

Class 2 Permit Modification Request
Procedure for Consideration of Tank Waste
Waste Isolation Pilot Plant
Carlsbad, New Mexico
WIPP HWFP No. NM489013908-TSDF

July 2, 2004

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Acronyms and Abbreviations

| | |
|------|--------------------------------------|
| CFR | Code of Federal Regulations |
| DOE | U.S. Department of Energy |
| EPA | U.S. Environmental Protection Agency |
| HWFP | Hazardous Waste Facility Permit |
| NMAC | New Mexico Administrative Code |
| NMED | New Mexico Environment Department |
| PCB | polychlorinated biphenyl |
| PMR | Permit Modification Request |
| TRU | Transuranic |
| WAP | Waste Analysis Plan |
| WIPP | Waste Isolation Pilot Plant |
| WTS | Washington TRU Solutions, LLC |

Overview of the Permit Modification Request

This document contains one Class 2 Permit Modification Request (**PMR**) for the Hazardous Waste Facility Permit (**HWFP**) of the Waste Isolation Pilot Plant (**WIPP**), Permit Number NM4890139088-TSDF, hereinafter referred to as the WIPP HWFP.

This PMR is submitted by the U.S. Department of Energy (**DOE**) 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 Section 270.42(b) of Title 40 of the Code of Federal Regulations (**CFR**)). If this PMR were approved, the HWFP would contain a procedure for consideration of TRU mixed waste from tanks that has ever been managed as high-level waste. The PMR will prohibit the acceptance and disposal of such wastes at the WIPP facility unless they are approved for disposal through a subsequent Class 3 permit modification. These changes do not reduce the ability of WIPP to protect human health and the environment.

The proposed modifications to the text of the WIPP HWFP have been identified using a double underline for added information, and a ~~strikeout~~ font for deleted information. All direct quotations are indicated by italicized text. The following information demonstrates compliance with the WIPP HWFP requirement, Permit Condition I.B.1, for submission of this Class 2 PMR.

1. 20.4.1.900 NMAC (incorporating 40 CFR § 270.42(b)(1)(i)) requires the applicant to describe the exact change to be made to the permit conditions and supporting documents referenced by the permit.

This PMR would establish a procedure for approval of the disposal of transuranic (**TRU**) mixed waste from tanks that has ever been managed as high-level waste by adding language to Section II.C.3, Section B-1c, and Table B6-1 of the WIPP HWFP. The proposed conditions would prohibit WIPP from accepting TRU mixed waste from tanks that has ever been managed as high-level waste unless it is approved for WIPP disposal through a Class 3 permit modification. A brief description of the proposed changes to each HWFP section is provided in Table 1 of Attachment A to this PMR. The proposed changes to the WIPP HWFP are included in Section 1 of this PMR.

2. 20.4.1.900 NMAC (incorporating 40 CFR § 270.42(b)(1)(ii)) requires the applicant to identify that the modification is a Class 2 modification.

This PMR is submitted as a Class 2 modification because it does not involve any changes that substantially alter the WIPP facility or its operations, 20.4.1.900 NMAC (incorporating 40 CFR § 270.42(d)). This PMR proposes only to add conditions to the HWFP and the WIPP Waste Analysis Plan (**WAP**) that would prohibit the disposal of TRU mixed waste from tanks that has ever been managed as high-level waste unless such waste is approved for disposal at WIPP by NMED pursuant to a subsequent Class 3 permit modification.

This Class 2 PMR adds a procedure for consideration of TRU mixed waste from tanks that has ever been managed as high-level waste to the general permit provisions and the WIPP WAP. This procedural change falls within Item B.1.d. of Appendix I of 40 CFR § 270.42, which classifies such changes as Class 2. This modification is similar to the Class 2 PMR related to polychlorinated biphenyl (**PCB**) waste that the Permittees submitted in May 2003. That PMR was approved as a Class 2 modification pursuant to Item B.1.d. In the PCB PMR, the Permittees proposed to change the same permit sections as in this PMR: Section II.C.3 of Module II, Section B-1c of the WAP, and Table B6-1 of Attachment B6 to the HWFP. The New Mexico Environment Department (**NMED**) considered and approved the PCB-related permit changes under the Class 2 process.

This PMR is also classified as a Class 2 PMR in accordance with the general principles set forth in the preamble to the U.S. Environmental Protection Agency (**EPA**) notice promulgating the permit modification procedures codified at 40 CFR § 270.42.¹ EPA's final rule establishes the principle that Class 2 procedures are appropriate for changes that do not substantially alter a facility or its operations.

