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November 14, 1995

Mr. Benito Garcia
State of New Mexico Environment Department
Hazardous and Radioactive Material Bureau
P.O. Box 26110
2044 Galisteo
Santa Fe, New Mexico 87502

Reference: Work Assignment No. G969; State of New Mexico Environment Department, Santa Fe, New Mexico; WIPP Disposal Phase Part B Permit Application Review; Deliverable, Review of Chapters F, G, H, and All Remaining Chapters

Dear Mr. Garcia:

Enclosed please find a copy of the review deliverable for Chapters F, G, H, and all remaining chapters of the WIPP Part B Permit Application, Revision 5.0. Checklists identifying where in the permit application specific issues are discussed are being prepared and will be sent under separate cover. As mentioned during this October 30, 1995 conference call, this deliverable is being provided to NMED approximately one week early, so that the NMED internal schedule can be expedited as much as possible. All deliverables, including the checklists, are provided on disk in WordPerfect 5.1 and hard copy.

In general, and as with previous chapters reviewed, Chapters F, G, and ^HI of the permit application lack necessary and important detailed information. There is also a problem with inconsistent information within the chapters' narratives, as well as between the narrative, tables, and appendices of Chapters F, G, and ^HI. Chapter G, the Contingency Plan, is the one chapter of the application where these inconsistencies are most apparent. General and specific comments have been drafted which address the general vagueness and lack of consistency for all the remaining chapters.

General Comment No. 11 requires a number of environmental monitoring programs mentioned in Section D be included in Chapter F, and that the inspection procedures and inspection schedules be provided. We had previously discussed this issue with NMED during the October 25, 1996 meeting. During that meeting, it was determined

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that only those environmental programs relevant to RCRA hazardous waste should be included. Those environmental programs solely associated with the monitoring of radioactivity should be deleted from our comment. However, upon further investigation, it was determined that several of these programs are utilized in the WIPP's evaluation or determination of co-detection programs. Therefore, A.T. Kearney is somewhat reluctant to remove the request for additional information on these environmental programs, and has therefore, maintained the extensive list of programs in our comment. NMED may wish to examine this comment relative to applicability of the co-contamination concept to monitoring programs, and then decide whether to provide this comment to DOE in its entirety.

Chapters F, G, and H included many inferences and information that apply to the previous test phase application. DOE apparently did not do a thorough job of removing all unnecessary test phase information, and NMED may wish to request that DOE review the entire application to ensure all information is pertinent to the test phase.

The general comments on all remaining chapters sufficiently capture our overall concerns. It is recommended, therefore, that the NMED-DOE meeting to discuss remaining chapters focus on the general comments for each chapter, rather than discuss any specific comments.

Please feel free to contact me or June Dreith at 303-572-6175, should you have any questions or require additional information.

Sincerely,



Connie Walker
Program Manager

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**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER F

GENERAL COMMENTS

1. The description of the alarm and communications systems in the underground portions of the facility addresses only one of the eight waste disposal panels proposed under the permit application. The permit application does not include a description of procedures to expand these systems as the underground portions of the facility are expanded. Revise the permit application either to provide a design drawing showing the proposed layout of these systems in the panels that have yet to be excavated, or the permit application must include a clear description of the criteria that will be used to properly place the alarms and phones as the underground panels are excavated, filled, and closed. Refer to Specific Comment Nos. 19 and 20.
2. As required by 20 NMAC 4.1, Subpart IX, § 270.14(6)(8)(iv), Section F-4d must discuss procedures to mitigate equipment and power failure. As currently written, the section only discusses procedures to mitigate power failure. The permit application must be revised to describe how failure of key waste management equipment has been anticipated and mitigated. Key equipment includes: the cranes in the contact-handled waste areas of the building; all container conveyance equipment, manipulators, and any other equipment in the remote-handled waste areas of the facility, particularly the hot-cell; the waste hoist system; and ventilation fans. The safety features or safety procedures related to key equipment must also be explicitly described in the permit application. Revise the permit application to address these issues. Refer to Specific Comment Nos. 30, 31, and 32.
3. In accordance with 20 NMAC 4.1, Subpart V, § 264.15(d), the inspection log or summary must include a space to note the nature of and date that repairs, observed to be required during a particular inspection event, were performed. None of the inspection sheets or inspection instructions in Appendix F1 include such a space to note whether any required remedial action was completed. Some of the inspection logs do include space to note the number of the work order request form that would be filled out to correct problems noted during an inspection. However, the permit application does not identify what procedures are in place to ensure that required repairs have been completed and that the proper information is recorded in the inspection logs. Revise Chapter F of the permit application and Appendix F1 to address this issue. Refer to Table and Figures Comment No. 1.
4. Many of the items presented in Appendix F1 include instructions to enter inspection information in a logbook, rather than providing the actual forms to be completed.

This approach is acceptable, but the specific information required by 20 NMAC 4.1, Subpart V, § 264.15(d) to be included in the log is incomplete. The instructions state that only deficiencies that have not been corrected should be included on the inspection log. However, all repairs that were completed, including those immediately fixed during an inspection, must be recorded. In addition, many of the forms do not require that observations of problems be clearly described on the inspection logs. Also, other forms do not require that an explanation for a failed equipment test conducted at the end of a maintenance check be documented and the equipment subsequently repaired and retested. A thorough review of each form must be performed, and Appendix F1 of the permit application must be revised to address these issues. Refer to Appendix Comment No. 1.

5. The inspection sheet presented in Appendix F1 entitled, "Surface CH TRU (Contact-Handled Transuranic) Waste Handling Area" raises a number of significant questions. These questions affect many of the chapters of the permit application, in addition to Chapter F. Revise all applicable portions of the permit application to address waste handling activities related to the following:
- Identify the location, design, and use of the "Bin Leak Test Area." Explain what bins are being leak tested and why.
 - Explain what is meant by "Enclosed by ALARA Lines." If these are physical barriers or entry control procedures, explain why they are not included in the description of security equipment, Section F-1.
 - Identify the location, design, and use of the "Shielded Storage Room." Explain what waste or other material is stored in this room and for how long.
 - Identify the location, design, and use of the "General Overpack and Repair Room Areas" and the "Overpack Enclosure Area." Explain why numerous figures in Chapter B and D specifically exclude the overpack room from being considered part of the Waste Handling Building (WHB).
 - Identify the location and use of the "Derived Waste Satellite Accumulation Area." Identify the types and volumes of derived wastes that are satellite accumulated. Identify the storage location for the wastes once the accumulation limits are reached.
 - Identify the location, design, and use of the "Liquid Radwaste Area." Identify the source of the radioactive liquid waste and subsequent disposal methods. Describe secondary containment provisions.
 - Identify how long TRUPACTs may be stored in the asphalt parking area. The inspection sheet in Appendix F1 suggests that waste storage in the asphalt

parking area may occur for weeks. Describe secondary containment provisions for this waste storage area.

6. The inspection section of Chapter F does not include inspection instructions or forms specifically covering remote-handled mixed waste handling areas to look for structural deterioration or spills. Only the equipment in the remote-handled mixed waste handling area is addressed in the inspection materials found in Appendix F1. Revise Chapter F of the permit application to address inspection of the remote-handled mixed waste handling areas, in addition to the remote-handled mixed waste handling equipment. Refer to Tables and Figures Comment No. 1.
7. There are major discrepancies between the emergency equipment identified in Chapter G of the permit application and the emergency equipment identified and included in the inspection section of Chapter F. For example, Chapter F does not include a description of the hazard prevention features or inspection procedures for the environmental truck, the Public Address (PA) van, tool crib, smoke and thermal detectors, radio equipment (repeater), among other equipment, which are included in Chapter G. Review the list of emergency equipment in Chapters F and G and revise both chapters of the permit application for consistency and completeness. Refer to Specific Comment No. 22.
8. Nowhere in Section F-3 is hazard prevention described as it applies to the shafts, waste hoist, and personnel elevators. Revise Chapter F of the permit application to provide a description of the alarm and safety systems that control the movement of the hoists/elevators, clarify whether any communications systems are available in the shafts, and whether facility emergency alarms can be heard in the shafts and/or hoists. Ensure that all safety equipment is included in the inspection section of Chapter F.
9. The potential accumulation of explosive gases in the underground is inadequately addressed in the permit application. Section F-4g describes only the overall ventilation of the underground as the rationale for not performing any monitoring for explosive gases. The most important explosive gas control requirements (for diluting and removing methane) are in the disposal panels and access drifts, especially after each disposal unit is completely filled, but before the seals are fully constructed. (Refer to Specific Comments on the Closure Plan, Chapter I, related to this issue.) Revise the permit application to include detailed descriptions of the ventilation requirements and means for ensuring specified air flow rates through disposal panels and access drifts. Revise the permit application to provide a monitoring program for explosive gases in the underground areas, and ensure that the program is clearly described in the permit application, including the type of equipment and its specific locations, and the inspection procedures that will be used to maintain and calibrate the equipment.

10. Section F-5 asserts that TRU-mixed waste "...that may be created..." does not exhibit the characteristics of ignitability, reactivity, or corrosivity. Therefore, this section of the permit application does not address or even mention the expected generation of methane gas due to microbial degradation of wastes. According to the "best estimate" of gas generation in Chapter I, Appendix I-1, methane will be generated at a maximum average rate of 0.07 moles per drum equivalent per year. When each panel is filled with 81,000 drum equivalents, methane may be produced or "created" at the rate of 127 cubic meters per year. This quantity of methane could result in a total volume of 2,540 cubic meters of explosive gas mixture (at 5 percent methane). Methane is not expected to be generated uniformly throughout the emplaced wastes, raising the possibility that localized areas may contain much higher concentrations of methane than the average.

Two important concerns must be addressed in the revised permit application to resolve the issue of methane gas generation and prevention of fires and explosions. First, the methane produced from TRU-mixed wastes may be ignitable and reactive hazardous waste according to the definitions in 20 NMAC 4.1, Subpart II, § 261.21(a)(2) and § 261.23(a)(6), and as indicated in comments provided for Chapter C. The permit application contains no information to refute this conclusion. Second, the general inspection requirements in 20 NMAC 4.1, Subpart V, § 264.15(a) require inspections to identify releases of hazardous constituents or conditions that may be a threat to human health, and § 264.15(c) requires such releases or conditions to be remedied. Accumulation of explosive concentrations of methane in disposal units would clearly pose a threat to human health, even if excess releases of other hazardous constituents may not occur. Therefore, inspections (monitoring) for methane and means to prevent the accumulation of methane (ventilation of disposal areas) must be included in the permit application, regardless of the technical regulatory status of methane. Revise the permit application to address these concerns.

11. A number of monitoring programs are identified in Section D-9e(1) that are ongoing at the WIPP, but Chapter F does not address these programs. The equipment that is used to perform monitoring to detect and respond to or prevent hazards must be explicitly included in the permit application, including routine equipment maintenance and calibration. Revise Chapter F to discuss all hazard prevention procedures including providing a clear description and purpose of each monitoring program, the specific equipment that is used, and the inspection procedures to maintain and calibrate the equipment that will be used. Clearly identify those monitoring programs that are relying on a co-detection approach (i.e., those where monitoring of radioactivity only is performed as an indicator of potential release of hazardous constituents as well). These co-detection (radioactive) monitoring programs must be included in the RCRA permit application. Revise Chapter F of the permit application to include these programs. Monitoring programs to be addressed in the revised Chapter F of the permit application include, but are not limited to, the following:

- Geomechanical Monitoring
- Air Monitoring
- Aerosol Sampling
- Ambient Radiation Monitoring
- Radiological Soil Monitoring
- Hydrologic Radioactivity Monitoring
- Surface-Water and Sediment Monitoring
- Biotic Radioactivity Surveillance
- Nonradiological Environmental Surveillance
- Meteorological Monitoring
- Water-Quality Monitoring
- Wild-life Population Monitoring
- Aerial Monitoring
- VOC Monitoring
- Groundwater Monitoring

**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER F

SPECIFIC COMMENTS

1. Chapter F, Introduction, Page F-1, Line 29.

Further detail is required regarding the procedures to establish a Controlled Area (CA) when Transuranic (TRU) mixed wastes are handled. Revise the permit application to explain how the CA is established, where it is established, and how the boundaries of this area are communicated to other WIPP site personnel.

