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ENTERED

April 27, 2005

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Hazardous Waste Permits Program  
Hazardous Waste Bureau  
New Mexico Environment Department  
2909 E. Rodeo Dr. Bldg 1  
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Subject: Notification of Two Class 1 Permit Modifications to the Hazardous Waste Facility Permit, Permit Number: NM4890139088-TSDF for "Administrative and Informational Changes to Attachments B and B6" and "Revised Language for Compacted 55-Gallon Drums with Rigid Liners"

Dear Mr. Zappe:

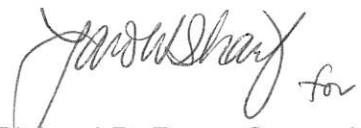
The purpose of this letter is to submit this notification of two Class 1 permit modifications to the Waste Isolation Pilot Plant Hazardous Waste Facility Permit, Number: NM4890139088-TSDF. The proposed changes do not compromise worker safety, human health, or the environment. The purpose of these modifications is to:

- Revise the language in Attachments B and B6 noted by New Mexico Environment Department during several recent site generator audits
- Revise the language in Attachment B1 to clarify the permit text for compacted 55-gallon drums with rigid liners

*We certify under penalty of law that this document and all attachments were prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Sincerely,

  
Inés R. Triay, Acting Manager  
U. S. Department of Energy

 for  
Richard D. Raaz, General Manager  
Washington TRU Solutions LLC

Enclosure



Mr. Steve Zappe

-2-

April 27, 2005

cc: w/enclosure  
C. Walker, Trinity Engineering

cc: w/o enclosure  
J. Bearzi, NMED  
J. Kieling, NMED

**Class 1 Permit Modification Notification**

**Administrative & Informational Changes to  
Attachments B and B6**

**Waste Isolation Pilot Plant  
Carlsbad, New Mexico**

**WIPP HWFP #NM4890139088-TSDF**

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## Acronyms and Abbreviations

AK	Acceptable Knowledge
CBFO	Carlsbad Field Office
CFR	Code of Federal Regulations
DOE	Department of Energy
HWFP	Hazardous Waste Facility Permit
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
PMN	Permit Modification Notification
RCRA	Resource Conservation and Recovery Act
SOP	Standard Operating Procedure
TSDF	Treatment, Storage and Disposal Facility
VE	Visual Examination
WAP	Waste Analysis Plan
WIPP	Waste Isolation Pilot Plant
WTS	Washington TRU Solutions LLC

## Overview of the Permit Modification Notification

This document contains a Class 1 Permit Modification Notification (**PMN**) to the Hazardous Waste Facility Permit (**HWFP**) at the Waste Isolation Pilot Plant (**WIPP**), Permit Number NM4890139088-TSDF hereinafter referred to as the WIPP HWFP.

This PMN is being submitted by the U.S. Department of Energy (**DOE**), Carlsbad Field Office (**CBFO**) and Washington TRU Solutions LLC (**WTS**), collectively referred to as the Permittees, in accordance with the WIPP HWFP, Condition I.B.1 (20.4.1.900 New Mexico Administrative Code (**NMAC**) incorporating Title 40 of the Code of Federal Regulations (40 **CFR**) §270.42(a)). The PMN in this document is necessary for the following reason:

- to revise the language in the HWFP to correct several errors in Attachment B and B6 noted by New Mexico Environment Department (**NMED**) during several recent site generator audits.

This change does not reduce the ability of the Permittees to provide continued protection to human health and the environment.

The requested modification to the WIPP HWFP and related supporting documents are provided in this PMN. The proposed modification to the text of the WIPP HWFP has been identified using a double underline and revision bar in the right hand margin for added information, and a ~~strikeout~~ font for deleted information. All direct quotations are indicated by italicized text.

**Attachment B**

**Description of the Class 1 Permit Modification Notification**

**Table 1. Class 1 Hazardous Waste Facility Permit Modification Notification**

No.	Affected Permit Section	Item	Category	Attachment B Page #
1	a. Attachment B	Add new Table to Table of Contents	A-1	B-5
1	b. Attachment B	Revise language to incorporate Table B-10	A-1	B-5
1	c. Attachment B	Add new Table B-10 <i>Listing of Permitted Waste Numbers</i>	A-1	B-12
2	a. Attachment B6, Table B6-1	Revise language to clarify F-listed and P-listed solvents or waste in question 8	A-1	B-14
2	b. Attachment B6, Table B6-3	Clarify sentence in question 139	A-1	B-14
2	c. Attachment B6, Table B6-6	Correct references in questions 306, 307, 308, and 309	A-1	B-15



## Item 1

### Description:

Language changes requested by the NMED during recent reviews of final audit reports to update additional permitted waste codes. This modification is intended to clarify that language and correct those changes noted by NMED.