Pursuant to the proposed procedural changes, the Permittees would be prohibited from accepting TRU mixed waste from tanks that has ever been managed as high-level waste unless the waste is approved for WIPP disposal through a subsequent Class 3 permit modification. Any such Class 3 PMR would include specific information on the waste and its origin, and the PMR would be subject to the public participation requirements of 20.4.1.900(B) NMAC.

3. 20.4.1.900 NMAC (incorporating 40 CFR § 270.42(b)(1)(iii)) requires the applicant to explain why the modification is needed.

In November 2003, NMED published a Public Notice and Fact Sheet announcing its intent to approve a permit modification it had developed that would limit waste eligible for disposal at WIPP to an inventory developed when the permit was originally issued.²

At the Permittees' request, NMED scheduled a public hearing on its proposed modification. On June 2, 2004, NMED and the Permittees filed a Joint Motion with the Hearing Officer requesting that the public hearing on NMED's permit modification be held in abeyance to allow the Permittees time to submit, and NMED to consider this PMR, which would supplant NMED's proposed permit modification. On June 3, 2004, the Hearing Officer issued an Order granting the Joint Motion. This PMR is submitted in compliance with the Hearing Officer's Order.

4. 20.4.1.900 NMAC (incorporating 40 CFR § 270.42 (b)(1)(iv)) requires the applicant to provide the applicable information required by 40 CFR §§ 270.13 through 270.21, 270.62 and 270.63.

¹ Permit Modifications for Hazardous Waste Management Facilities, Final Rule, September 28, 1988, 53 FR 37912.

² Public Notice No. 03-12, Notice of Public Comment Period and Public Hearing Concerning Intent to Approve an Agency Initiated Modification to the Hazardous Waste Facility Permit for the Waste Isolation Pilot Plant, Carlsbad, New Mexico, EPA I.D. No. NM4890139088, New Mexico Environment Department, November 26, 2003.

The regulatory crosswalk describes those portions of the WIPP HWFP that would be altered by this PMR. Where applicable, regulatory citations in this modification reference Title 20, Chapter 4, Part 1, NMAC, revised October 1, 2003, incorporating 40 CFR Parts 264 and 270. Sections 270.16 through 270.22, 270.62, 270.63 and 270.66 of Title 40 of the CFR are not applicable to the WIPP. Consequently, they are not listed in the regulatory crosswalk.

5. 20.4.1.900 NMAC (incorporating 40 CFR § 270.11(d)(1) and 40 CFR § 270.30(k)) requires any person signing under paragraph a and b must certify the document in accordance with 20.4.1.900 NMAC.

The transmittal letter for this PMR contains the signed certification statement in accordance with Module I.F of the WIPP HWFP.

Regulatory Crosswalk

| Regulatory Citation(s) 20.4.1.900 NMAC (incorporating 40 CFR Part 270) | Regulatory Citation(s) 20.4.1.500 NMAC (incorporating 40 CFR Part 264) | Description of Requirement | Added or Clarified Information | | |
|---|---|--|---|-----|----|
| | | | Section of the HWFP or Permit Application | Yes | No |
| § 270.13 | | Contents of Part A permit application | Attachment O, Part A | | ✓ |
| § 270.14(b)(1) | | General facility description | Attachment A | | ✓ |
| § 270.14(b)(2) | § 264.13(a) | Chemical and physical analyses | Attachment B | | ✓ |
| § 270.14(b)(3) | § 264.13(b) | Development and implementation of waste analysis plan | Module II, Attachment B | ✓ | |
| | § 264.13(c) | Off-site waste analysis requirements | Module II, Attachment B | ✓ | |
| § 270.14(b)(4) | § 264.14(a-c) | Security procedures and equipment | Attachment C | | ✓ |
| § 270.14(b)(5) | § 264.15(a-d) | General inspection requirements | Attachment D | | ✓ |
| | § 264.174 | Container inspections | Attachment D | | ✓ |
| § 270.23(a)(2) | § 264.602 | Miscellaneous units inspections | Attachment D | | ✓ |
| § 270.14(b)(6) | | Request for waiver from preparedness and prevention requirements of Part 264 Subpart C | NA | | |
| § 270.14(b)(7) | 264 Subpart D | Contingency plan requirements | Attachment F | | ✓ |
| | § 264.51 | Contingency plan design and implementation | Attachment F | | ✓ |
| | § 264.52 (a) & (c-f) | Contingency plan content | Attachment F | | ✓ |
| | § 264.53 | Contingency plan copies | Attachment F | | ✓ |
| | § 264.54 | Contingency plan amendment | Attachment F | | ✓ |
| | § 264.55 | Emergency coordinator | Attachment F | | ✓ |
| | § 264.56 | Emergency procedures | Attachment F | | ✓ |
| § 270.14(b)(8) | | Description of procedures, structures or equipment for: | Attachment E | | ✓ |
| § 270.14(b)(8) (i) | | Prevention of hazards in unloading operations (e.g., ramps and special forklifts) | Attachment E | | ✓ |
| § 270.14(b)(8) (ii) | | Runoff or flood prevention (e.g., berms, trenches, and dikes) | Attachment E | | ✓ |
| § 270.14(b)(8) (iii) | | Prevention of contamination of water supplies | Attachment E | | ✓ |