2. Chapter F, Section F-1a(1), 24-Hour Surveillance System, Page F-2, Line 6.

Section F-1a(1) states that continuous monitoring of the entire facility (all 16 sections) is performed. "Continuous monitoring" would imply that either guards are stationed throughout the entire facility or that surveillance equipment is placed such that remote monitoring of the facility on a continuous basis is possible. Clearly this is not the case. Revise the wording of Section F-1a(1) to accurately reflect the frequency of patrols of various fenced and unfenced areas of the facility.

3. Chapter F, Section F-1a(1), 24-Hour Surveillance System, Page F-2, Lines 9-10.

The figure numbers on page F-2 are incorrectly referenced. Revise Lines 9 and 10 to refer to Figure B-7 (not Figure B-6), and to reference Figure B-6 (not Figure B-3).

4. Chapter F, Section F-1a(1), 24-Hour Surveillance System, Page F-2, Lines 14-17.

The description of security procedures in terms of security forces on-site at one time and frequency of patrols lacks detail. Revise Section F-1a(1) of the permit application to identify the number of patrol teams and the frequency that the fenced and unfenced portions of the site are patrolled. Clarify in the permit application whether only the outdoor portions of the facility are patrolled or whether the indoor areas are also inspected for unauthorized personnel.

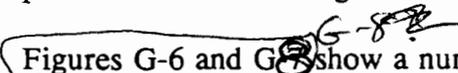
Revise the permit application to clarify whether there are any special control or check-in procedures necessary to access the Waste Handling Building (WHB) or the underground portions of the facility.

5. **Chapter F, Section F-1a(2)(a), Barrier, Page F-2, Lines 29-35.**

The description of barriers refers only to the surface facility. Revise Section F-1a(2)(a) to identify any Hazardous Waste Management Unit (HWMU) specific controls. Explain how access to the WHB and underground are controlled (e.g., by locked doors, etc.) so that unauthorized personnel will not enter these areas. Revise the permit application to address access controls pertinent to when waste is actively being managed and when no waste management activities are being conducted.

6. **Chapter F, Section F-1a(2)(b), Means to Control Entry, Page F-2 Line 39.**

The permit application discusses entry control relative to the Property Protection Area (PPA), but not the HWMUs. Revise Section F-1a(2)(b) of the permit application to address HWMU specific entry controls; specifically how unauthorized personnel are prohibited from entering the WHB and underground.

 Figures G-6 and G-8 show a number of emergency exit gates in the fence surrounding the PPA. Revise Section F-1a(2) of the permit application to discuss methods to control access at these gates, including a description of how these gates are unlocked on a timely basis in an emergency event.

7. **Chapter F, Section F-1a(3), Warning Signs, Page F-3, Line 6.**

For consistency, the term "Zone 1" should be replaced with "Property Protection Area," since page B-11 states that "Zone 1" is no longer used. Revise the permit application, where applicable, to address this.

8. **Chapter F, Section F-1a(3), Warning Signs, Page F-3, Lines 6-11.**

Revise the permit application to clarify whether there are any HWMU specific warning signs at the exterior of the WHB or the entrance shafts to the underground.

9. **Chapter F, Section F-2, Inspection Schedule, Page F-4, Line 5.**

Revise the permit application to identify the specific controlled document locations where inspection records will be maintained.

10. **Chapter F, Section F-2, Inspection Schedule, Page F-4, Lines 8-11.**

Contrary to the statement on Page F-4, lines 8-11, all of the inspection instructions and forms provided in Appendix F1 do not include inspector signature, date, time, frequency, or what to do if an item fails inspection and directions on routing for recordkeeping, as indicated in the text of the permit application. Refer to General Comments 3 and 4 above, and Table and Figure Comment No. 1 for specific

deficiencies. Revise the permit application text description of the inspection logs to accurately reflect the content of all support material that is provided.

11. Chapter F, Section F-2, Inspection Schedule, Page F-4, Lines 23-29.

The procedures to test, repair, and document calibration or repair are not understandable as presented on page F-4 of the permit application. The "Plan of the Day" document is reportedly used to indicate what specific equipment is scheduled for routine inspection or testing that day. However, it is not clear how the Plan of the Day clearly indicates to staff performing the inspections that the specific equipment has been identified for repair or replacement in a previous inspection. Revise the permit application to provide a more detailed description of the information provided in the Plan of the Day, including how it is cross-referenced to previous inspection logs/forms and any work request forms or radiation work permits.

12. Chapter F, Section F-2, Inspection Section, Pages F-4 to F-5.

The WHB is required to manage as a container storage area. Currently, inspection forms for the WHB address only the contact-handled waste portions of the building. Revise Section F-2 of the permit application to include inspection of the remote-handled waste portions of the building. See also Chapter F, General Comments 5 and 6.

13. Chapter F, Section F-2, Inspection Section, Section F-2a, General Inspection Requirements, Page F-5, Lines 2-3.

The permit application implies that loading/unloading areas are required in accordance with 20 NMAC, Subpart V, § 264.15(b)(4) to be inspected daily when in use, but the inspection forms in Appendix F1 for the CH TRU Waste Handling Area indicate that the asphalt areas where TRUPACTs may be temporarily stored prior to unloading are inspected only on a weekly basis. Revise the permit application to address this discrepancy.

14. Chapter F, Section F-2, Inspection Section, Section F-2a, General Inspection Requirements, Section F-2a(1), Types of Problems, Page F-5, Lines 20-24.

Claiming that calculated VOC air concentrations are below American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) and are therefore protective of public and worker health is a misapplication of TLVs. The TLVs are designed to protect healthy workers that are generally exposed to eight hours per day. The TLVs should not be construed to be automatically protective of the general population, particularly sensitive populations (e.g., the elderly, children, etc.) who may be exposed. Revise the discussion in Section F-2a of the permit

application to describe protection of the general public from Volatile Organic Compound (VOC) releases.

- 15. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3a(1), Internal Communications, Page F-8, Lines 6-11.**

In accordance with 20 NMAC 4.1, Subpart V, § 264.32(a), revise the permit application to clarify whether the internal communications systems can be used to communicate with personnel in the outdoor portions of the facility. Also, revise the permit application to identify the individuals to whom two-way radios are issued and to clarify when the two-way radios would be used. In particular, revise the permit application to discuss how the two-way radios would be used to provide timely notification of an emergency incident.

- 16. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3a(1), Internal Communications, Page F-8, Lines 28-32.**

Revise the permit application to clearly identify which areas of the facility use plectrons for internal communications. Also revise the permit application to include a facility diagram showing the location of this equipment, or discuss why such a diagram is not provided.

Revise the permit application to identify the location of the radio operator who has access to the security codes necessary to use the pagers and plectrons. Explain how the radio operator will coordinate with emergency response personnel (i.e., the Control Room Monitoring Operator and/or the Emergency Coordinator) to communicate with office wardens and other facility personnel during an emergency incident.

- 17. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3a(1), Internal Communications, Page F-8, Lines 38-39.**

The description of the mobile phone communications is insufficiently detailed. Table G-2 (page G-36) states that mobile phones are issued to emergency vehicles, the environmental truck, and the public address van to provide communication with WIPP Security. Revise Section F of the permit application to include a description of mobile phone capabilities.

18. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3a(1), Internal Communications, Page F-9, Line 1.

Line 1 states that the Public Address (PA) system has two alarm tones, ^{but} only the evacuation tone is discussed. Revise the permit application to explain under what circumstances the second PA alarm tone is used.

Also revise the permit application to clarify the number of separate alarm sounds that may be heard at the facility. Page G-6, line 40 mentions fire and radiation alarms as examples of facility alarms, and page G-9, lines 1-4, describe the evacuation system alarm sound. Explain why section F-3a(1) identifies only two alarm tones.

Table G-2 (page G-36) identifies a public address van. Revise the permit application to include the use of this van included in the Section F-3a(1) description of internal communications equipment, or discuss why the use of this van is not included.

19. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3a(1), Internal Communications, Page F-9, Lines 6-7.

Section F-3a(1) states that the evacuation alarm can be manually activated in the underground areas. Table G-2 (page G-35), however, describes the underground fire alarm and site evacuation systems as being automatic only. Clarify how the alarm systems function in the underground areas of the facility, and revise Chapters F and G of the permit application so that they are consistent.

20. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3a(1), Internal Communications, Page F-9, Lines 18-19.

Page F-9 states that the mine phones are moved periodically so that they are close to work areas. In addition, drawing 73-J-001 shows only the location of mine phones in Panel 1 (and other underground areas where waste disposal will not be performed). Revise the permit application to explain what criteria will be used to determine when mine phones must be moved and identify the minimum spacing of mine phones (as well as other alarm communication systems) that will be required as Panels 2 through 8 are constructed.

- 21. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3a(2), External Communications, Page F-10, Lines 8-12.**

Revise the permit application to clarify the capabilities and number of plant radio stations, but page F-8 states that there are three stations. Page F-10 states that there are only two stations. Revise Section F-3a to clarify whether there is a base radio station at the Control Monitoring Room that is capable of being used for communications with agencies outside the WIPP facility.

- 22. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3a(3), Emergency Equipment, Page F-10, Lines 19-27.**

The location of emergency response equipment at the facility is poorly described both in Chapter F and Chapter G of the permit application, as it is generally impossible to determine where the equipment is located or stored. Locational drawings are provided only for communications systems and fire sprinkler systems in the aboveground areas and some of the emergency vehicle, communication, fire alarm, and fire extinguishing equipment in the underground. In accordance with 20 NMAC 4.1, Subpart V, § 264.32(c), revise the permit application to clearly show the location of all spill-control and decontamination equipment, fire extinguishers, alarm pull boxes, first-aid kits, emergency showers and eyewashes, personal protective gear, and any other emergency response equipment that is immediately available to facility personnel in the vicinity of the WHB and underground. For equipment that must be transported to the RCRA units in an emergency, revise the permit application to provide a clear text description or a drawing showing the storage location of this equipment (e.g., fire trucks, rescue trucks, ambulances, HazMat trailer, first aid room, underground cabinets, etc.).

The capabilities and equipment available in the Control Monitoring Room (CMR) must be identified. Page G-6, lines 36-39 briefly mentions the monitoring equipment for which the Central Monitoring Room Operator (CMRO) is responsible. Revise Chapter F to provide a complete list of each of the mechanical, electrical, and radiological monitors that the CMRO oversees, including the number of monitors, their location, and the specific activity or upset condition for which they monitor.

- 23. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3b, Aisle Space Requirement, Page F-12, Lines 1-11.**

The referenced Figure D-2 does not demonstrate that adequate aisle space will be maintained in the WHB. In fact, none of the figures provided with the permit application clearly identify where both contact-handled or remote-handled waste

containers will be stored while awaiting paperwork verification or discrepancy resolution (which may take up to 30 days), or where containers will be staged while awaiting transfer to the underground (including times when aboveground operations are backed-up due to problems with equipment used for underground transfer). It is also not clear where derived wastes are stored or where satellite accumulation areas in the WHB are located. Therefore, it is impossible to determine whether adequate aisle space is available at the facility with respect to waste management activities. Revise the permit application text to clearly identify the minimum acceptable aisle space and describe procedures to ensure this aisle space is maintained. Provide figure(s) showing the location of all containers and equipment storage or staging areas to demonstrate that adequate aisle space is available.

Also, provision of aisle space is discussed only with respect to contact-handled waste. Revise Section F-3b to discuss aisle space provisions with respect to remote-handled waste.