### Basis:

The change is administrative and informational only and is therefore a Class 1 notification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion:

The purpose of this modification is to notify NMED of the following changes:

- Update F-listed and P-listed solvents or wastes to be in accordance with those wastes approved by NMED by incorporating a new table of permitted waste numbers.

The Permittees are proposing to change the language for Section B-2 to be as follows: "F-listed and P-listed solvents or wastes in Table B-10, F001, F002, F003, F004, F005, F006, F007, F009, P015) found in 20.4.1.200 NMAC (incorporating 40 CFR §261.31)".

In addition, other references to Permit Attachment O are changed to reference Table B-10. This change provides an effective way to communicate the list of approved Hazardous Waste Numbers to the generator/storage sites.

- The hazardous components of the TRU mixed waste to be managed at the WIPP facility are designated in Table B-10 the Permittees' RCRA Part A Permit Application (Permit Attachment O).
- This WAP describes the measures that will be taken to assure that the TRU mixed wastes received at the WIPP facility are in Table B-10 within the scope of the RCRA Part A Permit Application (Permit Attachment O) as established by 20.4.1.500 NMAC (incorporating 40 CFR §264), and that they comply with unit-specific requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.600), Miscellaneous Units.
- The Permittees will only allow generators to ship those TRU mixed waste streams with EPA hazardous waste codes listed in Table B-10 on the Permittees' RCRA Part A Permit Application (Permit Attachment O).
- Toxicity characteristic contaminants listed in 20.4.1.200 NMAC (incorporating 40 CFR, §261.24), Table 1 (excluding pesticides), as specified in Table B-10 Permit Attachment O.
- The EPA hazardous waste codes for the wastes that appear on the Waste Stream Profile Form will be compared to those in Table B-10 the Permittees' RCRA Part A Permit Application (Section XIV of Permit Attachment O) to ensure

that only wastes that contain constituents listed Section XIV are approved for management, storage, or disposal at WIPP.

**Revised Permit Text:**

1.a Attachment B

**List of Tables**

<b>Table</b>	<b>Title</b>
B-1	Summary of Hazardous Waste Characterization Requirements for Transuranic Mixed Waste
B-2	Maximum Allowable VOC Room-Averaged Headspace Concentration Limits
B-3	Headspace Target Analyte List and Methods
B-4	Required Organic Analyses and Test Methods Organized by Organic Analytical Groups
B-5	Summary of Sample Preparation and Analytical Methods for Metals
B-6	Summary of Parameters, Characterization Methods, and Rationale for CH Transuranic Mixed Waste (Stored Waste, Newly Generated Waste)
B-7	Required Program Records Maintained in Generator/Storage Site Project Files
B-8	WIPP Waste Information System Data Fields
B-9	Waste Tanks Subject to Exclusion
<u>B-10</u>	<u>Listing of Permitted Waste Codes</u>

1.b Attachment B

Introduction and Attachment Highlights

This waste analysis plan (**WAP**) has been prepared for management, storage, or disposal activities to be conducted at the Waste Isolation Pilot Plant (**WIPP**) facility to meet requirements set forth in 20.4.1.500 NMAC (incorporating 40 CFR §264.13). Guidance in the most recent U.S. Environmental Protection Agency (**EPA**) manual on waste analysis has been incorporated into the preparation of this WAP (EPA, 1994). This WAP includes test methods, details of planned waste sampling and analysis, a description of the waste shipment screening and verification process, and a description of the quality assurance (**QA**)/quality control (**QC**) program. Before the Permittees manage, store, or dispose transuranic (**TRU**) mixed waste from a generator/storage site (**site**), the Permittees shall require that site to implement the applicable requirements of this WAP.

TRU mixed waste that may be stored or disposed at WIPP are or were generated at DOE generator/storage sites by various specific processes and activities. Examples of the major types of operations that generate this waste include:

- Production of Nuclear Products—Production of nuclear products

includes reactor operation, radionuclide separation/finishing, and weapons fabrication and manufacturing. The majority of the TRU mixed waste was generated by weapons fabrication and radionuclide separation/finishing processes. More specifically, wastes consist of residues from chemical processes, air and liquid filtration, casting, machining, cleaning, product quality sampling, analytical activities, and maintenance and refurbishment of equipment and facilities.

