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November 1, 2012

**RE: SPECIFIC RESPONSE TO COMMENTS, CLASS 2 MODIFICATION REQUEST
WIPP HAZARDOUS WASTE FACILITY PERMIT
EPA I.D. NUMBER NM4890139088**

Dear Commenter:

On November 1, 2012, the New Mexico Environment Department (NMED) took final administrative action on a Class 2 permit modification request (PMR) to the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit. The Department of Energy Carlsbad Field Office and Nuclear Waste Partnership LLC formerly Washington TRU Solutions LLC (the Permittees) submitted this PMR to the Hazardous Waste Bureau on July 5, 2012 seeking to:

- Add the shielded container as a shipping package;
- Add descriptions of how the volume of RH TRU mixed waste which is disposed in shielded containers will be tracked;
- Add related changes to waste handling descriptions.

NMED approved the modification with changes. This Class 2 PMR was evaluated and processed in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)). It was subject to a 60-day public comment period. You are receiving this mailing because you provided public comment on this modification. NMED's specific response to all comments as well as further information on this administrative action may be found on the NMED WIPP Information Page at <<http://www.nmenv.state.nm.us/wipp/>>.

NMED appreciates your participation by submitting comments on these permit modification requests. Please contact Trais Kliphuis at (505) 476-6051 or via e-mail at <trais.kliphuis@state.nm.us> if you have further questions or need additional information.

Sincerely,

John E. Kielling
Bureau Chief
Hazardous Waste Bureau

cc: Trais Kliphuis, NMED HWB
Laurie King, EPA Region 6
Jose Franco, DOE/CBFO
M. Farok Sharif, Nuclear Waste Partnership LLC



**NEW MEXICO ENVIRONMENT DEPARTMENT'S
RESPONSE TO PUBLIC COMMENTS
ON THE CLASS 2 PERMIT MODIFICATION REQUEST
FOR THE ADDITION OF SHIELDED CONTAINERS**

Introduction. The New Mexico Environment Department (Department) is hereby responding to comments it received from the public on the permit modification request (modification) for the addition of shielded containers, dated July 5, 2012. The Department proposes to issue the permit pursuant to its authority under the New Mexico Hazardous Waste Act (HWA), NMSA 1978, §§ 74-4-1 to 74-1-14. On July 12, 2012, the Permittees issued a public notice that the Department would accept comments for 60 days, until September 10, 2012. The Department carefully considered all the comments received. The comments and the Department's responses follow.

1. Comment: I am very concerned about shielded containers. They would expand the space available at WIPP for remote-handled waste that is dangerous to transport, store, and dispose.

Response: Table 4.1.1 of the permit limits the volume of RH waste that may be placed in each panel and as an overall total for all the panels. This limit is not being changed in the modification. See forthcoming responses for additional information on RH waste.

2. Comment: Despite what the Department of Energy says, shielded containers could not be handled like contact handled waste because damaged or leaking containers could be too radioactive to over-pack.

Response: The revised permit does include basic requirements for container management and overpacking that are relevant to established conditions that are consistent with Department permit authority. The Permittees have a more detailed and specific technical procedure for container overpacking (WP 05 –WH1010) which includes situations for overpacking a shielded container.

3. Comment: The shielded containers request is not a proper class 2 permit modification. I request the DOE's permit be denied. If this is not so, then I request a public hearing and that shielded containers be a class 3 modification so that there would be more extensive public comment and an opportunity for a hearing.

Response: The regulations, at 40 CFR 270.42 Appendix 1, Item F.3.b, address the modification as requested. The Department has approved similar Class 2 modifications including but not limited to the addition of direct loaded ten drum overpack in November of 2002 and the addition of a standard large box 2 in April 2011. This modification does not substantially alter the existing permit conditions or significantly affect the overall operation of the facility which would warrant a Class 3 modification.

Class 2 modifications provide for public comment by mandating a permit submittal meeting and a sixty day public comments period. In addition to these requirements, the Permittees held a pre-

submittal meeting and additional public meetings. The comments provided during this process do not indicate that any additional significant and/or relevant information would be provided that would warrant a public hearing.

4. Comment: The request is incomplete and does not include important information necessary for the public to adequately comment and for NMED to determine that the modification would protect public health and the environment and comply with other provisions of RCRA and the HWA.

Following are examples of important information that is missing or incomplete or inadequate and some of the questions that need to be answered.