| Regulatory Citation(s) 20.4.1.900 NMAC (incorporating 40 CFR Part 270) | Regulatory Citation(s) 20.4.1.500 NMAC (incorporating 40 CFR Part 264) | Description of Requirement | Added or Clarified Information | | |
|--|--|---|---|-----|----|
| | | | Section of the HWFP or Permit Application | Yes | No |
| § 270.14(b)(8)(iv) | | Mitigation of effects of equipment failure and power outages | Attachment E | | ✓ |
| § 270.14(b)(8)(v) | | Prevention of undue exposure of personnel (e.g., personal protective equipment) | Attachment E | | ✓ |
| § 270.14(b)(8)(vi) § 270.23(a)(2) | § 264.601 | Prevention of releases to the atmosphere | Module II Module IV Attachment M2 Attachment N | | ✓ |
| | 264 Subpart C | Preparedness and prevention | Attachment E | | ✓ |
| | § 264.31 | Design and operation of facility | Attachment E | | ✓ |
| | § 264.32 | Required equipment | Attachment E Attachment F | | ✓ |
| | § 264.33 | Testing and maintenance of equipment | Attachment D | | ✓ |
| | § 264.34 | Access to communication/alarm system | Attachment E | | ✓ |
| | § 264.35 | Required aisle space | Attachment E | | ✓ |
| | § 264.37 | Arrangements with local authorities | Attachment F | | ✓ |
| § 270.14(b)(9) | § 264.17(a-c) | Prevention of accidental ignition or reaction of ignitable, reactive, or incompatible wastes | Attachment E | | ✓ |
| § 270.14(b)(10) | | Traffic pattern, volume, and controls, for example: Identification of turn lanes Identification of traffic/stacking lanes, if appropriate Description of access road surface Description of access road load-bearing capacity Identification of traffic controls | Attachment G | | ✓ |
| § 270.14(b)(11)(i) and (ii) | § 264.18(a) | Seismic standard applicability and requirements | Part B, Rev. 6 Chapter B | | ✓ |
| § 270.14(b)(11)(iii-v) | § 264.18(b) | 100-year floodplain standard | Part B, Rev. 6 Chapter B | | ✓ |
| | § 264.18(c) | Other location standards | Part B, Rev. 6 Chapter B | | ✓ |
| § 270.14(b)(12) | § 264.16(a-e) | Personnel training program | Attachment H | | ✓ |
| § 270.14(b)(13) | 264 Subpart G | Closure and post-closure plans | Attachment I & J | | ✓ |