- **Plutonium Recovery**—Plutonium recovery wastes are residues from the recovery of plutonium-contaminated molds, metals, glass, plastics, rags, salts used in electrorefining, precipitates, firebrick, soot, and filters.
- **Research and Development (R&D)**—R&D projects include a variety of hot cell or glovebox activities that often simulate full-scale operations described above, producing similar TRU mixed wastes. Other types of R&D projects include metallurgical research, actinide separations, process demonstrations, and chemical and physical properties determinations.
- **Decontamination and Decommissioning**—Facilities and equipment that are no longer needed or usable are decontaminated and decommissioned, resulting in TRU mixed wastes consisting of scrap materials, cleaning agents, tools, piping, filters, Plexiglas™, gloveboxes, concrete rubble, asphalt, cinder blocks, and other building materials. These materials are expected to be the largest category by volume of TRU mixed waste to be generated in the future.

TRU mixed waste contains both TRU radioactive and hazardous components, as defined in 20.4.1.800 NM AC (incorporating 40 CFR, §268.35(d)), and in the Federal Facility Compliance Act, Public Law 102- 386, Title 1, §3021(d). It is designated and separately packaged as either contact-handled (**CH**) or remote-handled (**RH**), based on the radiological dose rate at the surface of the waste container. RH TRU mixed wastes will not be received and disposed at the WIPP facility.

The hazardous components of the TRU mixed waste to be managed at the WIPP facility are designated in Table B-10 the Permittees' RCRA Part A Permit Application (~~Permit Attachment O~~). Some of the waste may also be identified by unique state hazardous waste codes. These wastes are acceptable at WIPP as long as the Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (**TSDF-WAC**) in Module II are met. This WAP describes the measures that will be taken to assure that the TRU mixed wastes received at the WIPP facility are Table B-10 within the scope of the RCRA Part A Permit Application (~~Permit Attachment O~~) as established by 20.4.1.500 NM AC (incorporating 40 CFR §264), and that they comply with unit-specific requirements of 20.4.1.500 NM AC (incorporating 40 CFR §264.600), Miscellaneous Units.

Some TRU mixed waste is retrievably stored at the DOE generator/storage sites. Additional TRU mixed waste will be generated and packaged into containers at these

generator/storage sites in the future. TRU mixed waste will be retrieved from storage areas at a DOE generator/storage site. Retrievably stored waste is defined as TRU mixed waste generated after 1970 and before NMED notifies the Permittees, by approval of the final audit report, that the characterization requirements of the WAP at a generator/storage site have been implemented. Newly generated waste is defined as TRU mixed waste generated after NMED approves the final audit report for a generator/storage site. Acceptable knowledge (AK) information is assembled for both retrievably stored and newly generated waste. Retrievably stored TRU mixed waste will be characterized on an ongoing basis, as the waste is retrieved. Newly generated TRU mixed waste is typically characterized as it is generated, although some characterization occurs post-generation. Waste characterization requirements for retrievably stored and newly generated TRU mixed wastes differ, as discussed in Sections B-3d(1) and B-3d(2).

Characterization requirements for individual containers of TRU mixed waste are specified on a waste stream basis. A waste stream is defined as waste material generated from a single process or from an activity that is similar in material, physical form, and hazardous constituents. Waste streams are grouped by Waste Matrix Code Groups related to the physical and chemical properties of the waste. Generator/storage sites shall use the characterization techniques described in this WAP to assign appropriate Waste Matrix Code Groups for WIPP disposal. The Waste Matrix Code Groups are solidified inorganics, solidified organics, salt waste, soils, lead/cadmium metal, inorganic nonmetal waste, combustible waste, graphite, filters, heterogeneous debris waste, and uncategorized metal. Waste Matrix Code Groups can be grouped into three Summary Category groups: Homogeneous Solids (Summary Category S3000), Soil/Gravel (Summary Category S4000), and Debris Waste (Summary Category S5000).

TRU mixed wastes are initially categorized into the three broad Summary Category Groups that are related to the final physical form of the wastes. Waste characterization requirements for these groups are specified separately in Section B-2 of this WAP. Each of the three groups is described below.