Page 2 of the request states:

The management and storage requirements of CH TRU mixed waste in the Permit will apply to the waste that arrives at the WIPP facility in shielded containers because the surface dose rate is less than 200 millirems/hr at the time of shipment.

That statement is incorrect. Permit Section 1.5.2. states:

“Remote-handled transuranic mixed waste” means transuranic mixed waste with a surface dose rate of 200 millirem per hour or greater. For WIPP, the surface dose rate shall not exceed 1,000 rems per hour. [Pub. L. 102-579 (1992)]

Thus, regardless of the surface dose rate “at the time of shipment,” any container at the WIPP site with a surface dose rate of 200 millirem per hour or greater is remote-handled (RH) waste and must be managed according to the RH waste requirements of the Permit. The request does not appear to recognize that requirement. Because the 30-gallon inner container has a surface dose rate of 200 millirem per hour or greater in each shielded container, there could be one, tens, hundreds, or thousands of such RH waste containers at WIPP. The request provides no technical analysis about the potential for one or more shielded containers with a surface dose rate of less than 200 millirem per hour at the time of shipment to have a surface dose rate of 200 millirem per hour at the time of arrival at WIPP or to have such a surface dose rate at any time at WIPP. Questions that should have been addressed include whether vibration or movement from rough roads could cause shifting or settling of the RH waste such that the surface dose rate changes at the time of shipment to arrival at WIPP; whether there is variation among the generator sites as to how surface dose rates are measured, as compared with how they are measured at WIPP, that give differing results; and whether handling practices at WIPP could result in shifting or settling such that the surface dose rate changes. What circumstances, including accidents and manufacturing errors or quality assurance deficiencies, could result in a shielded container having a surface dose rate of 200 millirem per hour or greater? Not only are there not answers to those questions included in the request, but the request includes no Documented Safety Analysis (DSA) for shielded containers.

Response: All characterization is done at generator sites where there are packaging requirements to minimize shifting for containers already approved by the permit.

The generator sites determine whether a waste falls under the RH or CH waste program, and the Permittees manage it accordingly. Even under the current permit, if containers meet the CH waste criteria, they may be managed in accordance with CH waste criteria and practices irrespective of whether the contents were determined to be RH waste by the generator sites.

This modification provides for the Permittees the option of managing their identified RH waste using a new container, and because this container reduces the dose rate at the container surface to a level consistent with CH waste, the Permittees are allowed to dispose of the waste once accepted at WIPP. That is, if waste meets the criteria for management in CH waste areas, then it can be managed in that area.

See response to Comment 16 regarding the potential for damage or increase in dosage as a result of shipping.

5. Comment: The modification request includes no limits on the amount of remote-handled (RH) waste in shielded containers that can be stored in the Parking Area Unit (PAU) or in the contact-handled (CH) Bay of the Waste Handling Building (WHB), even though such containers will likely have external dose rates that are more than an order-of-magnitude greater than the CH waste that is normally handled. That much higher surface dose rate is never mentioned in the request. The Permit now allows no RH waste in the CH Bay Storage Area, in the CH Bay Surge Storage Area, and in the Derived Waste Storage Area. Permit Part 3.1.1.2 and Table 3.1.1.

The request is to allow RH waste to be managed in precisely those CH areas in which RH waste is currently, and has always been, prohibited. Yet the request includes no changes regarding Table 3.1.1 and no limits on the number of shielded containers in those areas. Thus, the entire CH Bay Storage Area could be filled with RH waste in shielded containers for up to 60 calendar days.

Response: Once the waste is placed in the shielded container and the surface dose rate is no greater than 200 millirem per hour, the waste is then handled as CH waste. The permit specifies management of waste in the CH waste related areas if the containers in those areas can be managed as CH waste. Using the shielded container, which reduces the dose rate at the surface, allows these containers to be managed in accordance with the permit in CH waste management areas and using CH waste-related management practices.

RH waste distinctions are determined at the generator site when the waste is placed in the original containers. There are specific containers and measurement devices that are used by the generator site before placement of the containers in any canister or shielded container. It is determined by generator shipping requirements. As stated by the Permittees, the RH waste in shielded containers will remain part of the RH waste inventory (the contents having been determined to be RH waste by the generator sites). However, the shielded container changes a "measurement" at the container surface that allows it to meet handling/disposal criteria associated with CH waste. EPA reviewed and approved use of the shielded on August 8, 2011 and stated "...the DOE can treat waste in shielded containers as contact handled (CH) waste for the purpose of facility operations".

