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RON CURRY
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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 29, 2004

Mr. R. Paul Detwiler, Acting Manager
Carlsbad Field Office
Department of Energy
P.O. Box 3090
Carlsbad, New Mexico 88221-3090

Dr. Steven Warren, President
Washington TRU Solutions, LLC
P.O. Box 2078
Carlsbad, New Mexico 88221-5608

**RE: FINAL DETERMINATION, CLASS 2 MODIFICATION REQUEST
WIPP HAZARDOUS WASTE FACILITY PERMIT
EPA I.D. NUMBER NM4890139088**

Dear Mr. Detwiler and Dr. Warren:

The New Mexico Environment Department (NMED) hereby approves with changes the permit modification request (PMR) to the WIPP Hazardous Waste Facility Permit as submitted to the Hazardous Waste Bureau in the following document:

- Request for Class 2 Permit Modification (Tank Waste), Letter Dated 7/2/04, Rec'd 7/2/04

The following item was included in this submittal:

1. Procedure for Consideration of Tank Waste

This Class 2 PMR was processed in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)). It was subject to a sixty (60) day public comment period running from July 8 through September 7, 2004, during which NMED received written specific comments from a total of thirteen individuals and organizations. NMED also received approximately 1200 general comments in the form of green postcards expressing opposition to high-level waste at WIPP.

Mr. Detwiler and Dr. Warren

October 29, 2004

Page 2

NMED hereby approves this modification with changes as noted in Attachment 1. Attachment 2 contains the redline/strikeout pages of the modified permit to help the reader rapidly identify each modification. Language deleted from the permit is ~~stricken out~~. Language added to the permit is **highlighted in redline**. Specific language changes imposed by NMED are distinguished from language changes proposed in the modification request by **yellow highlighting**.

Also enclosed is a CD-ROM containing the modified files in WordPerfect 8 redline/strikeout format as well as files with markings and comments removed. An electronic version of the modified permit with markings removed will be publicly posted on the NMED WIPP Information Page at <<http://www.nmenv.state.nm.us/wipp/download.html>>.

For purposes of version control, please note that NMED has established the date of these modified pages and attachment as November 1, 2004. The effective date of the permit modification approval is your date of receipt of this letter.

NMED is providing full response to all public comments under separate cover next week.

If you have any questions regarding this matter, please contact Steve Zappe of my staff at (505) 428-2517.

Sincerely,

Original signed by

Ron Curry
Cabinet Secretary

RC/soz

Attachment 1 – changes to permit modification request

Attachment 2 – redline/strikeout pages

cc: Charles Lundstrom, NMED WWMD
James Bearzi, NMED HWB
John Kieling, NMED HWB
Steve Zappe, NMED HWB
Ashley Schannauer, NMED OGC
Laurie King, EPA Region 6
Betsy Forinash, EPA ORIA
Connie Walker, Trinity Engineering
File: Red WIPP '03

Attachment 1

Changes to Permit Modification Request

1. Procedure for Consideration of Tank Waste

Permit Condition II.C.3.i

- The text was modified to clarify that the prohibition applied to both TRU mixed waste that had ever been managed as high-level waste and waste from specific tanks identified in Permit Attachment B. This clarification was determined to be necessary to avoid possible confusion over the word “managed” and was in response to public comment.
- The short title for the permit condition was changed from “Tank waste” to “Excluded waste” to better reflect the overall intent of the condition by clearly identifying those wastes that were excluded from acceptance at WIPP (i.e., waste managed as high-level, waste from specific tanks).

Table II.C.3.i

- The title of the table was modified by removing the word “Tank” to better reflect the overall intent of the Permit Condition II.C.3.i.
- The column on the table indicating the submittal date for the Class 3 PMR was changed to indicate instead the date the Class 3 PMR was approved, because compliance with the permit condition would be determined by final approval date, not submittal date.
- The column on the table labeled “Description of Wastes” was changed to read “Description of Waste Stream” to be consistent with the permit in that it relates descriptive information to waste streams, not just waste in general.

Section B-1c

- The text was modified to be parallel with revised text in Permit Condition II.C.3.i.

Table B-9

- NMED added this table identifying the 243 tanks at Hanford, Savannah River, and INEEL that are subject to the exclusion identified in Permit Condition II.C.3.i and Permit Attachment B, Section B-1c. This list was distilled from a complete list submitted as public comment, and by inclusion is meant to include all tanks from each site identified on the complete list.
- The list of tables at the beginning of Permit Attachment B was updated to include Table B-9.

Table B6-1, Item 12a

- The B6 checklist item was edited to conform to final language in Section B-1c.

Attachment 2
Redline/Strikeout Pages

- II.C.3.c. Non-mixed hazardous wastes - hazardous wastes not occurring as co-contaminants with TRU wastes (non-mixed hazardous wastes) are not acceptable at WIPP.
- II.C.3.d. Chemical incompatibility - wastes incompatible with backfill, seal and panel closures materials, container and packaging materials, shipping container materials, or other wastes are not acceptable at WIPP.
- II.C.3.e. Explosives and compressed gases - wastes containing explosives or compressed gases are not acceptable at WIPP.
- II.C.3.f. PCB waste - wastes with polychlorinated biphenyls (**PCBs**) not authorized under an EPA PCB waste disposal authorization are not acceptable at WIPP.
- II.C.3.g. Ignitable, corrosive, and reactive wastes - wastes exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous Waste Numbers of D001, D002, or D003) are not acceptable at WIPP.
- II.C.3.h. Remote-handled transuranic waste - remote-handled (**RH**) TRU mixed waste (waste with a surface dose rate of 200 millirem per hour or greater) is not acceptable at WIPP.
- II.C.3.i. Tank-Excluded waste - TRU mixed wastes from tanks that has ever been managed as high-level waste is and waste from tanks specified in Permit Attachment B are not acceptable at WIPP unless specifically approved through a subsequent Class 3 permit modification. Such wastes are listed in Table II.C.3.i below.