#### S3000 - Homogeneous Solids

Homogeneous solids, or solid process residues, are defined as solid materials, excluding soil, that do not meet the NMED criteria for classification as debris (20.4.1.800 NMAC (incorporating 40 CFR §268.2[g] and [h])). Included in the series of solid process residues are inorganic process residues, inorganic sludges, salt waste, and pyrochemical salt waste. Other waste streams are included in this Summary Category Group based on the specific waste stream types and final waste form. This Summary Category Group is expected to contain toxic metals and spent solvents. This category includes wastes that are at least 50 percent by volume solid process residues.

#### S4000 - Soils/Gravel

This Summary Category Group includes S4000 waste streams that are at least 50 percent by volume soil/gravel. This Summary Category Group is expected to contain toxic metals. Soils/gravel are further categorized by the amount of debris included in the matrix.

#### S5000 - Debris Wastes

This Summary Category Group includes heterogeneous waste that is at least 50 percent by volume materials that meet the criteria specified in 20.4.1.800 NMAC (incorporating 40 CFR §268.2 (g)). Debris means solid material exceeding a 2.36 inch (in.) (60 millimeter) particle size that is intended for disposal and that is:

1. a manufactured object, or
2. plant or animal matter, or
3. natural geologic material.

Particles smaller than 2.36 inches in size may be considered debris if the debris is a manufactured object and if it is not a particle of S3000 or S4000 material.

If a waste does not include at least 50 percent of any given category by volume, characterization shall be performed using the waste characterization process required for the category constituting the greatest volume of waste for that waste stream (see Section B-3d).

The most common hazardous constituents in the TRU mixed waste to be managed in the WIPP facility consist of the following:

#### Metals

Some of the TRU mixed waste to be managed in the WIPP facility contains metals for which 20.4.1.200 NMAC (incorporating 40 CFR §261.24), toxicity characteristics were established (EPA hazardous waste codes D004 through D011). Cadmium, chromium, lead, mercury, selenium, and silver are present in discarded tools and equipment, solidified sludges, cemented laboratory liquids, and waste from decontamination and decommissioning activities. A large percentage of the waste consists of lead-lined gloveboxes, leaded rubber gloves and aprons, lead bricks and piping, lead tape, and other lead items. Lead, because of its radiation-shielding applications, is the most prevalent toxicity-characteristic metal present.

#### Halogenated Volatile Organic Compounds

Some of the TRU mixed waste to be managed in the WIPP facility contains spent halogenated volatile organic compound (VOC) solvents identified in 20.4.1.200 NMAC (incorporating 40 CFR, §261.31) (EPA hazardous waste numbers F001 through F005). Tetrachloroethylene; trichloroethylene; methylene chloride; carbon tetrachloride; 1,1,1-trichloroethane; and 1,1,2-trichloro-1,2,2-trifluoroethane (EPA hazardous waste codes F001 and F002) are the most prevalent halogenated organic compounds identified in TRU mixed waste that may be managed at the WIPP facility during the Disposal Phase. These compounds are commonly used to clean metal surfaces prior to plating, polishing, or fabrication; to dissolve other compounds;

or as coolants. Because they are highly volatile, only small amounts typically remain on equipment after cleaning or, in the case of treated wastewaters, in the sludges after clarification and flocculation. Radiolysis may also generate halogenated volatile organic compounds.

#### Nonhalogenated Volatile Organic Compounds

Xylene, methanol, and n-butanol are the most prevalent nonhalogenated VOCs in TRU mixed waste that may be managed at the WIPP facility during the Disposal Phase. Like the halogenated VOCs, they are used as degreasers and solvents and are similarly volatile. The same analytical methods that are used for halogenated VOCs are used to detect the presence of nonhalogenated VOCs. Radiolysis may also generate non-halogenated volatile organic compounds.

All waste characterization activities specified in this WAP and associated Permit Attachments shall be carried out at generator/storage sites and, as applicable, at the WIPP facility in accordance with this WAP. The Permittees will audit generator/storage site waste characterization programs and activities as described in Section B-3. Waste characterization activities at the generator/storage sites include the following, although not all these techniques will be used on each container, as discussed in Section B-3:

- Radiography, which is an x-ray technique to determine physical contents of containers
- Visual examination of opened containers as an alternative way to determine their physical contents or to verify Radiography results
- Headspace-gas sampling to determine VOC content of gases in the void volume of the containers
- Sampling and analysis of waste forms that are homogeneous and can be representatively sampled to determine concentrations of hazardous waste constituents and toxicity characteristic contaminants of waste in containers
- Compilation of acceptable knowledge documentation into an auditable record<sup>1</sup>

Once the required waste characterization is complete, the generator/storage site will complete a Waste Stream Profile Form (WSPF) to document the results of their characterization activities (Section B-1d). The WSPF and the Characterization Information Summary for the waste stream resulting from waste characterization activities shall be transmitted to the Permittees, reviewed for completeness, and screened for acceptance prior to loading any TRU mixed waste into the Contact

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<sup>1</sup> "Auditable records" mean those records which allow the Permittees to conduct a systematic assessment, analysis, and evaluation of the Permittees compliance with the WAP and this Permit.