6. Comment: The entire CH Bay Storage Area could be filled with RH waste in shielded containers for up to 60 calendar days. Similarly, the request also includes no changes regarding Table 3.1.2, so the entire PAU could be filled with RH waste in shielded containers and in canisters for up to 59 days, in some cases. Such storage would be in sharp contrast to the storage time limits for the other RH waste not in canisters. Permit Section 3.1.1.10.ii. The request asserts safety, but provides no analysis to show that the 60-day storage time would be protective of public health and the environment, as compared with shorter time limits. The request omits a DSA or other technical basis to demonstrate that such additional storage time beyond 25 calendar days for uncanistered RH waste is protective of public health and the environment. Thus, the request is incomplete.

Response: The request does not require a DSA or other technical basis to demonstrate that additional storage time beyond 25 calendar days for uncanistered RH waste is protective of public health and the environment since the waste meets the criteria for management in CH waste areas by exhibiting the appropriate dose rate at the container surface. Also, see response to Comment 5.

7. Comment: The request does not include the amounts of RH waste that would be managed at WIPP in shielded containers, nor the amount of RH waste that would be managed at WIPP in canisters, nor whether the amount of waste in shielded containers would reduce the number of RH canisters or would allow additional RH waste to be managed. Thus, the public and NMED cannot determine, among other things, the types and amounts of RH waste that would be managed in the CH Bay Storage Area, in the CH Bay Surge Storage Area, and in the Derived Waste Storage Area. The public and NMED cannot determine how much RH waste in shielded containers would be emplaced in the Underground Hazardous Waste Disposal Units (HWDUs) and how much RH waste in canisters would be in Panels 6, 7, and 8. The request omits a DSA or other technical basis to demonstrate that the requested storage and disposal is protective of public health and the environment. Therefore, the request is incomplete.

Response: Once the waste is in the shielded container and the surface dose rate is less than 200 millirem per hour, the waste can be managed as CH waste. The WIPP Waste Information System will track the volume of RH waste that will be emplaced in the HWDU. Also see response to Comment 5.

8. Comment: The public and NMED cannot determine how much remaining capacity would be available for CH waste in the Underground HWDUs if shielded containers were emplaced. The request Figure 3 (which is not proposed for inclusion in the permit) shows some shielded containers being “randomly placed.” However, the request does not describe how “random emplacement” would be accomplished and why shielded containers would be not emplaced if they are received in three three-packs at a time in a shipment with three HalfPACTs. That “normal” operation would result in three-packs being emplaced in locations other than “interstitial” spaces. The request omits a DSA or other technical basis to demonstrate that such “random emplacement” is protective of workers, public health, and the environment. The request includes no information about shielded containers emplaced randomly (or in any other configuration) would make the most efficient use of Underground HWDU capacity. Some CH

waste emplacement space will be displaced for RH waste in shielded containers, but there is no analysis of how much that might be.

Response: Table 4.1.1 of the permit specifies the volume of RH and CH waste that may be emplaced in each panel. The permit also specifies that there may not be more than 730 RH waste boreholes/panel. It does not mandate a specific percentage of RH to CH waste. The concerns regarding how much remaining capacity would be available for CH waste in the Underground HWDUs are not relevant to this permit modification. As long as the CH and RH waste limits specified in Tables 3.1.1, 3.1.2 and 4.1.1, and relevant provisions of the WIPP permit are complied with, the Permittee may manage the inventory of that waste as appropriate. The requirements for ensuring the table limits are unchanged because, as already discussed, the waste in the shielded containers will meet the CH waste criteria and may be managed in accordance with CH waste criteria.

9. Comment: The number (17,473 shielded containers) stated on page 3 of the request cannot be considered reliable, as it was done 5 years ago and the RH inventory has changed since that time. Moreover, that estimated amount does not account for dunnage containers, which could up to triple the amount of space taken by shielded containers, if each three-pack contains two dunnage containers. Using the estimated amount and adding dunnage containers, therefore, up to 18 percent of the floor space in panels 7-10 could be taken by shielded containers. There is no analysis provided about whether displacing up to that amount of the remaining CH waste in the WIPP Inventory could result in reduction of the permitted amounts of CH waste in panels 7 and 8. Therefore, the request is incomplete.