| Regulatory Citation(s) 20.4.1.900 NMAC (incorporating 40 CFR Part 270) | Regulatory Citation(s) 20.4.1.500 NMAC (incorporating 40 CFR Part 264) | Description of Requirement | Added or Clarified Information | | |
|---|---|---|--|-----|----|
| | | | Section of the HWFP or Permit Application | Yes | No |
| § 270.14(b)(13) | § 264.111 | Closure performance standard | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.112(a) (b) | Written content of closure plan | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.112(c) | Amendment of closure plan | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.112(d) | Notification of partial and final closure | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.112(e) | Removal of wastes and decontamination/dismantling of equipment | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.113 | Time allowed for closure | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.114 | Disposal/decontamination | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.115 | Certification of closure | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.116 | Survey plat | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.117 | Post-closure care and use of property | Attachment J | | ✓ |
| § 270.14(b)(13) | § 264.118 | Post-closure plan; amendment of plan | Attachment J | | ✓ |
| § 270.14(b)(13) | § 264.178 | Closure/containers | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.601 | Environmental performance standards-Miscellaneous units | Attachment I | | ✓ |
| § 270.14(b)(13) | § 264.603 | Post-closure care | Attachment I | | ✓ |
| § 270.14(b)(14) | § 264.119 | Post-closure notices | Attachment J | | ✓ |
| § 270.14(b)(15) | § 264.142 | Closure cost estimate | NA | | ✓ |
| | § 264.143 | Financial assurance | NA | | ✓ |
| § 270.14(b)(16) | § 264.144 | Post-closure cost estimate | NA | | ✓ |
| | § 264.145 | Post-closure care financial assurance | NA | | ✓ |
| § 270.14(b)(17) | § 264.147 | Liability insurance | NA | | ✓ |
| § 270.14(b)(18) | § 264.149-150 | Proof of financial coverage | NA | | ✓ |
| § 270.14(b)(19)(i), (vi), (vii), and (x) | | Topographic map requirements, Map scale and date, Map orientation, Legal boundaries, Buildings Treatment, storage, and disposal operations, Run-on/run-off control systems, Fire control facilities | Attachment O Part A Part B, Rev. 6 Chapter B, E | | ✓ |

| Regulatory Citation(s) 20.4.1.900 NMAC (incorporating 40 CFR Part 270) | Regulatory Citation(s) 20.4.1.500 NMAC (incorporating 40 CFR Part 264) | Description of Requirement | Added or Clarified Information | | |
|---|---|---|---|-----|----|
| | | | Section of the HWFP or Permit Application | Yes | No |
| § 270.14(b)(19)(ii) | § 264.18(b) | 100-year floodplain | Attachment O Part A Part B, Rev. 6 Chapter B, E | | ✓ |
| § 270.14(b)(19)(iii) | | Surface waters | Attachment O Part A Part B, Rev. 6 Chapter B, E | | ✓ |
| § 270.14(b)(19)(iv) | | Surrounding land use | Attachment O Part A Part B, Rev. 6 Chapter B, E | | ✓ |
| § 270.14(b)(19)(v) | | Wind rose | Attachment O Part A Part B, Rev. 6 Chapter B, E | | ✓ |
| § 270.14(b)(19)(viii) | § 264.14(b) | Access controls | Attachment O Part A Part B, Rev. 6 Chapter B, E, F | | ✓ |
| § 270.14(b)(19)(ix) | | Injection and withdrawal wells | Attachment O Part A Part B, Rev. 6 Chapter B, E, F | | ✓ |
| § 270.14(b)(19)(xi) | | Drainage on flood control barriers | Part B, Rev. 6 Chapter B, E, F | | ✓ |
| § 270.14(b)(19)(xii) | | Location of operational units | Part B, Rev. 6 Chapter B | | ✓ |
| § 270.14(b)(20) | | Other federal laws Wild and Scenic Rivers Act National Historic Preservation Act Endangered Species Act Coastal Zone Management Act Fish and Wildlife Coordination Act Executive Orders | Part B, Rev. 6 Chapter K | | ✓ |
| § 270.15 | § 264 Subpart I | Containers | Attachment M1 | | ✓ |
| | § 264.171 | Condition of containers | Attachment M1 | | ✓ |
| | § 264.172 | Compatibility of waste with containers | Attachment M1 | | ✓ |
| | § 264.173 | Management of containers | Attachment M1 | | ✓ |
| | § 264.174 | Inspections | Attachment D Attachment M1 | | ✓ |
| § 270.15(a) | § 264.175 | Containment systems | Attachment M1 | | ✓ |
| § 270.15(c) | § 264.176 | Special requirements for ignitable or reactive waste | Attachment E Permit Module II | | ✓ |
| § 270.15(d) | § 264.177 | Special requirements for incompatible wastes | Attachment E Permit Module II | | ✓ |
| | § 264.178 | Closure | Attachment I | | ✓ |
| § 270.15(e) | § 264.179 | Air emission standards | Attachment E Attachment N | | ✓ |
| § 270.23 | 264 Subpart X | Miscellaneous units | Module IV, Attachment M2 | | ✓ |
| § 270.23(a) | § 264.601 | Detailed unit description | Module, IV, Attachment M2 | | ✓ |