Handled Packaging at the generator facility, as described in Section B-4. Only TRU mixed waste and TRU waste that has been characterized in accordance with this WAP and that meets the **TSDF-WAC** specified in this Permit will be accepted at the WIPP facility for disposal in a permitted Underground Hazardous Waste Disposal Unit (HWDU).

In the event the Permittees request detailed information on a waste stream, the site will provide a Waste Stream Characterization Package (Section B3-12b(2)). For each waste stream, this package will include the WSPF, the Characterization Information Summary, and the complete AK summary. The Waste Stream Characterization Package will also include specific Batch Data Reports and raw analytical data associated with waste container characterization as requested by the Permittees.

#### B-1b Waste Summary Category Groups and Hazardous Waste Accepted at the WIPP Facility

Once a waste stream has been delineated, generator/storage sites will assign a Waste Matrix Code to the waste stream based on the physical form of the waste. Waste streams are then assigned to one of three broad Summary Category Groups; S3000-Homogeneous Solids, S4000-Soils/Gravel, and S5000-Debris Wastes. These Summary Category Groups are used to determine further characterization requirements.

The Permittees will only allow generators to ship those TRU mixed waste streams with EPA hazardous waste codes listed in Table B-10 on the Permittees' RCRA Part A Permit Application (Permit Attachment Θ). Some of the waste may also be identified by unique state hazardous waste codes. These wastes are acceptable at WIPP as long as the TSDF-WAC are met. The Permittees will perform characterization of all waste streams as required by this WAP. If during the characterization process, new EPA hazardous waste codes are identified, those wastes will be prohibited for disposal at the WIPP facility until a permit modification has been submitted to and approved by the NMED for these new EPA hazardous waste codes. Similar waste streams at other generator/storage sites will be examined by the Permittees to ensure that the newly identified EPA hazardous waste codes do not apply to those similar waste streams. If the other waste streams also require new EPA hazardous waste code, shipment of these similar waste streams will also be prohibited for disposal until a permit modification has been submitted to and approved by NMED.

#### B-2 Waste Parameters

The following waste analysis parameters shall be characterized at the generator/storage sites:

- Confirmation of physical form and exclusion of prohibited items specified in Section B-1c
- Toxicity characteristic contaminants listed in 20.4.1.200 NM AC (incorporating 40 CFR, §261.24), Table 1 (excluding pesticides), as specified in Table B-10 Permit Attachment Θ.
- F-listed and P-listed solvents or waste, in Table B-10 (F001, F002, F003, F004, F005, F006, F007, F009, P015) found in 20.4.1.200 NM AC

(incorporating 40 CFR §261.31)

- Hazardous constituents included in 20.4.1.200 NM AC (incorporating 40 CFR §261) Appendix VIII as specified in Tables B-1, B-3 and B-4, as well as any other hazardous constituent identified through acceptable knowledge.

**B-4b(1)(ii) Examination of the Waste Stream Profile Form and Container Data Checks**

The Permittees will be responsible for the verification of completeness and accuracy of the Waste Stream Profile Form (Section B3-12b(1)). The assignment of the waste stream description, Waste Matrix Code Group, and Summary Category Groups; the results of waste analyses; the acceptable knowledge summary documentation; the methods used for characterization; the Carlsbad Field Office (CBFO) certification, and appropriate designation of EPA hazardous waste code(s) will be examined. If the WSPF is inaccurate, efforts will be made to resolve discrepancies by contacting the generator/storage site. If discrepancies in the waste stream are detected at the generator/storage site, the generator/storage site will implement a non-conformance program to identify, document, and report discrepancies (Permit Attachment B3).

The WSPF shall pass all verification checks by the Permittees in order for the waste stream to be approved for shipment to the WIPP facility. The WSPF check against waste container data will occur during the initial WSPF approval process (Section B-4b(1)).