- 24. Chapter F, Section F-3, Waiver or Documentation of Preparedness and Prevention Requirements, Section F-3b, Aisle Space Requirement, Page F-12, Lines 15-23.**

Complete ventilation of the underground area, including all open panels, is required to prevent the accumulation of potentially explosive gases. The permit application does not address issues related to the type and location of ventilation system equipment in the underground, including ensuring access (i.e., aisle space) and adequate air flow to the ventilation equipment. Revise the permit application to clearly describe access requirements for the ventilation equipment and procedures to ensure adequate air flow throughout the underground areas.

- 25. Chapter F, Section F-4, Preventive Procedures, Structures, and Equipment, Section F-4a, Unloading Operations, Page F-13, Lines 6-13.**

The discussion of pallets on page F-13 overly simplifies the types of containers and container groupings that may occur prior to transport underground. Only seven-packs and standard waste boxes are identified; Section D also mentions four-packs, ten-packs, and overpacks. Stacking procedures are also not described. Revise Section F-4a of the permit application to be consistent with information in Chapter D relative to container types and groupings, and to describe any special loading/unloading procedures that may exist for particular container types or groupings.

26. **Chapter F, Section F-4, Preventive Procedures, Structures, and Equipment, Section F-4b, Runoff, Page F-15, Lines 1-7.**

As a container storage area, the WHB is required to provide secondary containment. Revise Section F-4b to describe the secondary containment provisions of the unit.

27. **Chapter F, Section F-4, Preventive Procedures, Structures, and Equipment, Section F-4b, Runoff, Page F-15, Lines 18-22.**

The permit application only addresses spills occurring in the center portion of the WHB. The description of the maximum extent of a spill on page F-15 fails to address the impact of a spill that occurs near a doorway to the outside of the WHB, or in route (i.e. in the waste shaft) to the underground portions of the facility. Additionally, for completeness and consistency, a discussion of containment of underground spills enroute to the disposal room should be included in Section F-4b. Revise the permit application to address these issues.

28. **Chapter F, Section F-4, Preventive Procedures, Structures, and Equipment, Section F-4b, Runoff, Page F-16, Line 24.**

Revise the permit application to explain why it is considered unnecessary to inspect flood-control structures after a major precipitation event. Typically, flood-control structures would be inspected for deterioration or accumulated debris. Revise Section F-2 (covering inspections) and Section F-4b to address this issue in further detail.

29. **Chapter F, Section F-4, Preventive Procedures, Structures, and Equipment, Section F-4d, Equipment and Power Failure, Page F-17, Lines 22-24.**

Revise the permit application to identify the "important" monitoring systems and facility electrical loads that are backed up with generators and Uninterruptable Power Supply (UPS) units. Discuss within the permit application whether human health and the environment will not be jeopardized by a loss of utility electrical power in the waste management and support areas of the facility.

30. **Chapter F, Section F-4, Preventive Procedures, Structures, and Equipment, Section F-4d, Equipment and Power Failure, Page F-17, Lines 36-37.**

Since it may take up to 30 minutes to bring diesel generators on-line, revise the permit application to discuss the implications of this delay on ventilation in the underground areas of the facility and the operation of personnel hoists in the event of evacuation.

31. Chapter F, Section F-4, Preventive Procedures, Structures, and Equipment, Section F-4d, Equipment and Power Failure, Page F-18, Lines 14-16.

Revise the permit application to clarify what equipment is defined as "local processing units." Also, it is unclear exactly what equipment will continue to function under power from the central Uninterruptable Power Supply (UPS) unit that covers the WHB; revise the permit application to clarify this.

Also, revise the permit application to clarify what specific equipment will continue to function in the underground areas powered by a local UPS unit. Revise the permit application to also identify the location of the UPS unit(s) that services the underground.

32. Chapter F, Section F-4, Preventive Procedures, Structures, and Equipment, Section F-4d, Equipment and Power Failure, Page F-18, Line 20.

The connection between the Control Monitoring Room (CMR), the control UPS, the central UPS (line 12), and the individual UPSs (line 15) is unclear. Revise the permit application to provide a clearer discussion of the interconnection of the various power backup systems.

COMMENTS: TABLES AND FIGURES

1. Chapter F, Table F-1, Inspection Schedule, Pages F-23 through F-26.

The permit application includes numerous discrepancies between Table F-1 and Appendix F-1, as well as technical issues that must be addressed, including:

- A. Revise the permit application to explain why the stormwater control berms are inspected only on an annual basis. The berms should be inspected after major precipitation events for evidence of deterioration or debris accumulation.
- B. Also, the inspection sheets in Appendix F1 indicate that the emergency eye washes and showers are to be tested weekly to flush lines and verify flow, but Table F-1 identifies only monthly inspection of this equipment. Revise the permit application to resolve the discrepancy.
- C. Appendix F1 does not include inspection log sheets or instructions for inspecting the dry chemical fire suppression system. Revise the permit application to provide an inspection log or instruction sheet that clearly identifies the types of problems that may occur.
- D. Appendix F1 also does not include an inspection log or instructions for inspecting negative and positive pressure respirators. Additionally, the forms in Appendix F1, which cover only SCBAs, indicate that weekly inspections are performed, in addition to the monthly inspections identified on Table F-1. Revise Chapter F to address these discrepancies.
- E. Appendix F1 does not include an inspection log or instructions for inspecting facility radios, including both hand-held and base station radios. The material provided in Appendix F1 covers only pagers, PA system, and plectrons. Revise the permit application to resolve this discrepancy.
- F. Appendix F1 does not include an inspection log or instructions for inspecting the rescue truck and related supplies and equipment. Only a title cover sheet is provided. Revise the permit application to provide an inspection log for this equipment.
- G. Appendix F1 does not include an inspection log covering spill control equipment, instead a hazardous waste emergency incident reporting form is provided. Revise Chapter F to include an inspection log for all spill control equipment that clearly identifies the specific number, type and location of each piece of equipment, including the type of problems for which to inspect. Ensure that this list is consistent with the information provided in Chapter G.

- H. Appendix F1 discusses the Surface CH TRU Waste Handling Area and includes weekly and monthly inspections. However, Table F-1 does not include this information. Revise Table F-1 to reflect these additional inspection frequencies.
- I. Table F-1 states that the daily inspection log for the Underground CH TRU Mixed Waste Disposal Area includes equipment and signs, but these items are not included on the inspection sheet in Appendix F1. Revise the permit application to resolve this discrepancy.
- J. Appendix F1 does not include an inspection log addressing weekly and monthly inspection of the underground waste emplacement area, although this log is identified in Table F-1. Revise the permit application to resolve this discrepancy.
- K. The inspection instructions in Appendix F1 for the ventilation system address only annual calibration of the ventilation flow instrumentation, although Table F-1 identifies quarterly inspection of the exhaust fan. Revise the permit application to resolve the discrepancy.
- L. Table F-1 indicates that the water tank levels are checked daily. However, the inspection sheets for water pumps in Appendix F1 indicate that while the water tank level is recorded on the water pumps form, the inspection is conducted on a weekly, not daily, basis. Revise the permit application to resolve the discrepancy.
- M. Table F-1 identifies a vehicle siren as an item to be inspected daily. Appendix F1 includes no inspection log for the vehicle siren. Revise Table F-1 to identify the specific vehicle siren(s) that are inspected on a daily basis, and explain how the inspection is documented, since no inspection log is maintained.
- N. Appendix F1 includes inspections that address RH mixed waste handling equipment that are missing from the inspection schedule, Table F-1. Revise Table F-1 to include: canister shuttle car, facility cask, cask transfer car, cask turntable, grapple, grapple hoist, master-slave manipulators, RH emplacement machine, road cask transfer car, shield valve, telescoping port shield, and 20-ton forklift. Revise the permit application to explain why the 20-ton forklift will be inspected only on a weekly basis, according to the inspection log in Appendix F1, when other forklifts identified on page F-24 of Table F-1 are inspected prior to each use.
- O. Revise the permit application to explain why the equipment included under the title cover sheet "Other Equipment" in Appendix F1 is missing from the

inspection schedule Table F-1. Revise Table F-1 to include: floor scrubber, elevating work platform, monorail hoist, and trailer jockeys.

- P. None of the structural components of the RH mixed waste handling area and hot cell (other than the shield valve and telescoping port shield) are included in the inspection schedule. Revise Chapter F to include inspection of the floors, walls, secondary containment, containers, overpack areas, hot cell welding equipment, and any other structural or operational features of the RH mixed waste areas.

2. Chapter F, Table F-2, Monitoring Schedule, Page F-27.

Table F-2 is unacceptably vague as it does not identify the specific types of monitoring instrumentation to be used and does not ensure that each piece of equipment included in the inspection schedule Table F-1 is also addressed.

Table F-2 also states that the underground roof system instrumentation (which apparently includes load cells and room creep rate measurement devices) is monitored monthly, although Table F-1 states that this same equipment is inspected (i.e., monitored) weekly. Appendix F1 inspection sheets for the underground instrumentation identify extensometers, inclinometers, and GIS (acronym not defined), but do not include load cells or room creep rate measurements. Revise the permit application to resolve these discrepancies.

3. Chapter F, Table G-2, page G-36.

Table G-2 (page G-36) identifies a repeater used to enable transmission of radio waves. Revise Chapter F to discuss the capabilities and use of this equipment.

COMMENTS: APPENDIX F1

1. **Chapter F, Appendix F1, Examples of Inspection Sheets, Logs, and Instructions for Systems/Equipment Requiring Inspection.**

A number of problems regarding the inspection logs and instructions in Appendix F1 of the permit application are apparent, with specific deficiencies detailed below. General problems with all or many of the inspection forms/instructions are also identified in the General Comments 3 and 4, above. Revise the permit application to address the following:

- A. Ambulances and Related Emergency Response Supplies and Equipment - None of these inspection sheets identify the minimum inventory that must be on hand. Explain how inspectors will know whether supplies are adequate. The inspection sheet for "First Aid Equipment/Ambulance Weekly Checklist" includes no space to note inspector name, date, time, observations, and nature and date of any remedial action performed. Revise the inspection forms to include these required items.
- B. Standby Emergency Power Backup Diesel Generators - A space to record inspection observations and date and nature of required repairs is missing from the form. Revise the inspection forms to include these required items.
- C. Facility Inspections - The form does not include space to note the date and nature of repairs that were required to be performed as a result of the inspection. Revise the inspection forms to include these required items.
- D. Eye Wash and Shower Equipment - The inspection form indicates that the units should periodically be treated to eliminate bacteria. Revise the inspection form to identify the specific frequency that the anti-bacterial treatment should be performed.
- E. First Aid Medical Supplies - The inspection form covers only underground first aid supplies. Explain why inspection of aboveground first aid supplies are not documented. The underground first aid supply inspection form does not provide space for noting the inspector name, date, time, observations, and date and nature of required repairs, but instead is merely a listing of inventory that should be in kits of various sizes. Revise the inspection forms to include all items and required information.
- F. Mine Pager Phones - The inspection log includes no space to note the inspection time and includes no space to note the date and nature of any repairs. Revise the inspection forms to include these required items.

