• Regulatory Requirements Crosswalk
• Summary of Proposed Changes
• Part A Application
  – Required Information
  – Environmental Protection Agency Form
  – Part A Application Certification
  – List of Active Environmental Permits
  – Maps
  – Facilities
  – Photographs
• Part B Application
  – Required Information
  – Maps and Illustrations
    • Demographics
    • Drawings
• Public Participation Information
Draft Renewal Application
Part B Application Attachments

- Attachment A  General Facility Description and Process Information
- Attachment A1  Container Storage
- Attachment A2  Geologic Repository
- Attachment A3  Traffic Patterns
- Attachment B  (Reserved for Part A Application)
- Attachment C  Waste Analysis Plan
- Attachment C1  Waste Characterization Testing Methods
- Attachment C2  (Reserved)
- Attachment C3  Quality Assurance Objectives and Data Validation Techniques for Waste Characterization Methods
- Attachment C4  TRU Mixed Waste Characterization Using Acceptable Knowledge
- Attachment C5  Quality Assurance Project Plan Requirements
- Attachment C6  Audit and Surveillance Program
- Attachment C7  TRU Waste Confirmation
Draft Renewal Application
Part B Application Attachments

- Attachment D  RCRA Contingency Plan
- Attachment E  Inspection Schedule, Process, and Forms
- Attachment F  Facility Personnel Permit Training Program
- Attachment G  Closure Plan
- Attachment G1  WIPP Panel Closure Design Description and Specifications
  - Appendix G1-A  Technical Specifications
  - Appendix G1-B  Drawings
- Attachment G2  Waste Isolation Pilot Plant Shaft Sealing System Compliance Submittal Design Report
  - Appendix G2-A  Material Specification
  - Appendix G2-B  Shaft Sealing Construction Procedures
  - Appendix G2-E  Design Drawings
- Attachment G3  Radiological Surveys to Indicate Potential Hazardous Waste Releases
- Attachment H  Post-Closure Plan
- Attachment H1  Active Institutional Controls During Post-Closure
Draft Renewal Application
Part B Application Attachments

- Attachment I (Reserved for Compliance Schedule)
- Attachment J (Reserved for Hazardous Waste Management Unit Tables)
- Attachment K (Reserved for Solid Waste Management Unit (SWMU) and Area of Concern (AOC) Tables)
- Attachment L *WIPP Groundwater Detection Monitoring Program Plan*
- Attachment M *Figures*
- Attachment N *Volatile Organic Compound Monitoring Plan*
- Attachment O *WIPP Mine Ventilation Rate Monitoring Plan*
Draft Renewal Application Addenda to Part B Application Attachments

• Addendum C1  Dispute Resolution
• Addendum D1  Preparedness and Prevention
• Addendum E1  Security
• Addendum L1  Site Characterization
• Addendum N1  300-Year Performance Demonstration
Summary of Proposed Changes

- Tabulation of proposed changes to the current Permit text reflected in Part B Application Attachments

- Categories of general *Global Changes*
  - Clarify Renewal Application text
  - Streamline Renewal Application text; remove redundancy
  - Provide updated/additional information
  - Remove obsolete information
  - Revise descriptive information in Renewal Application Attachments
  - Remove detail that does not support a Permit requirement or is not required by the New Mexico Hazardous Waste Regulations

- Specific changes reflected in redline/strikeout of text and addressed in “Discussion” column under attachment subheadings of table

- *Global Editorial Changes*
  - Applicable to Part B Application Attachments
  - Captured in redline/strikeout of text but not listed under attachment subheadings of table
Summary of Proposed Changes

• Revise the WIPP facility description
  – Consolidate descriptions of containers (Attachment A1)
  – Eliminate redundancy with Permit Part 3 relative to maximum storage capacities (Attachment A1)
  – Clarify conditions for use of Contact-Handled Bay Surge Storage Area (Attachment A1)
  – Clarify storage time limit in the Parking Area Unit (Attachment A1)
  – Remove obsolete design classification information (Attachment A1) and road design information (Attachment A3) and reference information contained in the 2009 Renewal Application
  – Clarify requirement for suspending waste shipments in an off-normal event (Attachment A1)
  – Establish consistency in aisle-spacing with the Waste Handling Building Container Storage Unit (Attachments A1 and E)
  – Remove references to future Permit modification requests pertaining to disposal in Panel 9 (Attachment A2)
  – Replace description of the Horizontal Emplacement and Retrieval Equipment (HERE) with the Horizontal Emplacement Machine (HEM), or equivalent (Attachment A2)

• Incorporate Department of Energy radiological guidance and regulations by reference (Attachments A1, D, G, G3, H, and H1)
Summary of Proposed Changes

• Streamline reporting requirements
  – Nonconformance reports and data quality objective-affecting procedure change reports – add provision for no reporting requirement if none are identified in a given month (Attachment C3)
  – Contract-laboratory standard operating procedures – change frequency from annually to upon request (Attachments L and N)

• Remove requirement for quarterly repeat of data-generation level review (Attachment C3)

• Revise text pertaining to corrective actions associated with Acceptable Knowledge compilation and/or Environmental Protection Agency hazardous waste number assignment (Attachment C4)

• Revise inspection schedule (Attachment E)
  – Change frequency from pre-operational to pre-evolution for some waste handling equipment
  – Remove preventive maintenance details for remote-handled equipment

• Address changes per adoption of the Generator Improvements Rule into the NMAC (Attachments A, D, and E)
Summary of Proposed Changes

• Remove requirement for serial sampling in groundwater monitoring procedures (Attachment L)
  – Allow for sampling pursuant to stability of pH, conductivity

• Extend Disposal Phase and assumed closure start date to 2052 in Attachments G and H1
  – Panel 9 will not be used for waste emplacement
  – Panel 10 is not authorized for waste emplacement
  – Construction of panels beyond Panel 10 not authorized
  – Assumption is future panels will be needed to dispose of available inventory of TRU waste

• Clarify the use of co-detection (Attachment G3)

• Relocate Permit attachment figures to Attachment M
  – Consolidate figures from Permit Attachments A1, A2, A3, A4, G, H1, L and N
  – Remove redundant/unnecessary figures
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