Table <u>II.C.3.i</u> - Additional Approved Waste-Tank Streams	
Date Class 3 Permit Modification Request Submitted Approved	Description of Wastes Stream

- II.C.3.j. Headspace gas sampling and analysis - any waste container that does not have VOC concentration values reported for the headspace is not acceptable at WIPP.

List of Tables

Table	Title
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

List of Figures

Figure	Title
B-1	WIPP Waste Stream Profile Form
B-2	Data Collection Design for Characterization of Newly Generated Waste
B-3	Data Collection Design for Characterization of Retrievably Stored Waste
B-5	TRU Mixed Waste Screening Flow Diagram

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

14 B-1c Waste Prohibited at the WIPP Facility

15 The following TRU mixed waste are prohibited at the WIPP facility:

- 16 C liquid waste (waste shall contain as little residual liquid as is reasonably
17 achievable by pouring, pumping and/or aspirating, and internal containers shall
18 contain less than 1 inch or 2.5 centimeters of liquid in the bottom of the container.
19 Total residual liquid in any payload container (e.g., 55 gallon drum or standard
20 waste box) may not exceed 1 percent volume of that container. Payload
21 containers with U134 waste shall have no detectable liquid)
- 22 C non-radionuclide pyrophoric materials, such as elemental potassium
- 23 C hazardous wastes not occurring as co-contaminants with TRU mixed wastes
24 (non-mixed hazardous wastes)
- 25 C wastes incompatible with backfill, seal and panel closures materials, container
26 and packaging materials, shipping container materials, or other wastes
- 27 C wastes containing explosives or compressed gases
- 28 C wastes with polychlorinated biphenyls (**PCBs**) not authorized under an EPA PCB
29 waste disposal authorization
- 30 C wastes exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA
31 Hazardous Waste Numbers of D001, D002, or D003)
- 32 C RH TRU mixed waste (waste with a surface dose rate of 200 millirem per hour or
33 greater)
- 34 C ~~waste from tanks~~ that has ever been managed as high-level waste and waste
35 from tanks specified in Table B-9, unless specifically approved through a
36 subsequent Class 3 permit modification

TABLE B-9
WASTE TANKS SUBJECT TO EXCLUSION

Hanford Site - 177 Tanks	
A-101 through A-106	C-201 through C-204
AN-101 through AN-107	S-101 through S-112
AP-101 through AP-108	SX-101 through SX-115
AW-101 through AW-106	SY-101 through SY-103
AX-101 through AX-104	T-101 through T-112
AY-101 through AY-102	T-201 through T-204
B-101 through B-112	TX-101 through TX-118
B-201 through B-204	TY-101 through TY-106
BX-101 through BX-112	U-101 through U-112
BY-101 through BY-112	U-201 through U-204
C-101 through C-112	
Savannah River Site - 51 Tanks	
Tank 1 through 51	
Idaho National Engineering and Environmental Laboratory - 15 Tanks	
WM-103 through WM-106	WM-180 through 190

	WAP Requirement ¹	Procedure Documented		Example of Implementation/ Objective Evidence, as applicable		Comment (e.g., any change in procedure since last audit, etc.)
		Location	Adequate? Y/N (Why?)	Item Reviewed	Adequate? Y/N	
12a	<ul style="list-style-type: none"> C wastes with polychlorinated biphenyls (PCBs) not authorized under an EPA PCB waste disposal authorization C wastes exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous Waste Numbers of D001, D002, or D003) C RH TRU mixed waste (waste with a surface dose rate of 200 millirem per hour or greater) C TRU mixed wastes from tanks that has ever been managed as high-level waste and waste from tanks specified in Table B-9, unless specifically approved through a subsequent Class 3 permit modification and listed in Table II.C.3.i of Module II C any waste container that does not have VOC concentration values reported for the headspace C any waste container which has not undergone either radiographic or visual examination C any waste container from a waste stream which has not been preceded by an appropriate, certified Waste Stream Profile Form (see Section B-1d) (Section B-1c) 					
13	Are procedures in place to ensure that the generator/storage site uses radiography, visual examination, headspace gas analysis and, as applicable, solids sampling, to confirm the absence of the unacceptable waste listed above? (Section B-3)					
WASTE ACCEPTANCE CONTROL						
14	Are procedures in place to ensure that the generator/storage site uses a Waste Stream Profile Form (WSPF) which includes, at a minimum, the information indicated on the attached WSPF found in Figure B-1? A Waste Stream Profile Form need not be submitted for subsequent waste stream lots unless warranted by the characterization information. (Sections B-1a, B-1d)					
15	Are procedures in place to ensure that WSPFs are provided to WIPP and NMED for each waste stream prior to acceptance for disposal at the WIPP? (Section B-1d)					