Response: It is the Permittees responsibility to manage container volumes appropriately and in compliance with the permit. The impact of dunnage on the number of shielded containers that could be emplaced is not a Department concern as long as permit requirements are met. There is no regulatory mandate or WIPP permit requirement to review emplacement of waste with regard to ratios of CH to RH waste other than those specified in Tables 3.1.1, 3.1.2 and 4.1.1. The same applies to dunnage.

10. Comment: Despite extensive discussion in SRIC's December 5, 2011 comments and questions at the June 7, 2012 pre-submittal meeting by SRIC and others, the permittees continue to not discuss a major need for the modification request, despite the requirement that the request explains why the modification is needed. 40 CFR §270.42(b)(1)(iii). That need is to address the permittees' management of WIPP over the past 13+ years in such a way that there is not enough available capacity in the Underground HWDUs for a significant portion of the RH waste in the WIPP Inventory. In Panels 1-5, there are 462 RH canisters emplaced, with a volume of 411.18 cubic meters (462 x 0.89). Panels 6, 7, and 8 have a total capacity of 2,060 canisters (600+730+730), or 1,834 cubic meters, according to Table 4.1.1. Since the permittees have stated that they intend to request a permit modification for panels 9 and 10 to be the same size as panels 1-8, the presumed RH capacity of those two panels would be 1,460 canisters or 1,300 cubic meters. Thus, the total available capacity for RH waste is 3,545.18 cubic meters (411.18+1,834+1,300). That is approximately half of the RH waste legal capacity of 7,079 cubic meters and approximately 2,000 cubic meters less than the amount of RH waste described in the 2011 WIPP Inventory (DOE/TRU-11-3425). (Attachment 1). The actual RH capacity is being

further limited by the fact that canister emplacement in Panel 6 will be less than half of the 600 cubic meter limit.

Response: See response to Comment 8. The Permit has established RH waste limits that shall not be exceeded.

11. Comment: The fact that there is no[t] enough space for the RH waste in the current WIPP inventory using the current configuration and permit requirements has not been contested by the permittees.¹ How shielded containers relate to meeting the need for capacity for RH waste in the Underground HWDUs must be addressed in an adequate permit modification request. That this major need and the above data are not even mentioned clearly show that the request is grossly incomplete.

Response: The Department disagrees that the need for additional RH waste capacity must be addressed in this permit modification request. As stated above, the concerns regarding how much remaining capacity would be available for CH waste in the Underground HWDUs are not relevant to the Permit or this permit modification. Also see response to Comment 8.

12. Comment: Page 4 of the request states:

RH TRU mixed waste emplaced at the WIPP facility in shielded containers will remain designated as RH TRU mixed waste in the WIPP Waste Information System (WWIS). The emplaced volume will be counted against the RH TRU mixed waste volume limits specified in the Permit.

Proposed revised Permit Section A1-1b(2) states that "Each 30-gallon inner container has a gross internal volume of 4.0 ft³ (0.11 m³)." Since each shipment could contain a single 3-pack of shielded containers, each shipment could have 0.33 cubic meters. Each RH canister holds 0.89 cubic meters. Thus, 100 cubic meters of RH waste in canisters can be handled in 113 shipments, whereas 100 cubic meters of RH waste in shielded containers is handled in a minimum of 304 3-packs, and could require that number of shipments. Therefore, use of shielded containers would substantially increase the number of packages containing RH waste being handled at WIPP, and substantially increase the number of containers arriving at the site and being stored in the PAU, WHB, and Underground HWDUs. However, those matters are not discussed in the request, and the request is inadequate and incomplete.

Response: As long as the RH mixed waste volume (as accounted for in the WIPP Waste Information System) does not exceed the permitted capacity specified in Table 4.1.1, the number of packages containing RH mixed waste does not concern the Department provided the Permittees remain in compliance with the permit volume limits and other relevant requirements. Inventory management of the permit-allowed CH and RH waste volumes is the responsibility of the Permittees and the concerns regarding how much remaining capacity would be available for

¹ The SRIC analysis, attachment 1, was provided to the permittees on January 26, 2012 (Attachment 2). They have never contested its accuracy, and have agreed with the factual statement that the current configuration does not provide enough actual capacity on more than one occasion.

CH waste in the Underground HWDUs are not relevant to this permit or this permit modification. Also see response to Comment 8.

13. Comment: Since the permit request provides for no prohibition on dunnage drums, one or two of the 30-gallon inner containers in the shielded container three-pack, the number of containers to be transported to and managed at WIPP could be two or three times the amounts provided in the preceding paragraph. The impact of dunnage drums on the number of shielded containers that could be emplaced, and the amount of space shielded containers could occupy in the PAU, WHB, and Underground SWDU is not discussed in the request. Thus, the amounts described in the request are not accurate and complete, and the request is incomplete.