The EPA hazardous waste codes for the wastes that appear on the Waste Stream Profile Form will be compared to those in Table B-10 ~~the Permittees' RCRA Part A Permit Application (Section XIV of Permit Attachment G)~~ to ensure that only wastes that contain constituents listed Section XIV are approved for management, storage, or disposal at WIPP. Some of the waste may also be identified by unique state hazardous waste codes. These wastes are acceptable at WIPP as long as the TSDf-WAC are met. The Characterization Information Summary will be reviewed by the Permittees to verify that the waste has been classified correctly with respect to the assigned EPA hazardous waste codes. The analytical method used will be compared to those listed in Tables B-3, B-4, and B-5 to assure that only approved analytical methods were used for analysis of the waste. The Permittees will verify that TSDf-WAC compliance has been met by the generator/storage site.

Waste data transferred via the WWIS after WSPF approval will be compared with the approved WSPF. Any container with a hazardous waste stream description different from its WSPF will not be managed, stored, or disposed at WIPP.

The Permittees will also verify that three different types of data specified below are available for every container holding TRU mixed waste before that waste is managed, stored, or disposed at WIPP. The following three verifications will be performed on data from the following determinations: 1) an assignment of the waste stream's waste description (by Waste Matrix Codes) and Waste Matrix Code Group; 2) a determination of ignitability, reactivity, and corrosivity; and 3) a determination of compatibility. The verification of waste stream description will be performed by reviewing the WWIS for consistency in the waste stream description and WSPF. The Characterization Information Summary will indicate if the waste has been checked for the characteristics of ignitability, corrosivity, and reactivity. The final verification of



waste compatibility will be performed using Appendix C1 of the WIPP RCRA Part B Permit Application (DOE, 1997), the compatibility study.

1.c Add new Table B-10, Listing of Permitted Hazardous Waste Numbers

**TABLE B-10**  
**LISTING OF PERMITTED HAZARDOUS WASTE NUMBERS**

<b><u>EPA Hazardous Waste Numbers</u></b>			
<u>F001</u>	<u>D019</u>	<u>D043</u>	<u>U079</u>
<u>F002</u>	<u>D021</u>	<u>P015</u>	<u>U103</u>
<u>F003</u>	<u>D022</u>	<u>P030</u>	<u>U105</u>
<u>F004</u>	<u>D026</u>	<u>P098</u>	<u>U108</u>
<u>F005</u>	<u>D027</u>	<u>P099</u>	<u>U122</u>
<u>F006</u>	<u>D028</u>	<u>P106</u>	<u>U133</u>
<u>F007</u>	<u>D029</u>	<u>P120</u>	<u>U134</u>
<u>F009</u>	<u>D030</u>	<u>U002</u>	<u>U151</u>
<u>D004</u>	<u>D032</u>	<u>U003</u>	<u>U154</u>
<u>D005</u>	<u>D033</u>	<u>U019</u>	<u>U159</u>
<u>D006</u>	<u>D034</u>	<u>U037</u>	<u>U196</u>
<u>D007</u>	<u>D035</u>	<u>U043</u>	<u>U209</u>
<u>D008</u>	<u>D036</u>	<u>U044</u>	<u>U210</u>
<u>D009</u>	<u>D037</u>	<u>U052</u>	<u>U220</u>
<u>D010</u>	<u>D038</u>	<u>U070</u>	<u>U226</u>
<u>D011</u>	<u>D039</u>	<u>U072</u>	<u>U228</u>
<u>D018</u>	<u>D040</u>	<u>U078</u>	<u>U229</u>

**Acceptance of U-coded wastes listed for reactivity, ignitability, or corrosivity characteristics is contingent upon a demonstration that the wastes meet the requirements specified in Permit Condition II.C.3.g.**

## Item 2

### Description:

Language changes requested by the NMED during recent reviews of final audit reports to clarify confusing language and correct several errors noted. This modification is intended to clarify that language and correct those changes noted by NMED.