- G. Radio Equipment - The inspection log does not cover any of the radio equipment reported to be at the station (i.e., 2-way radios, base stations, repeater. In addition there are no procedures in place to inspect mobile phones. Revise the inspection forms to include these required items.
- H. Rescue Truck - No inspection log or instructions are provided in Appendix F1. Revise the permit application to include inspection forms for all equipment.
- I. Salt Hoist - A title cover sheet is missing and should be provided for this inspection log to be consistent with the identification of other inspection logs in Appendix F1. Provide the title to the cover sheet.
- J. Spill Control Equipment - No acceptable inspection log or inspection instructions are provided in the permit application for spill control equipment. The material included under this subsection is a form for reporting an emergency incident. Revise the permit application to include inspection forms for all equipment.
- K. Underground Openings Roof Bolts Travelways - The recordkeeping instructions must be revised to clearly indicate that inspectors name, date, time, observations, and nature and date of any repairs must be recorded in a logbook or inspection sheet. Revise the inspection recordkeeping instructions to include these required items.
- L. Underground Roof Support Instrumentation - Explain why the equipment identified in Appendix F1 is different from that identified in Table F-2. Define the acronym "GIS" (e.g., geographic information system) used on one of the data recording sheets. The GIS data sheet includes no space to record the inspection time or place to clearly record the nature and date of any repairs. The inspection sheet for the "Test Room Inclometers" addresses four "test" rooms in Panel 1 of the underground repository. It appears that this form was taken from the WIPP test phase permit application and was not revised for the disposal phase. Revise the inspection forms provided for the disposal phase application to include inspection of instrumentation applicable to all waste disposal rooms in all disposal panels.
- M. Underground CH TRU Mixed Waste Storage Area - Clarify why the inspection forms for the underground portions of the facility refer to "storage." Waste emplaced in the repository is considered disposal. Again, it appears that this form was taken from the WIPP test phase permit application. Revise the inspection forms to address equipment and features relevant to the WIPP disposal phase. Additionally, identify the specific equipment for which inspections for leaks and spills will be performed. Clarify how an inspection of barcodes on all emplaced containers will be performed. Clarify what

specific aisle space will be maintained with respect to emplaced containers. The form does not include space to note the time of inspections, which must be included. Revise the inspection forms to address these issues.

- N. 15-Ton Bridge Crane - The instructions for inspecting this equipment reference a data sheet that must be completed. Provide a copy of this data sheet showing what information is required to be recorded.
- O. RH Emplacement Machine - The instructions for inspecting this equipment do not include either an inspection log for each item to be inspected or clear instructions for the type of inspection information that must be recorded. Revise the permit application to address these issues.

**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER G

GENERAL COMMENTS

1. The procedures addressed in the Chapter G Contingency Plan emergency response procedures are inconsistently described. For example, page G-3, lines 25-27 implies that there is only one Contingency Plan that addresses all emergency incidents at the facility. Page G-1, line 24, however, states that only emergencies involving hazardous waste or hazardous waste constituents are addressed by the Plan. Page G-2, line 34 states that hazardous substances and hazardous materials are addressed in addition to hazardous wastes. Page G-3 line 7 further states that petroleum products are not covered by the Contingency Plan. Revise the Contingency Plan to provide a clear, concise, and comprehensive list of all materials that are addressed by the Contingency Plan. For each item, identify where the material is used and stored, and the approximate quantity of the material that may be on hand at the facility. For materials that are not included, identify the specific emergency response document that addressed those materials (e.g., a Spill Prevention Control and Countermeasures (SPCC) Plan for petroleum products, etc.).
2. The Contingency Plan is unacceptably vague in its descriptions of procedures to respond to emergencies at the facility. Specific control procedures are required to be provided in accordance with 20 NMAC 4-1, Subpart V, § 264.52(a). Page G-1, lines 25-27 states that the plan addresses emergencies related to both contact-handled, remote-handled, and non-radioactive hazardous wastes. The Contingency Plan, however, only provides generic response procedures that apparently apply uniformly to these waste types. Since clearly different procedures would be required to manage these different waste types, Chapter G must be revised extensively to address specific hazards related to specific waste types (i.e., contact-handled, remote-handled, and non-radioactive). Additionally, Chapter G must be revised in its entirety to reflect the fact that it addresses non-waste materials as well as stated on page G-2, line 34. As currently written, the plan focuses almost exclusively on wastes managed at the facility. Revise the permit application to address these issues.
3. Implementation of the Contingency Plan is poorly described throughout Chapter G. For example, page G-1, lines 31-35, state that the Plan will not be implemented when in-house resources are sufficient to control an emergency that doesn't threaten human health or the environment. The definition of "sufficient" is never defined, nor is there a clear indication of what will be considered to be a "threat" to human health or the environment. Page G-8, lines 8-13, however, state that the Contingency Plan will only be implemented if an emergency event requires notification of off-site public

agencies, if the spill exceeds secondary containment, or the spill exceeds CERCLA reportable quantities. These criteria are clearly inadequate, since these three items do not include the spectrum of emergency incidents that could occur. Revise Chapter G to clearly identify the specific criteria that will be used to determine when the Contingency Plan will or will not be implemented, as required by 20 NMAC 4.1, Subpart V, § 264.51(b). Refer to Specific Comment Nos. 17, 22, and 45.

4. The permit application offers no clear understanding of where contingency response support activities will take place at the WIPP facility. Page G-2, lines 22-27 briefly identifies a few of the support areas that will be used in the event of Contingency Plan implementation. Other areas are mentioned throughout Chapter G but are not adequately discussed or described. Chapter G must be revised to clearly identify where all emergency response equipment is located at the facility, where all other support buildings areas are located, and what specific activities may take place at each of these other support buildings or areas. Revise the permit application accordingly. Refer to Specific Comment No. 45.
5. Use of the Crisis Manager and his/her Emergency Management Team is not adequately discussed in the Contingency Plan. In fact, the Crisis Manager is not even mentioned until page G-8, and then is only briefly discussed. The Contingency Plan must be significantly revised to describe when and why the Crisis Manager will take command of an emergency incident, and the specific procedures that the Crisis Manager will use to control emergencies. Revise the permit application accordingly. Also, refer to Specific Comment Nos. 16 and 18.

**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER G

SPECIFIC COMMENTS

1. Chapter G, Introduction, Page G-1, Lines 12-14.

The description of the types of wastes that may be shipped to WIPP is vague, fails to identify major waste categories, and is generally inconsistent with the waste descriptions in Chapter C. At a minimum, the four Waste Summary Categories from Chapter C should be incorporated into Chapter G. Additionally, some indication of the types of contaminants that may be present in the wastes (i.e., some tie-in to the waste codes in the Part A application) should be briefly presented in Chapter G. Revise the Contingency Plan section of the permit application to be consistent with the waste description information in Chapter A and Chapter C.

2. Chapter G, Introduction, Page G-1, Lines 30-35.

Identify the specific criteria (e.g., specific size of spill, size or intensity of fire, size of explosion, radiation level reading, underground geomechanical instrument reading, explosive gas meter reading, etc.) that will be used to determine if WIPP facility resources are adequate to address the specific incident such that implementation of the Contingency Plan will or will not be necessary. Identify the specific criteria that will be used to determine what constitutes a "threat" to human health and the environment such that the Contingency Plan will be implemented. Revise Chapter G to provide clear criteria for implementing the Contingency Plan to demonstrate compliance with 20 NMAC 4.1, Subpart V, § 264.51(b).

3. Chapter G, Section G-1, General Information, Pages G-2 through G-3.

Revise the General Information Section G-1 to provide the reader an understanding of the magnitude of operations at the facility. This is especially important for off-site emergency organizations that may respond to emergencies at the WIPP facility. Provide a clear and concise description of the units that require RCRA permitting. Provide a discussion of facility operations which should include identifying hours of operation (e.g., 24-hours per day for 7 days per week, or reduced schedule for major waste management activities). Provide a brief summary of typical daily waste throughput (i.e., typical waste volumes arriving at the facility, in storage, awaiting emplacement). Provide a discussion of the maximum quantity of other types of hazardous materials at the facility that are covered under the Contingency Plan. Revise the permit application to address these concerns.

4. Chapter G, Section G-1, General Information, Page G-3, Lines 11-14.

The sentence on lines 11-14 is incomplete (it lacks a subject noun). Revise the permit application to clarify the intent of the sentence.

5. Chapter G, Section G-2, Incident Response Personnel, Section G-2a, Emergency Coordinators, Page G-4, Lines 1-3.

The description of the person assigned as the Emergency Coordinator lacks the detail that is provided elsewhere in Chapter G. Since Section G-2a specifically covers identification of the Emergency Coordinators, in accordance with 20 NMAC 4.1, Subpart V, § 264.55, revise this section to state that the primary Emergency Coordinator will be the Facility Shift Manager on duty (i.e., repeat the information on page G-7, lines 6-10).

There is no discussion of the individuals that have been selected as the alternate Emergency Coordinators as required by 20 NMAC 4.1, Subpart V, § 264.52(d). Revise the permit application to indicate whether there is a specific job title that will serve as the alternate emergency coordinator for each daily shift. List the alternate emergency coordinators in the order in which they will assume responsibility as alternates.

6. Chapter G, Section G-2, Incident Response Personnel, Section G-2b, Other Emergency Incident Personnel, Page G-4, Lines 29-30.

The description of the Emergency Services Technician (EST) duties must be expanded, and the permit application must be revised to address this concern. Indicate whether the EST is selected from among the emergency response team members will address the incident when it occurs, or whether the EST is a pre-designated individual. Explain how the EST fits into the chain of command. Identify the personnel who the EST is in charge of and who the EST directly reports to during an emergency incident. In addition, explain how the EST's duties differ from those of the Emergency Services Coordinator identified on page H2-37 in Appendix H2. It appears that the Emergency Services Coordinator is responsible for directing emergency control teams. Revise Chapters G and H to clearly identify the emergency response duties of all personnel involved in responding to emergency incidents at the facility.

The information in Appendix F1 under "Spill Control Equipment" provides a copy of a Hazardous Material Incident Report. This form implies that the EST on duty has responsibility for managing the incident, rather than the Emergency Coordinator. Revise the permit application to explain why completing the reporting form in Appendix F1 is not discussed in the Contingency Plan, and to explain why the

information on the reporting form in Appendix F1 contradicts information presented in the Contingency Plan.

7. Chapter G, Section G-2, Incident Response Personnel, Section G-2b, Other Emergency Incident Personnel, Page G-5, Line 5.

Revise the permit application to explain the differences in job duties between the Security Fire Brigade and the Emergency Response Team. Both appear to be assigned to fire fighting duties at the facility. Also, revise Section G-2b to clearly identify the job duties of each response team, especially where duties may be overlapping.

8. Chapter G, Section G-4, Emergency Response Method, Page G-5, Lines 21-22.

Section G-4 states that there are twelve implementation areas, but only eleven steps are listed. Revise Section G-4 to be consistent in the number of implementation steps that will be followed.

9. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-7, Lines 3-26.

The description of notification procedures on page G-7 is inconsistent with the procedures outlined on Figure G-4. On Figure G-4, it appears that the Emergency Coordinator must notify the Office Wardens, who will notify the emergency response personnel. On page G-7, it is stated that the Central Monitoring Room Operation (CMRO) or Security will notify emergency response personnel. In accordance with 20 NMAC 4.1, Subpart V, § 264.56, revise Figure G-4 and Section G-4a to describe consistent notification procedures.

The information in Appendix F1, under "Spill Control Equipment" provides a copy of a Hazardous Material Incident Report. This reporting form indicates that the CMRO is to contact Facility Operations (FOSS), the EST, Environmental Compliance and Support Group, Hazardous Waste Operations Group, and the Industrial Safety Group. Revise the permit application to explain why the notification procedures outlined on the Appendix F1 reporting form are different from those described in the text of the Contingency Plan or make them consistent. Additionally, the permit application should address why all the groups (with the exception of the EST) are not specifically identified and their duties discussed in the Contingency Plan.

10. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-7, Lines 3-5.

Revise the permit application to identify what specific criteria the Central Monitoring Room Operator (CMRO) will use when determining whether or not a fire, explosion,

or uncontrolled release at the facility requires immediate response. It is also not clear what "organizations" are being referred to on line 5. Revise Section G-4a to provide additional details of the CMRO's initial response activities.

11. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-7, Lines 7-8.

In the event that the primary Emergency Coordinator (the Facility Shift Manager on duty) cannot be reached, explain how the CMRO will know what individual has been assigned as the alternate Emergency Coordinator. None of the information in the Contingency Plan clarifies who the alternate Emergency Coordinators are for each facility shift. An order list of alternate coordinators is required by 20 NMAC 4.1, Subpart V, § 264.52(d). Revise the permit application to address these concerns.

12. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-7, Lines 12-13.

Identification of the EST and the duties of this individual must be described in further detail in the Contingency Plan. Since the EST appears to have a key role in assisting the Emergency Coordinator in his decision-making duties, the EST for each shift must be explicitly identified in Section G-2 as a key deputy of the emergency coordinator. All persons qualified to act as emergency coordinators must be identified in accordance with 20 NMAC 4.1, Subpart V, § 264.52(d). Additionally, Section G-4a must be revised to explain how the CMRO will know what individual has been assigned as the EST (including an alternate EST) for each shift, and procedures must be instituted for the CMRO to notify not only the Emergency Coordinator but also the EST to respond to each emergency at the facility. Revise the permit application accordingly.

13. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-7, Line 14.

The WIPP Security/ProForce has a key duty to assist the CMRO in notifying emergency response personnel. This group is not listed among the other emergency response personnel in Section G-2b. Revise Chapter G to clearly and consistently identify personnel that may assist in emergency response at the facility.

14. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-7, Lines 15-17.

Notification of only the Emergency Response Team (ERT) and First Line Initial Response Team (FLIRT) are included in Section G-4a. Revise Chapter G to include notification procedures to alert the Mine Rescue Team (MRT).

15. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-7, Line 37.

Page G-7, line 37 indicates that the Emergency Coordinator will determine if an actual or potential emergency exists. Lines 3-5 of Page G-7, however, suggest that the CMRO is responsible for making this determination. Furthermore, lines 12-14 of Page G-7 indicates that the Emergency Coordinator must consult with the EST to make this determination. Revise Section G-4a to clearly identify who has responsibility for determining when the Contingency Plan should be activated to respond to an incident at the facility. Clearly explain how the individual who will make this decision will be notified that an incident has occurred.

16. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-8, Lines 1-5.

Page G-8 provides the first mention of a Crisis Manager and the Emergency Management Team, who operate at the Emergency Operations Center (EOC). Chapter G must be substantially revised throughout to include a description of the identity, purpose, duties, and location of the Crisis Manager, Emergency Management Team, and EOC. Identify the specific criteria that the Emergency Coordinator will use to determine if incident control should be turned over to the Crisis Manager. Explain whether the Crisis Manager will use on-site emergency personnel, or whether additional off-site personnel will be used to manage the incident. Explain the chain of command for the Crisis Manager, his/her staff, and any on-site WIPP personnel involved in emergency response. Revise the permit application to address these concerns.

17. Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-8, Lines 8-13.

It is not acceptable to limit implementation of the Contingency Plan to the three criteria specified on lines 8-13 of page G-8. Under this scenario, it is highly unlikely that the Contingency Plan will ever be implemented. Moreover, using the three criteria, it is clear that the Contingency Plan will never be implemented for emergency incidents occurring underground. Protection of human health and the environment is not limited to off-site receptors. It is also not clear how this criteria to implement the Contingency Plan is consistent with those implementation criteria expressed elsewhere (i.e., page G-1, lines 31-35). Revise Chapter G to clearly identify the specific criteria that will be used to determine when the Contingency Plan will or will not be implemented. Ensure that the criteria are protective of human health and the environment on-site as well as off-site, aboveground and underground, and ensure that the criteria cover the full spectrum of incidents that may occur at the facility, as required by 20 NMAC 4.1, Subpart V, § 264.51(b).

18. **Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-8, Lines 27-31.**

Revise the permit application to indicate whether the Crisis Manager and Emergency Management Team are among the on-site resources available to the WIPP facility. Also, provide a description of the DOE resources that are available to staff at the WIPP facility. Identify the location and type of DOE resources, the time to arrive on-site (if applicable), and the availability (e.g., regular business hours, 24 hours per day, weekends, etc.).

19. **Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-9, Lines 10-16.**

Revise the permit application to include contingency notification procedures ^{that} will be used to evacuate underground personnel in the event of total power outage and failure of backup power systems.

20. **Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-9, Lines 17-18.**

Revise the permit application to clarify whether the Public Address (PA) system and plectron covers all areas of the facility (i.e., aboveground and underground, inside buildings, outside buildings). If there are areas that are outside the range of the PA system or plectron, explain what alternate notification system the CMRO will use.

21. **Chapter G, Section G-4, Emergency Response Method, Section G-4a, Notification, Page G-11, Line 20.**

The statement that "DOE policy is to provide accurate and timely information to the public by the most expeditious means possible" is unacceptably vague. Since the Emergency Coordinator must consult with DOE prior to notifying off-site agencies that evacuation of off-site areas may be necessary, identify the specific DOE individual or office that must be contacted. Explain what will happen if this individual or office cannot be reached (e.g., not available, not regular business hours). Clearly identify what is meant by "most expeditious means possible" (i.e., cite specific procedures). Revise the permit application to address these concerns.

22. **Chapter G, Section G-4, Emergency Response Method, Section G-4b, Identification of Hazardous Materials, Page G-12, Lines 1-12.**

In accordance with 20 NMAC 4.1, Subpart V, § 264.56(b), the permit application must be revised to address the following concerns regarding identification of hazardous materials:

- Identify the specific location where characterization information for hazardous wastes, and hazardous substances are kept for quick reference by the Emergency Coordinator during an emergency event. Simply stating that these reference sources are available is not adequate.
- Explain how quickly information from the waste manifests and operating record can be obtained.
- Explain where waste acceptance records are maintained.
- Explain where the WIPP Waste Information Station (WWIS) can be accessed in an emergency.
- Explain where material inventories and data from derived waste accumulation areas, waste staging areas, satellite staging areas, and non-regulated waste accumulation areas are specifically stored and describe the specific information each records storage area contains.

23. Chapter G, Section G-4, Emergency Response Method, Section G-4c, Assessment of the Nature and Extent of the Emergency, Page G-12, Lines 28-35.

In accordance with 20 NMAC 4.1, Subpart V, § 264.56(c) and (d), revise the permit application to explain how the WIPP Environmental, Safety, Health & Regulatory Compliance (ESH & RC) Department fits with the chain of command shown on Figure G-4 and the emergency response teams described in Section G-2b. Page G-12, lines 25-27 state that the Emergency Coordinator will identify the source, type and extent of wastes involved in the incident in order to determine the need to implement the Contingency Plan. Text on page G-12, lines 30-35, however, appears to assign this same duty to WIPP ESH & RC staff. Clarify the roles of the ESH & RC Department and the Emergency Coordinator with respect to characterizing an emergency incident and determining whether implementation of the Contingency Plan will be necessary.

24. Chapter G, Section G-4, Emergency Response Method, Section G-4c, Assessment of the Nature and Extent of the Emergency, Pages G-12 and G-13, Lines 37-40 and 1-2.

It appears that the reference materials that the Emergency Coordinator needs to make his/her assessment of an emergency incident are scattered throughout the facility. It would ~~not~~ be more efficient and effective to have one central location where the Emergency Coordinator could to assess references on the hazards associated with a particular chemical ^{as well as} to determine appropriate personal protective equipment and decontamination procedures. In accordance with 20 NMAC 4.1, Subpart V, § 264.56(c) and (d), revise the permit application to address these concerns.

25. **Chapter G, Section G-4, Emergency Response Method, Section G-4c, Assessment of the Nature and Extent of the Emergency, Page G-13, Lines 10-12.**

In accordance with 20 NMAC 4.1, Subpart V, § 264.56(c) and (d), revise the permit application to clarify whether "nonmixed" means "not mixed" (i.e., not combined together) or "nonradioactive". If "nonmixed" means "not combined together," then explain the discrepancy with Section F-5 page F-21, which states that all TRU mixed wastes that may be received at the WIPP facility are compatible, nonreactive, and nonignitable. Revise the Contingency Plan to use unambiguous terminology.

26. **Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-14, Lines 33-34.**

The need to determine compatibility of non-waste hazardous materials on a case-by-case basis during a fire emergency requires additional explanation. Since much of the facility is largely on a sprinkler system and fire extinguishers are located throughout the facility, it would be logical to expect that materials would be compatible with water and fire suppression chemicals. Materials that are not compatible with water and fire suppression chemicals must be clearly identified in the Contingency Plan, the containers should be clearly labelled. In accordance with 20 NMAC 4.1, Subpart V, § 264.52(a), revise Section G-4d to remove the unacceptable level of vagueness about this issue.

27. **Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-14, Lines 41-42.**

The removal of flammable material and TRU mixed waste from the area of a fire is unacceptably vague. Revise the permit application to identify the alternate storage location that may be used for these materials both aboveground and underground. In particular, explain the special management and storage considerations that will be important for contact-handled and remote-handled mixed wastes.

28. **Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-15, Lines 19-23.**

Revise the permit application to explain how, where, and who will be responsible for collecting a sample of potentially radioactive waste from an unknown container during the middle of responding to a fire emergency.

29. **Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-15, Lines 27-30.**

Revise the permit application to clarify whether the absorbents selected for use at the facility are compatible with all hazardous materials and wastes present at the facility.

If they are not compatible, explain alternate procedures to contain spilled liquid materials and wastes.

- 30. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-15, Lines 31-32.**

Revise the permit application to explain specifically how the water from fire fighting will be collected. Identify the containers that will be used and the storage location for the wastes will awaiting characterization for subsequent disposal.

- 31. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-16, Lines 9-11.**

The text on page G-16, lines 9-11 addresses transportation of injured personnel only in the event that they can be moved. Revise Chapter G to address the possibility that the injured personnel cannot be moved. Identify the facility's policy towards unmovable, injured personnel when a fire or explosion has occurred or is imminent.

- 32. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-16, Line 33.**

The text on line 33 states that the Emergency Coordinator will secure all operational units. Revise the permit application to explain what is specifically meant by "secure."

- 33. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-16, Line 37.**

For clarity and consistency, a subheader for "Spill" response should be added at line 37; revise the permit application accordingly.

- 34. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-16, Lines 38-41.**

Page G-16, lines 38-41 describe spill control procedures for extremely large spills only. Revise the permit application to explain what procedures the Emergency Coordinator will use for smaller size spills.

- 35. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-17, Lines 22-23.**

In accordance with 20 NMAC 4.1, Subpart V, § 264.52(a), revise the permit application to provide additional detail on procedures to sample and evaluate a release site for contamination. Simply stating that sampling and analysis will occur is not adequate. Considering the storage locations and potential emergencies that may occur

at the facility, it should be possible to identify the types of media that may require sampling and the sample collection procedures. Explain what criteria will be used to determine whether or not contamination of the release area has occurred.

36. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-18, Line 1.

Revise the permit application to explain why general site personnel are charged with containing the source of contamination during a mixed waste spill event. Section G-2b states that this is the responsibility of the ERT or the FLIRT.

37. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-18, Lines 7-28.

The entire discussion of spill control procedures is unacceptably vague. Section G-4d must be significantly revised in accordance with 20 NMAC 4.1, Subpart V, § 264.52(a), revise the permit application to provide details on how contact handled and remote handled mixed waste spills will be addressed. Specifically:

- Explain exactly how emergency responders will assess and mitigate the occurrence. Identify the types of activities that may occur and the equipment that will be required to perform these activities.
- Explain exactly how emergency responders will remove contaminated materials and transfer material to new containers. Identify the equipment required. If containers must be moved in the underground to access another leaking container, describe where containers will be temporarily stored. Address procedures for both contact-handled and remote-handled wastes.
- Explain how emergency responders will remove contamination from structures and other containers. Identify the range of procedures and equipment that are available to accomplish this task.
- Explain how emergency responders will decontaminate reusable spill cleanup equipment. Identify the range of procedures and equipment that are available to accomplish this task.
- Explain what criteria will be used to determine that cleanup is complete (i.e., identify the specific items that will be looked for during the post cleanup inspection).

38. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-19, Lines 14-29.

