Introduction

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The Waste Isolation Pilot Plant (WIPP) facility is designed, constructed, and operated for the management, storage and disposal of transuranic (TRU) mixed waste. Both contact-handled (CH) and remote-handled (RH) TRU mixed wastes are permitted for storage and disposal at the WIPP facility. The WIPP facility consists of a 16-section Federal land area under the jurisdiction of the US Department of Energy (DOE). The WIPP facility includes a mined geologic repository, defined as a "miscellaneous unit" under 40 CFR §260.10. "Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, waste pile, land treatment unit, landfill, incinerator, containment building, boiler, industrial furnace, or underground injection well with appropriate technical standards under 40 CFR Part 146, corrective action management unit, or unit eligible for research, development, and demonstration permit under 40 CFR §270.65. Some of the TRU mixed waste disposed of at the WIPP facility contains hazardous wastes as co-contaminants. The geologic repository has been divided into ten discrete hazardous waste disposal units (HWDUs), known as "panels," which are being permitted under 40 CFR Part 264, Subpart X. Additionally, one storage unit, known as a hazardous waste management unit (HWMU) is inside the Waste Handling Building (WHB) and consists of the CH bay, conveyance loading room, waste hoist entry room, RH bay, cask unloading room, hot cell, transfer cell, and facility cask loading room. Outside the WHB there is another HWMU know as the Parking Area Unit. These two HWMUs are permitted as storage units.

This Renewal Application is submitted to address the requirements of the New Mexico

Pursuant to the New Mexico Hazardous Waste Regulations and Permit Condition I.E.3.:

Administrative Code Title 20, Chapter 4, Part 1 (20.4.1 NMAC) specific to the mixed waste

operations of the WIPP facility. The WIPP facility currently has three permitted HWMUs and

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.

eighty (180) calendar days before the expiration date of this Permit. [20.4.1.900 NMAC

The Permittees shall submit an application for a new Permit at least one hundred

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seven permitted HWDUs.

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36 The term of the Permit is ten years from the date of issuance. The Renewal Application was 37 originally submitted to the New Mexico Environment Department (NMED) on May 28, 2009. 38 On August 19, 2009, the Permittees requested an extension to amend the Renewal Application. The Permittees and NMED received extensive public comments at and subsequent to the pre-

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43 Part A of the Renewal Application includes the information required by 40 CFR §270.13, 44

(incorporating 40 CFR §\$270.10(h), 270.30(b))]

Contents of Part A of the permit application. Additionally, Part B of the Renewal Application

application public meetings. Based on these comments, the Permittees determined that the

submittal of an amended Renewal Application would facilitate the permit renewal process.

includes general WIPP facility information required by 40 CFR §270.14, Contents of Part B:

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September 2009 General Requirements, as well as WIPP facility specific information required by 40 CFR 1 2 §270.15, 40 Specific Part B information requirements for containers; and CFR §270.23, Specific 3 Part B information requirements for miscellaneous units. 4 5 In this Renewal Application the Permittees are seeking the following changes or providing 6 new/revised information: 7 8 Changes to the Permit necessary to incorporate authorization to dispose of TRU mixed 9 waste in Panel 8 10 11 • Formal inclusion of the WIPP Mine Ventilation Rate Monitoring Plan 12 • Updated information in the form of revised drawings, site geological, hydrological and demographic information and the miscellaneous unit performance demonstration 13 14 15 Portions of the original Part B Permit Application that were incorporated into the Permit by 16 reference. 17 18 The following are **not** included in the Renewal Application: 19 20 Permit Modules. These are written by the NMED as part of the new permit. 21 22

- Pending and future permit modification notifications or requests. Approved modifications will be incorporated into the draft and final permits by the NMED.
- Editorial corrections in portions of the Permit unchanged by this Renewal Application.

Three addenda to the Chapters are included in the Renewal Application to provide significant information pertaining to topic(s) contained in the associated chapters and appendices. The addenda and the reasons for including them are as follows:

• Addendum B1, Dispute Resolution (This is a provision that is contained in Module I of the Permit that the Permittees wish to retain in the renewed Permit)

- Addendum L1, Site Characterization (This updates information referenced extensively in Attachment L of the Permit as Appendix D6 of the 1997 RCRA Part B Application [DOE 1997])
- Addendum N1, 300-year Performance Demonstration Re-Evaluation (This updates information that was used to prepare the Permit. The original analysis and the updated information reach the same conclusion that the only significant pathway from the miscellaneous unit is the air pathway involving the release of volatile organic compounds from containers prior to final facility closure.)

Waste Isolation Pilot Plant Hazardous Waste Facility Permit Renewal Application September 2009

When identifying the parts of either the Renewal Application or original Part B Permit
Application, the terms "chapters" and "appendices" are used. The terms "chapters" and
"appendices" are to distinguish between the current Permit "attachments" and permit application
"chapters" and "appendices." The Renewal Application contains no Modules as the NMED
writes the Modules for draft and final permits.

Other "supplemental information" was provided in an electronically retrievable format, including an index of the referenced information in the May 28, 2009, submittal of the Renewal Application. The Supplemental Information contains references that are cited in the Renewal Application with the exception of regulations, codes and standards and copyrighted materials. In these cases, links to where these materials may be viewed or purchased are included. References that are classified as "sensitive" may be viewed at the WIPP site by US citizens. One seven volume document: *Data Field Report – ERDA-6 and WIPP-12 Testing*, 1982, contains several fold out maps and is not amenable to electronic digitization. It can also be viewed at the WIPP site.

Additionally, the Permittees are representing proposed changed text from the current Permit in redline/strike out format. For those who wish to print the document and do not have a color printer, proposed replacement text is also <u>double underlined</u> and <u>shaded</u> so that proposed text can be readily identified. For example, the resulting text appears as: <u>new proposed text</u>.

The version of the Permit used to create the Renewal Application is the latest version the NMED has posted on its web page, May 22, 2009.