### Basis:

The change is administrative and informational only and is therefore a Class 1 notification pursuant to 20.4.1.900 NMAC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion:

The purpose of this modification is to notify NMED of the following changes:

The proposed language for Sections B6 would be as follows:

#### Question 8

- "F-listed and P-listed solvents or wastes, in Table B-10 F001, F002, F003, F004, F005, F006, F007, F009, P015) found in 20 NMAC 4.1.200"

#### Question 139

- Are procedures in place to ensure that the generator/storage site initially characterizes the waste on a waste stream basis using Acceptable Knowledge? and that -if the Acceptable Knowledge information does not meet the requirements of Attachment B4?, the waste will be characterized in the same manner as a newly generated waste (Section B-1a)"

#### Question 306

- "Do site procedures ensure that when the bags are not opened, a brief written description of the contents of the bags is prepared to document the estimated amounts of each waste type in the bags, based upon the use of historically derived waste weight tables and an estimation of the waste volumes? (Section ~~B1-3b(5)~~ B1-3b(3)"

#### Question 307

- "Do site procedures ensure that the written records of visual examination are supplemented with the audio/video recording or equivalent? (Section ~~B1-3b(6)~~ B1-3b(5)"

#### Question 308

- "Does the site have a site-specific SOP for conducting visual examinations? (~~Section B1-3b(5)~~ B1-3b(3))"

Question 309

- "Do site documents include criteria for the visual examination expert to have in his/her decision-making criteria for assessing the need to open the bags/packages in order to identify all of their contents? (Section B1-3b(5-B1-3b(3)))"

**Revised Permit Text:**

2.a Attachment B6, Table B6-1 Waste Analysis Plan (WAP) Checklist

<b>8</b>	<p>Does the generator/storage facility have procedures in place to ensure that the following waste analysis parameters will be characterized:</p> <ul style="list-style-type: none"><li>• Confirmation of physical form and exclusion of prohibited items</li><li>• Toxicity characteristic contaminants listed in 20 NMAC 4.1.200</li><li>• F-listed and P-listed solvents or wastes <u>in Table B-10 (F001, F002, F003, F004, F005, F006, F007, F009, P015)</u> found in 20 NMAC 4.1.200</li><li>• Hazardous constituents as included in 20 NMAC 4.1.200</li></ul> <p>(Section B-2)</p>
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2.b Attachment B6, Table B6-3 Acceptable Knowledge (AK) Checklist

<b>139</b>	<p>Are procedures in place to ensure that the generator/storage site initially characterizes the waste on a waste stream basis using Acceptable Knowledge? <u>and that if the Acceptable Knowledge information does not meet the requirements of Attachment B4?</u> the waste will be characterized in the same manner as a newly generated waste if the Acceptable Knowledge information does not meet the requirements of Attachment B4? (Section B-1a)</p>
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2.c Attachment B6, Table B6-6 Visual Examination (VE) Checklist

<b>306</b>	Do site procedures ensure that when the bags are not opened, a brief written description of the contents of the bags is prepared to document the estimated amounts of each waste type in the bags, based upon the use of historically derived waste weight tables and an estimation of the waste volumes?(Section <del>B4-3b(5)</del> <u>B1-3b(3)</u> )	
<b>307</b>	Do site procedures ensure that the written records of visual examination are supplemented with the audio/video recording or equivalent? (Section <del>B4-3b(6)</del> <u>B1-3b(5)</u> )	
<b>308</b>	Does the site have a site-specific SOP for conducting visual examinations? (Section <del>B4-3b(5)</del> <u>B1-3b(3)</u> )	
<b>309</b>	Do site documents include criteria for the visual examination expert to have in his/her decision-making criteria for assessing the need to open the bags/ packages in order to identify all of their contents? (Section <del>B4-3b(5)</del> <u>B1-3b(3)</u> )	

**Class 1 Permit Modification Notification**

**Revise Language for Compacted 55-Gallon Drums With Rigid Liners**

**Waste Isolation Pilot Plant  
Carlsbad, New Mexico**

**WIPP HWFP #NM4890139088-TSDF**

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## Acronyms and Abbreviations

CBFO	Carlsbad Field Office
CFR	Code of Federal Regulations
DAC	Drum Age Criteria
DOE	Department of Energy
HWFP	Hazardous Waste Facility Permit
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
PMN	Permit Modification Notification
RCRA	Resource Conservation and Recovery Act
TSDf	Treatment, Storage and Disposal Facility
WIPP	Waste Isolation Pilot Plant
WTS	Washington TRU Solutions LLC

## Overview of the Permit Modification Notification

This document contains a Class 1 Permit Modification Notification (PMN) to the Hazardous Waste Facility Permit (HWFP) at the Waste Isolation Pilot Plant (WIPP), Permit Number NM4890139088-TSDF hereinafter referred to as the WIPP HWFP.