Revise the permit application to explain how ventilation will be restricted in an area where a roof fall has occurred. Explain why monitoring for radiological mixed waste contamination, volatile organic compounds, and explosive gases is not part of planned emergency response procedures. Additionally, this portion of the permit application implies that if a roof falls in one of the open waste emplacement rooms, this waste may be removed. Since this is a disposal facility with the ultimate intent to leave waste in a closed room, it is not clear what criteria will be used to determine whether waste must be removed. Further, since the Closure Plan discusses panel seal emplacement, this would imply that an entire panel will be closed if a roof fall occurs in an open room. (It is assumed that an "open room" refers to one in which waste is actively being emplaced or has yet to be emplaced, not a room that has been filled, but is yet to undergo roof failure and creep closure.) Revise the permit application to address waste removal criteria, and specifically what will be closed if the Closure Plan is implemented.

39. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-19, Lines 21-23.

Revise the permit application to explain how emergency roof support will be provided. Explain why no roof support equipment is clearly identified in Table G-2.

40. Chapter G, Section G-4, Emergency Response Method, Section G-4d, Control, Containment, and Correction of the Emergency, Page G-19, Lines 17-28.

Revise the permit application to clarify exactly how emergency responders will remove contaminated materials and transfer material to new containers. Ensure that the revision identifies the equipment that is required and the access to this equipment underground, and address procedures for both contact-handled and remote-handled wastes.

41. Chapter G, Section G-4, Emergency Response Method, Section G-4f, Management and Containment of Released Material and Waste, Page G-22, Lines 28-29.

In accordance with 20 NMAC 4.1, Subpart V, § 264.56(g), revise the permit application to identify the specific areas of the Waste Handling Building (WHB) that are available for storing TRU mixed waste in the event that there is a prolonged cessation of mixed waste handling abilities. Also, identify in this revision the primary and alternate storage locations for both contact-handled and remote-handled wastes. Identify the maximum storage capacity of each area. Describe within the permit

application the procedures to ensure that once these storage capacities are reached, no more waste will be accepted at the WIPP facility from off-site generators.

42. Chapter G, Section G-4, Emergency Response Method, Section G-4f, Management and Containment of Released Material and Waste, Page G-23, Lines 2-3.

The discussion regarding the potential for managing water reactive materials is unacceptably vague. Since the facility largely has sprinklers, it would be logical to expect that materials routinely handled at the facility would be compatible with water. Materials that are not compatible with water must be clearly identified in the Contingency Plan, the containers should be clearly labelled, the material should have special use and storage considerations that can be described, and special cleaning solutions should be identified in advance so that they are available to respond to emergency events. In accordance with 20 NMAC 4.1, Subpart V, § 264.56(g), revise Chapter G to provide details of emergency response involving water reactive materials used at the facility.

43. Chapter G, Section G-4, Emergency Response Method, Section G-4f, Management and Containment of Released Material and Waste, Page G-23, Lines 21-23.

In accordance with 20 NMAC 4.1, Subpart V, § 264.56(g), revise the permit application to address the following:

- Provide additional details of what will be considered to be a nonemergency liquid spill.
- Identify the specific spill size that is considered "nonemergency." Identify who will perform the spill cleanup, describe the availability of spill kits and the materials they contain.
- Clarify whether there are any notification or documentation procedures that must be followed for nonemergency spills.

44. Chapter G, Section G-4, Emergency Response Method, Section G-4h, Post-Emergency Facility and Equipment Maintenance and Reporting, Page G-24, Lines 12-16.

The discussion pertaining to procedures for equipment decontamination is unacceptably vague. Revise the permit application to identify the specific cleaning methods, equipment, and cleaning solutions that are available at the facility. It must also describe any special procedures that must be used to decontaminate equipment used in responding to mixed waste emergencies. Additionally, in accordance with 20

NMAC 4.1, Subpart V, § 264.56(h)(2), the permit application must identify the specific areas and buildings that are suitable for conducting decontamination. Revise the permit application to address these concerns.

45. Chapter G, Section G-5, Emergency Equipment, Page G-25.

The permit application must include a map that clearly shows the above-ground location of all emergency response equipment. In accordance with 20 NMAC 4.1, Subpart V, § 264.52(e), revise the permit application to include a map that clearly shows the location of all spill-control and decontamination equipment, fire extinguishers, alarm pull boxes, first aid kits, emergency showers and eyewashes, personal protective gear, and any other emergency response equipment that is immediately available to facility personnel in the vicinity of the WHB and underground. For equipment that must be transported to the RCRA units in an emergency, provide a drawing showing the storage location of this equipment (e.g., fire trucks, rescue trucks, ambulances, HAZMAT trailer, first aid room, underground cabinets, etc.). Also, identify within the permit application the person or position responsible for transporting this equipment to the incident site.

46. Chapter G, Section G-6, Coordination Agreements, Page G-26, Lines 21-22.

The text of Section G-6 mentions the availability of the Living Desert State Park as a location to establish an alternate Emergency Operations Center. In accordance with 20 NMAC 4.1, Subpart V, § 264.37, revise the Contingency Plan to identify the location of the primary Emergency Operations Center. In this revision, identify the function of this center, personnel assigned to manage the center, and equipment or other resources that will be immediately available. Also, revise the permit application to discuss what resources will be available at the alternate Emergency Operations Center, and to identify the distance of this alternate center from the WIPP facility. If equipment or personnel must be transported to this alternate location, describe the procedures to authorize the move including time to establish the alternate center.

47. Chapter G, Section G-7, Evacuation Plan, Section G-7a, Surface Evacuation Assembly Areas and Staging Areas, Page G-28, Lines 1-12.

The discussion regarding staging areas does not discuss the need to exit the facility through gates in the fencing. In accordance with 20 NMAC 4.1, Subpart V, § 264.52(f), revise the permit application to explain what types of gates are available at the various exit points, including what types of locks are present. Also, explain in this revision how all gates will be quickly unlocked during an emergency incident requiring evacuation.

48. **Chapter G, Section G-7, Evacuation Plan, Section G-7a, Surface Evacuation Assembly Areas and Staging Areas, Page G-28, Lines 3-12.**

Revise Section G-7a to specifically explain how all personnel are accounted for at the assembly areas. Simply stating that they are accounted for is unacceptably vague.

49. **Chapter G, Section G-7, Evacuation Plan, Section G-7a, Surface Evacuation Assembly Areas and Staging Areas, Page G-28, Lines 11-12.**

Revise the permit application to provide a more detailed discussion of procedures to decontaminate personnel prior to evacuation to staging areas. Explain how the decontamination will be performed, where it will be performed, and who will be responsible for ensuring decontamination is complete. Also in this revision, provide contingencies in the event that time does not allow for decontamination (e.g., an explosion or natural disaster), and explain what contaminated personnel should do in these instances.

50. **Chapter G, Section G-7, Evacuation Plan, Section G-7b, Underground Assembly Areas, Page G-28, Line 17.**

Revise the permit application to explain who is in charge of accounting for all underground personnel and provide further details of specifically how all personnel are accounted for.

51. **Chapter G, Section G-7, Evacuation Plan, Section G-7b, Underground Assembly Areas, Page G-28, Lines 18-20.**

Revise the permit application to provide a more detailed discussion of procedures to manage contaminated personnel underground, and to explain when, how, and where decontamination will be performed. Ensure that the revision identifies who will be responsible for ensuring decontamination is complete and provides contingencies in the event that time does not allow for decontamination (e.g., an explosion or natural disaster). Also, revise the permit application to explain what contaminated personnel should do in these instances.

52. **Chapter G, Section G-7, Evacuation Plan, Section G-7b, Underground Assembly Areas, Page G-28, Line 21.**

Line 21 on page G-28 states that all underground assembly areas have telephones, pagers, and first-aid kits. Since pagers are issued to individuals, clarify whether all underground personnel have pagers. If only selected personnel have pagers, explain how it can be stated that all underground assembly areas will have pagers available. Moreover, explain how pagers will be useful in an emergency. Additionally, provide a diagram of the underground showing the location of mine phones to demonstrate

that telephones are available at all underground assembly areas. Figure G-5 does not show that first-aid kits are immediately available at all underground assembly areas. Explain the discrepancy with the text on page G-28. Revise the permit application to address all of these concerns.

53. Chapter G, Section G-7, Evacuation Plan, Section G-7c, Plan For Surface Evacuation, Page G-28, Line 38.

Revise the permit application to explain why the Assistant Chief Office Warden is not specifically listed among the other emergency response personnel in Section G-2b, and to identify all emergency response duties of the Assistant Chief Office Warden.

54. Chapter G, Section G-7, Evacuation Plan, Section G-7c, Plan For Surface Evacuation, Page G-29, Line 3.

Revise the permit application to explain specifically how the Chief Office Warden will communicate with all Office Wardens during an evacuation, since presumably all Office Wardens will be outdoors at assembly areas scattered throughout the facility.

55. Chapter G, Section G-7, Evacuation Plan, Section G-7c, Plan For Surface Evacuation, Page G-29, Lines 6-9.

The evacuation procedures for ERT and FLIRT personnel are not clear. Revise the permit application to clarify whether ERT and FLIRT personnel are to proceed to their appropriate evacuation assembly areas and wait for further instructions, whether the ERT and FLIRT personnel should remain next to their phones awaiting instructions when they hear an evacuation alarm, or whether ERT and FLIRT personnel should automatically report to their duty stations whenever they hear an evacuation alarm. Also, revise the permit application to identify the specific location of all duty stations, and to explain why special evacuation procedures for the MRT are not outlined.

56. Chapter G, Section G-7, Evacuation Plan, Section G-7d, Plan for Underground Evacuation, Page G-29, Line 23.

Revise the permit application to explain why the Underground Dispatcher is not specifically listed among the other emergency response personnel in Section G-2b, and to identify all emergency response duties of the Underground Dispatcher.

57. Chapter G, Section G-9, Location of the Contingency Plan and Plan Revision, Page G-31, Line 4.

The reference to Section G-9 on page G-31, in Line 4 is incorrect. It appears that the reference should be to Section G-2b. Confirm the section cross-reference and revise the text of the permit application as appropriate.

58. Chapter G, Section G-9, Location of the Contingency Plan and Plan Revision, Page G-31, Line 17.

Revise the permit application to explain why a description of the Memoranda of Understanding (MOU) with the New Mexico State Police is not included in Section G-6. Also, clarify the MOU coordination agreement has been established between the WIPP facility and the State Police.

COMMENTS: TABLES AND FIGURES

1. **Chapter G, Table G-1, Resource Conservation and Recovery Act Emergency Coordinators.**

Identification of the primary and alternate Emergency Coordinator is not clear on Table G-1. Mr. Bibby is listed as the primary coordinator, but footnote 1 states that Mr. Bibby and four other personnel are also alternate coordinators because they are Facility Shift Managers. This is confusing. The text of Section G-2a states that the Facility Shift Manager on duty is always the primary Emergency Coordinator; there is no mention of Mr. Bibby. In addition, there are nine additional personnel listed as qualified to serve as Emergency Coordinators. There is no indication of who these staff are, what job titles they have, what duties qualify them to serve as Emergency Coordinator, and who the CMRO will know to call ^{and} in what order if the Facility Shift Manager is unreachable in an emergency. Revise Table G-1 and the text of Section G-2a to clearly identify for each shift who will serve as primary Emergency Coordinator and who will serve as alternate Emergency Coordinator(s), in accordance with the requirements of 20 NMAC 4.1, Subpart V, § 264.52(d).

2. **Chapter G, Table G-2, Emergency Equipment Maintained at the Waste Isolation Pilot Plant, Pages G-35 through G-39.**

Table G-2 is not sufficiently detailed. In most cases, either a clear description of the use and capabilities of the equipment are not provided, or the minimum inventory that is required to be on hand is not identified. For the most part, the location of equipment is vaguely described and cannot be located on figures provided with Chapter G. In accordance with 20 NMAC 4.1, Subpart V, § 264.52(e), revise Table G-2 and the text of the Contingency Plan, as appropriate, to address these concerns. Specifically:

- Page G-35: Explain why the underground fire alarm systems cannot be manually activated. Since the alarms are only found at five locations underground, and since it is stated that the alarm sounds only in the general area of the control panel, confirm that all underground personnel will be alerted to an emergency by the alarm.
- Page G-35: Clarify whether the site-wide evacuation alarm can be heard outdoors as well as inside buildings. Provide a diagram of the high ambient noise aboveground and underground areas showing the location of all alarms and associated strobe lights, to demonstrate that personnel will be alerted to the need to evacuate the facility.