Response: Dunnage drums are included at the discretion of the generator, are currently used, and have never been a significant concern. In addition, it is the Permittees responsibility to manage container volumes appropriately and in compliance with the permit. As long as the permit requirements are met the concern about the impact of dunnage on the number of shielded containers that could be emplaced is not an issue. As stated earlier, there is no regulatory mandate or WIPP permit requirements to review emplacement of waste with regard to ratios of CH to RH waste other than those specified in the permit. The same applies to dunnage. The flexibility provides the Permittees to arrange waste so that safety is assured.

14. Comment: Instead, the request asserts, but provides no technical analysis, (page 9) for the proposition:

Shielded containers are expected to reduce the time and personnel necessary for the packaging of RH TRU mixed waste at generator sites and the management, storage, and disposal of that waste at the WIPP facility.

Absent any analysis to support the assertion, NMED cannot accept the assertion as stating a need for the modification. Such a proposition could only be true if shielded containers eliminate some RH canisters, for if the same number of canisters are packaged at the generator sites and shipped to WIPP, there are no such reductions.

Response: There would not be a reduction in time and personnel by implementation of this modification assuming that all the allocated bore holes for RH waste would be utilized and additional RH waste would be emplaced using the shielded containers, thus increasing the amount of RH waste potentially managed in each room and the time necessary at the generator sites needed to manage RH waste.

The Department has approved the inclusion of many different CH containers, all designed to provide generator sites with flexibility; this modification provides the Permittees flexibility to allow the generator sites with regard to containers management so this modification is consistent with previously approved Class 2 modifications. Management flexibility is part of a reasonable justification for the modification, provided permit requirements are met. The Department accepts the Permittees statement as adequate.

15. Comment: The second “need” discussed in the request (page 9) is:

The Permittees believe the use of shielded containers will be beneficial because the shipment of RH TRU mixed waste in shielded containers in the HalfPACT may be more efficient than shipment in canisters using the RH 72-B Cask.

What the permittees “believe” is not adequate documentation, and it is not an adequate statement of need for the modification. Indeed, shielded containers appear not to be beneficial, especially since shielded containers will compete with use of the storage facilities for CH waste, thereby potentially slowing handling of CH waste. Shielded containers also will displace some actual CH waste capacity in the Underground HWDUs. Of course, use of shielded containers would be extremely detrimental if those containers result in accidents, releases or contamination of the PAU, CH Bay, or Underground HWDUs that disrupt other operations at WIPP. Moreover, there could only be more efficiency if the use of shielded containers reduces the number of RH canisters. But the request does not mention that possibility. Instead, what the Permittees apparently desire is to bring as many RH canisters as possible and additional RH waste in shielded containers. As already discussed, the reality is that shielded containers would increase the amount of RH waste being stored at and disposed of at WIPP.

Response: The Permittee states in Section 3 that the presiding need to accommodate anticipated usage by TRU waste generators. The sentences that follow the statement, the Permittee substantiates the statement with data. The Department considers the statement to be an adequate statement.

16. Comment: The request includes a new section in Attachment A1, A1-1d(4) Handling Waste in Shielded Containers, which states, among other things:

If a primary waste container is not in good condition, the Permittees will overpack the container, repair/patch the container in accordance with 49 CFR §173 and §178 (e.g., 49 CFR §173.28), or return the container to the generator.

The request also includes a new section in Part 3, 3.3.1.8. Shielded Container, which states, among other things:

Shielded containers may be overpacked into a standard waste box or [sic] ten drum overpack.

Those provisions are not valid and cannot be incorporated into the permit. First, a three-pack of shielded containers could not be overpacked into either a standard waste box (SWB) or a ten-drum overpack (TDOP). According to Table A1-2 of the request, a three-pack of shielded containers weighs 7,000 pounds. However, that same table shows that weight exceeds the maximum gross weights of a SWB or a TDOP. Thus, it would be a violation of the permit (and endanger public health and the environment) to allow a three-pack of shielded containers to be overpacked in the proposed containers. Second, a shielded container that is damaged such that in any location its surface dose exceeds 200 millirem per hour should not be overpacked in either a SWB or TDOP because those containers are solely for CH waste. Therefore, overpacking may not be possible for shielded containers. Repair and patching may not be possible for shielded containers. Returning a shielded container not in good condition to the generator site may not be possible, if the damage precludes the HalfPACT from being returned to the generator site. Thus, shielded containers that are not in good condition could be “stranded” at WIPP. The request is

incomplete in not fully analyzing those possibilities and describing how the situations could be addressed.