This PMN is being submitted by the U.S. Department of Energy (DOE), Carlsbad Field Office (CBFO) and Washington TRU Solutions LLC (WTS), collectively referred to as the Permittees, in accordance with the WIPP HWFP, Condition I.B.1 (20.4.1.900 New Mexico Administrative Code (NMAC) incorporating Title 40 of the Code of Federal Regulations (40 CFR) §270.42(a)). The PMN in this document is necessary for the following reason:

- to revise the language in the HWFP to allow the receipt of compacted 55-gallon drums with rigid liners at WIPP that have headspace gas samples taken in accordance with the HWFP prior to compaction.

This change does not reduce the ability of the Permittees to provide continued protection to human health and the environment.

The requested modification to the WIPP HWFP and related supporting documents are provided in this PMN. The proposed modification to the text of the WIPP HWFP has been identified using a double underline and revision bar in the right hand margin for added information, and a ~~strikeout~~ font for deleted information. All direct quotations are indicated by italicized text.



**Attachment A**

**Description of the Class 1 Permit Modification Notification**

**Table 1. Class 1 Hazardous Waste Facility Permit Modification Notification**

No.	Affected Permit Section	Item	Category	Attachment A Page #
1	a. Attachment B1	Revise language to allow receipt of compacted 55-gallon drums with rigid liners so long as headspace gas samples have been taken prior to compaction.	A.1	A-4

## Item 1

### Description:

The WIPP facility is preparing to begin accepting supercompacted waste from the Advanced Mixed Waste Treatment Facility. A large portion of this waste is in 55-gallon drums which have rigid liners.

The Permittees believe that the language now in the HWFP is not intended to preclude the receipt of these drums so long as headspace gas sampling has occurred as required in the HWFP, on these drums, prior to compaction. This modification is intended to clarify that language.

### Basis:

The change is administrative and informational only and is therefore a Class 1 notification pursuant to 20.4.1.900 NM AC (incorporating 40 CFR 270.42, Appendix I, A.1).

### Discussion:

The purpose of this modification is to notify NMED of the following change:

Revise language to allow receipt of compacted 55-gallon drums with rigid liners so long as the appropriate Drum Age Criteria (DAC) has been met and headspace gas samples have been taken prior to compaction.

The Permittees submitted a Class 2 modification on January 8, 2004 entitled "Packaging-Specific Drum Age Criteria for New Approved Containers", which was approved by the New Mexico Environment Department (NMED) on May 7, 2004, with changes.

As now written, the revised language incorporated by NMED in Sections B1-1a(1), B1-1a(2) and B1-1a(3) implies that any compacted 55-gallon drum with a rigid liner is not acceptable for disposal at WIPP regardless of when headspace gas sampling is performed. The Permittees do not believe that this was the intent of the NMED since DAC values already exist for 55-gallon drums with rigid liners.

The Permittees are proposing this Class 1 PMN to clarify the language in the previously referenced sections to allow compacted 55-gallon drums to be shipped to WIPP so long as they have been headspace gas sampled in accordance with the HWFP prior to compaction.

The proposed language for Sections B1-1a(1) and B1-1a(2) would be as follows:  
"Drums, TDOPs, or SWBs that contain compacted 55-gallon drums containing a rigid liner may not be disposed of under any packaging configuration unless headspace gas sampling was performed before compaction in accordance with this WAP."

The proposed language in Section B1-1a(3) would be as follows:

1. for supercompacted waste, both the absence of rigid liners in the compacted 55-gallon drums which have not been headspace gas sampled in accordance with this permit prior to compaction, and
2. the absence of layers of confinement must be documented in the WWIS if Packaging Configuration Group 7 is used.

**Revised Permit Text:**

1.a Section B1-1a(1)

Drums, TDOPs, or SWBs that contain compacted 55-gallon drums containing a rigid liner may not be disposed of under any packaging configuration unless headspace gas sampling was performed before compaction in accordance with this WAP.

Section B1-1a(2)

Drums, TDOPs, or SWBs that contain compacted 55-gallon drums containing a rigid liner may not be disposed of under any packaging configuration unless headspace gas sampling was performed before compaction in accordance with this WAP.

Section B1-1a(3)

- 1) for supercompacted waste, both the absence of rigid liners in the compacted 55-gallon drums which have not been headspace gas sampled in accordance with this permit prior to compaction, and
- 2) the absence of layers of confinement must be documented in the WWIS if Packaging Configuration Group 7 is used.