- Page G-35: Clarify what areas of the facility are covered by the public address system and what areas are covered by the plectrons. Simply stating that both are available site-wide is not sufficient. Clarify that all areas of the facility (including the indoors and outdoors) are covered by at least one system.
- Page G-36: Clarify the number and specific locations of Plant Base Radios. Simply stating that radios are located at various sites is unacceptably vague.
- Page G-36: Explain why use of the public address van is not mentioned in the text of the Contingency Plan. Identify where the van is stored when not in use.
- Page G-36: Explain why the environmental truck is not mentioned in the text of the Contingency Plan. Describe the use of the truck, the equipment it contains, and the storage location when the truck is not in use.
- Page G-36: Identify the storage location of the HAZMAT Trailer, Rescue truck, Fire Truck #1, and Tool Crib.
- Page G-36: Identify the purpose and capabilities of the air bag system, come-alongs, porta-power, and patching kit.
- Page G-36: Identify the minimum acceptable inventory of spill guns and recharge powder, absorbent, absorbent socks, transfer pumps, drum openers, floor squeegees, hand tools, jugs, pails, and portable lighting.
- Page G-36: With respect to spill response equipment, explain why there are no spill kits immediately available at areas where spills of hazardous materials might occur, and explain why there are no overpack or empty drums specifically listed among emergency response equipment.
- Page G-37: Identify the minimum acceptable inventory of scoops and shovels that must be on hand.
- Page G-37: Explain why the underground is protected by only one smoke and thermal detector. Explain why these detectors are not necessary in other areas of the underground. Explain how the four other underground fire alarm stations noted on page G-35 will serve for fire protection if they are automatically activated (although not equipped with smoke or thermal detectors) and have no manual pull stations.
- Page G-38: Identify the location of the Mine Rescue Training Room and the Connex. These two areas cannot be identified on any of the facility maps.

- Page G-38: Identify the minimum acceptable inventory of gloves, acid suits, fire suits, fully encapsulating suits, and antishock trousers.
 - Page G-39: Identify the minimum acceptable inventory of oxygen, resuscitators, splints, stretchers, suction, trauma kits, emergency lighting radiation survey equipment, and radiation monitoring equipment.
 - Page G-39: Explain why first-aid kits are not listed among the emergency medical equipment available at the facility. Identify the minimum inventory of supplies that must be present in each first-aid kit.
 - Page G-39: Provide a diagram showing the location of the emergency showers and eye washes that are immediately available in the vicinity of the WHB and underground.
3. **Chapter G, Table G-3, Types of Fire Suppression Systems by Location, Pages G-40 through G-42.**

Page G-42 of Table G-3 states that the underground facilities are equipped with manual pull stations. Table G-2, page G-35 states that the fire alarm systems are automatic only. Revise either table to resolve this discrepancy, and revise Chapter G text and table as appropriate.

4. **Chapter G, Figure G-4, WIPP Facility Emergency Notifications, Page G-53.**

Since the EST has a key role to assist the Emergency Coordinator in determining the need to implement the Contingency plan, as stated on page G-7, revise Figure G-4 to specifically include the EST in the notification chain.

5. **Chapter G, Figure G-5, Underground Emergency Equipment Locations and Underground Evacuation Routes, Page G-54.**

The permit application does not explain the use of the underground west refuge area shown on Figure G-5 in the text of the Contingency Plan. Revise Chapter G to describe when the west refuge area will be used.

Figure G-5 also shows the location of only two of the five underground fire alarm panels. Revise Figure G-5 to show the location of all underground emergency equipment.

6. **Chapter G, Figure G-6, Fire-Water Distribution System, Page G-55.**

Figure G-6, like many of the Chapter G figures, has been so reduced in size as to make many of the features shown in the key extremely difficult to read and find on

the figure. Figure G-6 shows only one emergency exit located along the middle of the east facility fence and does not show any emergency exits located along the fence where access to the alternate staging areas is required. Revise Figure G-6 to address these concerns.

7. Chapter G, Figure G-8, WIPP On-Site Assembly Areas and WIPP Staging Areas, Page G-57.

The east fence emergency exit shown on Figure G-6 is missing from Figure G-8. Revise the figures to be consistent, and to discuss this fence exit is not discussed in the text of the Contingency Plan.

8. Chapter G, Figure G-9, Designated Underground Assembly Areas, Page G-58.

The text on page G-28 states that all underground assembly areas are adjacent to hoist stations. Figure G-9 clearly shows this is not the case. Resolve the discrepancy and revise the text of the Contingency Plan as appropriate.

**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER H

GENERAL COMMENTS

1. In general, Chapter H is vague and fails to provide sufficient detail in a number of areas, including job descriptions, training content and relevance of training to job position. Furthermore, a number of inconsistencies within Chapter H, as well as with other sections of the application, have been identified. Refer to Specific Comment Nos. 1, 3, 6, 7, 12, 13, 18, 20.
2. The training outline provided in Chapter H and Appendix H3 fails to provide sufficient detail to clearly evaluate the adequacy of the facility's training program. In accordance with 20 NMAC 4-1, Subpart V, § 264.16(a). The permit application must be revised to describe each of the topics that will be discussed during introductory and continuing training and the amount of time that will be dedicated to each topic. Refer to Specific Comment No. 1.
3. Chapter H does not make clear which job titles report to other job titles. It is also not clear how all groups and departments identified in Chapters F, G, and H are interrelated. Complicating this issue is the identification of job and group titles in other chapters of the application which are missing from Chapter H. For example, Table F-1 identifies numerous job titles and groups that have responsibility for inspecting equipment and areas that are directly related to hazardous waste management, but are not included in the groups and job titles identified in Chapter H. Table F-1 also identifies 14 job titles under the Facility Operations Group; Appendix H1 includes only 5 titles under this same group. Table F-1 identifies several job titles under an Industrial Safety Group and a Radiation Safety Group, which are all missing from Appendix H1. Still more confusion is introduced by the inconsistent use of group names; Table F-1 refers to a Hazardous Waste Operations Group, which appears to be the same as the Hazardous Waste and Self Assessment Group identified in Appendix H1. Revise Chapters F and H to ensure consistency in the identification of job titles and organizational groups. Revise the permit application to provide a complete organization chart with the revised permit application showing how all referenced groups/departments are interrelated. Additionally, revise the job descriptions in Appendix H2 to clearly show what higher level job title the individual reports to, and which lower level job title(s) the individual must supervise. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(c), 264.16(d)(3). Refer to Tables and Figures Comment No. 2.

4. The job descriptions fail to demonstrate that personnel in each job position are adequately and appropriately trained to perform the duties outlined in the job descriptions. For example, many job description indicate that personnel in those positions will be required to perform inspections (i.e., waste handling technician, waste handling assistant, operations engineer, hazardous waste manager, hazardous materials technician and associate scientist). However, there is no indication that these positions will receive inspection training. This same type of deficiency is also apparent with respect to those job tasks which require training to collect hazardous waste samples, operate specialized machinery, and perform emergency response activities. Furthermore, all of the job descriptions include vague statements such as "Hazardous waste management personnel receive the core training discussed in H-1a and H-1b(1)" or "must possess and maintain required certifications." All of the job description must be reviewed and revised to provide more detailed information to demonstrate that personnel are adequately prepared to perform their duties. Each job description should clearly identify the specific training courses and hours of each type of training (i.e., classroom and on-the-job), and refresher training required for that position, as well as an itemized listing of all required certifications. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(c), and 264.16(d)(3), revise the permit application to address these concerns.

**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER H

SPECIFIC COMMENTS

1. Chapter H, Section H-1, Outline of Training Program, Pages H-1 through H-3.

The training outline provided in Chapter H and Appendix H3 fails to provide sufficient detail to clearly evaluate the adequacy of the facility's training program. In accordance with 20 NMAC 4-1, Subpart V, § 264.16(a), the permit application must be revised to describe each of the topics that will be discussed during introductory and continuing training and the amount of time that will be dedicated to each topic.

2. Chapter H, Section H-1, Outline of Training Program, Page H-1, Lines 33 and 34.

The application is unclear as to which position will actually be directing the training program at the WIPP facility. Page H-1, lines 33 and 34 state that "Employee training for the purpose of hazardous waste management at the WIPP facility is the overall responsibility of the MOC General Manager, with responsibility for implementation delegated to the Manager of the Human Resources Department." Page H-6, line 31 states that "The Technical Training Manager directs the training program." In accordance with 20 NMAC 4-1, Subpart V, § 264.16(a), revise the permit application to specify the person directly responsible for directing personnel training at the WIPP facility.

3. Chapter H, Section H-1, Outline of the Training Program, Page H-2, Lines 6 through 7.

The permit application must provide a more detailed description of the modified Performance-Based Training (PBT) approach. It must also explain specifically how existing training programs are analyzed, designed, developed, implemented, and evaluated with respect to PBT methods, and must also explain how training needs identified with respect to a PBT approach will be integrated into the initial and refresher training program as it is currently described. Revise Section H-1 of the permit application to provide further details on these issues.

4. Chapter H, Section H-1, Outline of the Training Program, Page H-3, Lines 14 through 15.

The rationale behind keeping emergency response training records (maintained by the Emergency Services Coordinator) separate from other training records (maintained by the Technical Training Group) is not clear. Also, Section H-2 (page H-9) contradicts this association stating that all training records for emergency response personnel are maintained by the Technical Training Group. Since the Technical Training Manager is responsible for ensuring that WIPP personnel are adequately trained, including completion of required refresher training, he/she should have one complete training record for each individual in one recordkeeping location. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a), revise Sections H-1 and H-2 of the permit application to address this discrepancy, and to clearly describe the rationale behind maintaining two training record systems, if the applicant intends to do so.

5. Chapter H, Section H-1, Outline of the Training Program, Page H-3, Lines 19 through 21.

The specific equipment and systems/procedures related to hazardous waste management that require a qualification card must be identified in Chapter H. Job positions that require an individual to possess ~~and~~ a qualification card and certification card for that equipment or system/procedures must also be clearly identified in the permit application. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a), revise Chapter H to include this specific information. Ensure that the job descriptions in Appendix H2 are appropriately revised to reflect the qualification/certification skills required.

6. Chapter H, Section H-1, Outline of the Training Program, Page H-3, Lines 36 through 38.

The description of the training required for visitors, temporary personnel, and contractors is unacceptably vague. Revise Chapter H to clearly identify what specific site safety and emergency notification procedures are taught, what methods are used to provide this training, what hours of training are required, and how this training will be documented. Clearly identify what other activities may be conducted by visitors, temporary personnel, and contractors that would require training beyond these basics and describe what that training will entail. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a), revise Appendix H3 to provide a training course outline for all training courses.

7. Chapter H, Section H-1a, Job Title/Job Description, Page H-4, Lines 13 through 21.

Appendix H1 provides a list of hazardous waste management job titles for those personnel whose positions are related to hazardous waste management. However, page H-4, lines 13 through 21 identifies several positions which the facility has stated are "considered to be critical from the standpoint of hazardous waste management or emergency response." Included in this list is the position of Supervisor, Hoisting Operations. This position is not listed in the table provided in Appendix H1, nor is there a job description provided in Appendix H2. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(d), revise the permit application to include a job title and detailed job description for this position and any other positions where personnel may be reasonably expected to handle hazardous waste, including emergency response personnel. Refer also to Tables and Figures Comment No. 3.