| Regulatory Citation(s) 20.4.1.900 NMAC (incorporating 40 CFR Part 270) | Regulatory Citation(s) 20.4.1.500 NMAC (incorporating 40 CFR Part 264) | Description of Requirement | Added or Clarified Information | | |
|--|--|--|---|-----|----|
| | | | Section of the HWFP or Permit Application | Yes | No |
| § 270.23(b) | § 264.601 | Hydrologic, geologic, and meteorologic assessments | Permit Module IV Attachment M2 | | ✓ |
| § 270.23(c) | § 264.601 | Potential exposure pathways | Permit Module IV Attachment M2 Attachment N | | ✓ |
| § 270.23(d) | | Demonstration of treatment effectiveness | Permit Module IV Attachment M2 Attachment N | | ✓ |
| | § 264.602 | Monitoring, analysis, inspection, response, reporting, and corrective action | Permit Module IV Attachment M2 Attachment N | | ✓ |
| | § 264.603 | Post-closure care | Attachment J Attachment J1 | | ✓ |
| | 264 Subpart E | Manifest system, record keeping, and reporting | Permit Module I Permit Module II Permit Module IV Attachment B | | ✓ |

Attachment A

Description of the Class 2 Permit Modification Request

Table 1. Class 2 Hazardous Waste Facility Permit Modification

| Affected Permit Section | Explanation of Changes |
|--------------------------------|--|
| II.C.3 | New permit condition establishing a procedure for consideration of TRU mixed waste from tanks that has ever been managed as high-level waste by prohibiting the acceptance and disposal at WIPP of TRU mixed waste from tanks that has ever been managed as high-level waste unless the waste has been approved through a subsequent Class 3 permit modification. |
| B-1c | Change to the Waste Analysis Plan establishing a procedure for consideration of TRU mixed waste from tanks that has ever been managed as high-level waste by prohibiting the acceptance and disposal at WIPP of TRU mixed waste from tanks that has ever been managed as high-level waste unless the waste has been approved through a subsequent Class 3 permit modification. |
| B6, Table B6-1 | Change to Table B6-1, Waste Analysis Plan Checklist, to prohibit TRU mixed waste from tanks that has ever been managed as high-level waste unless the waste has been approved through a subsequent Class 3 permit modification. |

1.0 Revised Permit Text

1.1 Proposed Changes to Section II.C.3 of Module II

II.C.3. Treatment, Storage, and Disposal Facility Waste Acceptance Criteria (TSDF-WAC)

The Permittees shall not accept TRU mixed wastes at WIPP for storage, management, or disposal which fail to meet the treatment, storage, and disposal facility waste acceptance criteria as presented in Permit Conditions II.C.3.a through II.C.3.k~~l~~ of this Permit.

- II.C.3.a. Liquids - liquid waste is not acceptable at WIPP. Waste shall contain as little residual liquid as is reasonably achievable by pouring, pumping and/or aspirating, and internal containers shall contain less than 1 inch or 2.5 centimeters of liquid in the bottom of the container. Total residual liquid in any payload container (e.g., 55-gallon drum, standard waste box, etc.) may not exceed 1 percent volume of that container.
- II.C.3.b. Pyrophoric materials - non-radionuclide pyrophoric materials, such as elemental potassium, are not acceptable at WIPP.
- 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 waste - TRU mixed wastes from tanks that has ever been managed as high-level waste is 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.

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

- II.C.3.i. Headspace gas sampling and analysis - any waste container that does not have VOC concentration values reported for the headspace is not acceptable at WIPP.
- II.C.3.j. Radiographic / visual examination - any waste container which has not undergone either radiographic or visual examination is not acceptable at WIPP.
- II.C.3.k. Waste stream profiles - any waste container from a waste stream which has not been preceded by an appropriate, certified Waste Stream Profile Form (Attachment B, Figure B-1) is not acceptable at WIPP.

1.2 Proposed Changes to Section B-1c of HWFP Attachment B

B-1c Waste Prohibited at the WIPP Facility

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

- liquid waste (waste shall contain as little residual liquid as is reasonably achievable by pouring, pumping and/or aspirating, and internal containers shall contain less than 1 inch or 2.5 centimeters of liquid in the bottom of the container. Total residual liquid in any payload container (e.g., 55 gallon drum or standard waste box) may not exceed 1 percent volume of that container. Payload containers with U134 waste shall have no detectable liquid)
- non-radionuclide pyrophoric materials, such as elemental potassium
- hazardous wastes not occurring as co-contaminants with TRU mixed wastes (non-mixed hazardous wastes)
- wastes incompatible with backfill, seal and panel closures materials, container and packaging materials, shipping container materials, or other wastes
- wastes containing explosives or compressed gases
- wastes with polychlorinated biphenyls (PCBs) not authorized under an EPA PCB waste disposal authorization
- wastes exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous Waste Numbers of D001, D002, or D003)
- RH TRU mixed waste (waste with a surface dose rate of 200 millirem per hour or greater)