8. Chapter H, Section H-1b(1), Training Content, Page H-5, Line 19.

Course outlines must be provided for all training courses intended to demonstrate compliance with RCRA requirements. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(c), and § 264.16(d)(3), revise the permit application to provide a course outline for Course REP-107.

9. Chapter H, Section H-1b(3), Training Techniques, Page H-6, Lines 23 through 27.

In accordance with 20 NMAC 4.1, Subpart V, § 264.16(c), revise the permit application to clarify whether the board sheets identified on page H-3, line 7, will be used to document the successful completion of oral boards. In addition, revise the permit application to identify the specific positions/systems that require attendance at an oral board.

10. Chapter H, Section H-1c, Training Manager, Page H-6, Lines 33 through 37.

The permit application states on page H-6, lines 33 through 37, that "The Technical Training Manager is required to be trained in hazardous waste management procedures and to receive train-the trainer and instructor training." The permit application further states that the Technical Training Manager is also required to be knowledgeable of the applicable regulations, orders, and guidelines, and the specific training process employed at the WIPP facility." The job description for the Technical Training Manager (listed in Appendix H2, page H2-58) states that the only required training for this position is "the core training discussed in H-1a and H-1b(1)." Both the discussion and the Technical Training Manager job description fail to adequately demonstrate that the person chosen for the position of Technical Training Manager will be suitably qualified to provide training and to select trainers.

In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(2), revise the text of the permit application, as well as the job description in Appendix H2, to provide a detailed listing of the qualifications, certifications and any prerequisites for the position of Technical Training Manager. Refer also to Tables and Figures Comment No. 3

11. Chapter H, Section H-1d, Relevance of Training to Job Position, Page H-7, Lines 3 through 8.

The Contingency Plan (page G-12, lines 3 through 8) indicates that information available to identify hazardous wastes is maintained on the WIPP Waste Information System (WWIS). Use of this system would be very important for the emergency coordinators, Central Monitoring Room Operator and Facility Shift Managers. However, no information regarding training on the WWIS for the above-mentioned positions is provided in the permit application. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a), revise the permit application to indicate the types and amounts of WWIS training that are provided to personnel at the WIPP facility.

12. Chapter H, Section H-1d, Relevance of Training to Job Position, Page H-7, Lines 13 through 15.

The application states that "employees who operate key pieces of equipment (such as forklifts, hoists, etc.) must be trained to operate and inspect equipment and to recognize maintenance problems before a specific job function is performed." In reviewing the job descriptions for Senior Shaft Tender, Shaft Tender, and Hoist Operations Specialist (Appendix H2, pages H2-64 through H2-66), no specific equipment operating or inspection training is indicated. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(2), revise the permit application must be revised to correct these discrepancies. Refer also to Tables and Figures Comment No. 3

13. Chapter H, Section H-1d, Relevance of Training to Job Position, Page H-7, Line 21.

Simply stating that supervisors receive hazardous waste management training is unacceptably vague. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(2), revise the permit application to identify the specific hazardous waste management training that is given to specific supervisory job titles and provide a course outline for each management training course (including any refresher courses).

14. Chapter H, Section H-1e, Training for Emergency Response, Page H-7, Lines 34 through 36.

The application states that "WIPP facility employees receive GET-195, which includes instruction on hazard awareness, emergency preparedness, spill control, and

the WIPP RCRA Contingency Plan". However, the course outline for GET-195 provided in Appendix H3, states only that the course "provides all new plant employees with essential knowledge to perform their job safely and efficiently per 29 CFR 1910.120." In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(3), the permit application must be revised to correct this discrepancy. All course outlines should identify all of the topics that are discussed during each introductory and continuing course and the amount of time dedicated to each topic. Revise Section H of the permit application as appropriate.

15. Chapter H, Section H-1e, Training for Emergency Response, Page H-8, Lines 34 through 36.

Page H-8, lines 16 through 24 indicate the training requirements for Emergency Response Personnel. However, this written description does not agree with the information listed in Table H-1, specifically, the categories of emergency response team member, FLIRT member and MRT member. For example, the written description states that FLIRT "training includes 40-hour miner training, National Fire Protection Association (NFPA) 600 Industrial Brigade requirements and additional requirements pertaining to the team." Table H-1 states that FLIRT members receive HWW-101, SAF-630 and 20-hour mine rescue. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(3), the permit application must be revised to ensure that all information presented in the text and in referenced tables is consistent and complete.

16. Chapter H, Section H-1e, Training for Emergency Response, Page H-8, Lines 8 through 11.

Section G-2b of the Contingency Plan also identifies the Security Fire Brigade as a group that is responsible for responding to fire emergencies. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(3), revise Chapter H of the permit application to identify whether this group may respond to fires potentially involving hazardous wastes, and to explain why the Security Fire Brigade members do not receive specialized emergency response training.

17. Chapter H, Section H-1e, Training for Emergency Response, Page H-8, Lines 15 through 24.

The description of the specialized emergency response training provided to various emergency response teams is unacceptably vague and doesn't appear to address major types of incidents that may occur (e.g., spills, explosions, natural disasters). It is not clear what elements of the training are provided specifically to comply with RCRA training requirements and which are provided to address other types of emergencies that are not RCRA related (e.g., mine rescue of personnel not contaminated by hazardous wastes). In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(3), revise Section H-1e to clearly identify the courses that will be given to the Emergency

Response Team, the First Line Initial Response Team, the Mine Rescue Team, and the Security Fire Brigade (identified in Section G-2b). Provide a course outline for every course that provides training on responding to emergency incidents that may potentially involve hazardous wastes or hazardous waste constituents.

- 18. Chapter H, Section H-1e, Training for Emergency Response, Page H-8, Lines 26 through 27.**

It is understood that emergency response duties are not related to particular job titles. However, omission of a description of emergency response duties from Chapter H is not acceptable. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(3), revise the permit application to provide individual descriptions of emergency response duties that may involve responding to hazardous waste incidents for an Emergency Response Team member, a First Line initial Response Team member, a Mine Rescue Team member, a Security Fire Brigade member, an Office Warden, and a Chief Warden. Indicate that these job descriptions will be appended to the individual job descriptions of those individuals that volunteer to participate in the emergency response teams at the WIPP facility.

- 19. Chapter H, Section H-1e, Training for Emergency Response, Page H-9, Lines 4 through 7.**

In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(3), revise the permit application to clarify whether the Facility Shift Manager will act as the primary emergency coordinator. Also, provide a job description for the alternate emergency coordinator in this revision, as well as a description of the background, experience, training and education of the persons identified as the emergency coordinator.

- 20. Chapter H, Section H-1e, Training for Emergency Response, Page H-9, Lines 4 through 7.**

The Contingency Plan (Chapter G, page G-4, line 20) indicates that the Central Monitoring Room Operator (CMRO) will be the first person notified in the event of an emergency. Neither a job title or a job description has been provided in the application for this position. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(a)(3), revise the permit application to provide a job title and detailed job description for this position.

- 21. Chapter H, Section H-1e, Training for Emergency Response, Page H-9, Lines 4 through 8.**

Revise the permit application to provide a course outline of the special RCRA Contingency Plan training course that is provided to all primary and alternate Emergency Coordinators. Also, revise the permit application text to clarify whether

RCRA Contingency Plan refresher training is ever provided, and to include a refresher course training outline.

22. Chapter H, Section H-2, Implementation of Training Program, Page H-9.

In accordance with 20 NMAC 4.1, Subpart V, § 264.16(b), § 264.16(d)(4), and § 264.16(e), revise the permit application to provide examples of training log forms, certification cards, qualification cards, and board sheets which will be used at the facility.

COMMENTS: TABLES AND FIGURES

1. **Chapter H, Table H-1, Emergency Response Personnel Training Requirements for Specific Response, Page H-11.**

Table H-1 identifies courses including SAF 504, NFPA 101, and "other training" (not specified). In accordance with 20 NMAC 4.1, Subpart V, § 264.16(b), § 264.16(d)(4), and 264.16(e), revise the permit application to remove vague statements, and to identify all initial and refresher training courses that are intended to demonstrate compliance with RCRA training requirements. Provide in the revised permit application these additional courses in both the Table H-1 training matrix and in the course outline, Appendix H3.

Table H-1 states that emergency response personnel will complete their training in a "timely manner" and that they are responsible for maintaining their own qualifications. This is unacceptably vague and places the burden of updating training on the individual rather than the training director. Revise Chapter H to clearly identify what training must be updated and how often, and to clearly indicate that the training director is responsible for ensuring that training is up-to-date. Revise Chapter H to clarify what is considered a "timely manner" with respect to receiving required emergency response training.

2. **Chapter H, Appendix H1, List of Hazardous Waste Management Job Titles.**

Chapter H does not make clear which job titles report to other job titles. It is also not clear how all groups and departments identified in Chapters F, G, and H are interrelated. Complicating this issue is the identification of job and group titles in other chapters of the application which are missing from Chapter H. For example, Table F-1 identifies numerous job titles and groups that have responsibility for inspecting equipment and areas that are directly related to hazardous waste management, but are not included in the groups and job titles identified in Chapter H. Table F-1 also identifies 14 job titles under the Facility Operations Group; Appendix H1 includes only 5 titles under this same group. Table F-1 identifies several job titles under an Industrial Safety Group and a Radiation Safety Group, which are all missing from Appendix H1. Still more confusion is introduced by the inconsistent use of group names; Table F-1 refers to a Hazardous Waste Operations Group, which appears to be the same as the Hazardous Waste and Self Assessment Group identified in Appendix H1. Revise Chapters F and H to ensure consistency in the identification of job titles and organizational groups. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(c), 264.16(d)(3), revise the permit application to provide a complete organization chart with the revised permit application showing how all referenced groups/departments are interrelated. Additionally, revise the job descriptions in

Appendix H2 to clearly show what higher level job title the individual reports to, and which lower level job title(s) the individual must supervise.

3. Chapter H, Appendix H2, RCRA Hazardous Waste Management Job Descriptions, Pages H2-1 through H2-75.

The job descriptions fail to demonstrate that personnel in each job position are adequately and appropriately trained to perform the duties outlined in the job descriptions. For example, many job description indicate that personnel in those positions will be required to perform inspections (i.e., waste handling technician, waste handling assistant, operations engineer, hazardous waste manager, hazardous materials technician and associate scientist). However, there is no indication that these positions will receive inspection training. This same type of deficiency is also apparent with respect to those job tasks which require training to collect hazardous waste samples, operate specialized machinery, and perform emergency response activities. Furthermore, all of the job descriptions include vague statements such as "Hazardous waste management personnel receive the core training discussed in H-1a and H-1b(1)" or "must possess and maintain required certifications." All of the job description must be reviewed and revised to provide more detailed information to demonstrate that personnel are adequately prepared to perform their duties. Each job description should clearly identify the specific training courses and hours of each type of training (i.e., classroom and on-the-job), and refresher training required for that position, as well as an itemized listing of all required certifications. In accordance with 20 NMAC 4.1, Subpart V, § 264.16(c), and 264.16(d)(3), revise the permit application to address these concerns.

**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER K

GENERAL COMMENTS

There are no comments for this section.

**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER L

GENERAL COMMENTS

1. The facility has stated that prior to beginning disposal operations DOE will submit a No-Migration Variance Petition for the disposal operations. DOE further states that the first phase of the petition is scheduled for submittal in May of 1995. The No-Migration Variance Petition schedule is different than that for the permit application, and it is not conclusive that the NMVD for the disposal phase will be granted. Therefore, the permit application must be revised to indicate that waste will meet LDR requirements or the current standard, given that the current standard could mean NMVD requirements. Revise the permit application to state this. Also, there are no mechanisms in place to determine that this conformance assessment will occur. Revise the permit application to indicate how LDR compliance conformance will be ensured. (Refer to applicable comments, Chapter C).

**WIPP PART B PERMIT APPLICATION REVIEW
FACILITY AND PROCESS INFORMATION**

CHAPTER M

GENERAL COMMENTS

There are no comments for this section.