- any waste container that does not have VOC concentration values reported for the headspace
- any waste container which has not undergone either radiographic or visual examination
- any waste container from a waste stream which has not been preceded by an appropriate, certified WSPF (see Section B-1d)
- waste from tanks that has ever been managed as high-level waste unless specifically approved through a subsequent Class 3 permit modification

Before accepting a container holding TRU mixed waste, the Permittees will ensure, through audit and as part of their Permittee-level data reviews (Section B3-10c), that generator/storage sites examine the radiography or visual examination data records (Section B-4b) to verify that the container holds no unvented compressed gas containers and that residual liquid does not exceed 1 percent volume in any payload container. If discrepancies or inconsistencies are detected during the data review, the generator/storage site will review the radiography video tape or visual examination tape to verify that the observed physical form of the waste is consistent with the waste stream description provided by the generator and to ensure that no prohibited items are present in the waste. Radiography tapes will be selected randomly from at least one percent of containers received at WIPP and will be reviewed and compared to radiographic data forms. (Note that for radiography tapes containing classified information, review of radiography tapes will be conducted by the Permittees at a secure location other than WIPP. The records generated from the Permittee's review of radiography tapes will be sent to WIPP for inclusion in the Operating Record, while the original tape will be maintained at another secure location.) All personnel who review radiography video tapes will be trained to the same standard as radiography operators. Section B-4 includes a description of the waste verification process that the Permittees will conduct prior to receiving a shipment at the WIPP facility. Containers are vented through filters, allowing any gases that are generated by radiolytic and microbial processes within a waste container to escape, thereby preventing over pressurization or development of conditions within the container that would lead to the development of ignitable, corrosive, reactive, or other characteristic wastes.

To ensure the integrity of the WIPP facility, waste streams identified to contain incompatible materials or materials incompatible with waste containers cannot be shipped to WIPP unless they are treated to remove the incompatibility. Only those waste streams that are compatible or have been treated to remove incompatibilities will be shipped to WIPP.

The VOC concentrations in the headspace of waste containers have been limited to those which when averaged on a room basis, will ensure compliance with the performance standards. These limits are presented in Table B-2 as maximum allowable VOC room-averaged headspace concentration limits. There are no maximum allowable headspace gas concentration limits for individual containers, as some containers can exceed these values as long as container headspace averages in a disposal room do not.

1.3 Proposed Changes to Table B6-1 of HWFP Attachment B6

| | |
|-----|---|
| 12 | <p>Are procedures in place to ensure that the generator/storage site ensures, through administrative and operational procedures and characterization techniques, that waste containers do not include the following unacceptable waste:</p> <ul style="list-style-type: none"> • liquid waste (waste shall contain as little residual liquid as is reasonably achievable by pouring, pumping and/or aspirating, and internal containers shall contain less than 1 inch or 2.5 centimeters of liquid in the bottom of the container. Total residual liquid in any payload container may not exceed 1 percent volume of that container. Payload containers with U134 waste shall have no detectable liquid) • non-radionuclide pyrophoric materials • hazardous wastes not occurring as co-contaminants with TRU wastes (non-mixed hazardous wastes) • wastes incompatible with backfill, seal and panel closures materials, container and packaging materials, shipping container materials, or other wastes • wastes containing explosives or compressed gases (continued below) |
| 12a | <ul style="list-style-type: none"> • wastes with polychlorinated biphenyls (PCBs) not authorized under an EPA PCB waste disposal authorization • wastes exhibiting the characteristic of ignitability, corrosivity, or reactivity (EPA Hazardous Waste Numbers of D001, D002, or D003) • RH TRU mixed waste (waste with a surface dose rate of 200 millirem per hour or greater) • any waste container that does not have VOC concentration values reported for the headspace • any waste container which has not undergone either radiographic or visual examination • any waste container from a waste stream which has not been preceded by an appropriate, certified Waste Stream Profile Form (see Section B-1d) • <u>TRU mixed wastes from tanks that has ever been managed as high-level waste and that has not been approved through a subsequent Class 3 permit modification and listed in Table II.3.i of Module II</u> <p>(Section B-1c)</p> |