If the permittees intend to overpack a single 30-gallon inner container, the request must then discuss how such a situation would comply with the limitations on SWBs and TDOPs and another new proposed provision:

4.3.1.8. Shielded Container

Shielded containers are configured as a three-pack.

A single overpacked shielded container is not consistent with that proposed provision. Nor would the remaining two containers that were not overpacked be consistent with the proposed provision without a dunnage drum.

Response: The permit provides requirements for damaged containers on pages A1-5 and A1-16 that would apply to the shielded containers in the event of a spill or release of hazardous waste.

These comments do not express concern regarding co-detection monitoring or RCRA issues with respect to hazardous waste release or release detection. The commentor is correct that a three-pack of shielded containers could not be overpacked into either a standard waste box (SWB) or a ten-drum overpack (TDOP). The Permittees did not state that a three-pack would be overpacked. The language in the modification states that a shielded container may be overpacked. The Permit requirements shall be met by the Permittees with respect to weight considerations and other requirements if overpacking is necessary.

The Permittees have a standard operating procedure for CH waste containers that are damaged and/or contaminated. The Permittees have a technical procedure for container overpacking (WP 05 –WH1010) that will be modified to include the situation for overpacking a shielded container.

The revised permit includes requirements for container management and overpacking that the Permittees indicate will be adequate for management of shielded containers. Without evidence to the contrary, the Department accepts the permit (with revisions), with the understanding that the Permittees are responsible for ensuring compliance with the permit and accepting responsibility for violations of the permit.

In addition, under its authority, EPA approved the use of shielded containers on August 8, 2011. EPA found that DOE had fulfilled all documentation requirements set forth by the Agency and had demonstrated that use of shielded containers in the repository would not affect facility compliance with either 40 CFR 191 or 40 CFR 194.

17. Comment: Moreover, the Permit provides that SWBs and TDOPs are for CH waste. To allow shielded containers to be overpacked in those containers requires changes in various other provisions of the Permit, which have not been requested. For example, Permit Section 3.3.1.3, provides that TDOPs may be used to overpack “CH TRU mixed waste.” But a damaged shielded container could have a surface dose rate of 200 millirem per hour and could not then be considered to be CH TRU waste. Permit Section A1-1b(1) includes SWBs and TDOPs as CH

TRU mixed waste, so those provisions would have to be changed to allow overpacking of shielded containers, which are not CH TRU waste. But such a change would be inconsistent with Section A1-1b(2), which relates to RH TRU mixed waste containers, including shielded containers.

Response: The commentor is correct that there is a probability that damaged shielded container could have a surface dose rate of 200 millirem per hour or greater. The Permittees indicate that current management practices will be used and if these practices proved unsuccessful then the Permittees are responsible for subsequent consequences if the permit is violated. This is also true under the current permit for already approved containers and the permit provides procedures for damaged containers on pages A1-5 and A1-16.

18. Comment: Co-permittee U.S. Department of Energy (DOE) has stated another need for shielded containers. Its *Draft Environmental Impact Statement for the Disposal of Greater-Than-Class-C (GTCC) Low-Level Radioactive Waste and GTCC-Like Waste* (DOE/EIS-0375-D), February 2011, states:

Consistent with this planned change request, this EIS assumes that all activated metal waste and Other Waste - RH would be packaged in shielded containers that would be emplaced on the floor of the mined panel rooms in a manner similar to that used for the emplacement of CH waste. at 2-4.

That need is not discussed in the request, nor is there any discussion of whether, if the request were approved, any further modification in the shielded container provisions would be required. Therefore, the request is incomplete.

Response: The disposal of Greater-Than-Class-C is prohibited at WIPP by the Land Withdrawal Act and was not requested in this permit modification.

19. Comment: SRIC would also note that its comments on the *GTCC DEIS* strongly criticized the document for many legal and technical deficiencies.

Response: Comment noted. Also see response to Comment 18.

20. Comment: The request does not meet the requirements of the HWA and RCRA. 40 CFR §270.42(b)(7)(ii). The request includes numerous changes to the Permit in how RH waste is packaged (using the shielded container), stored in the PAU, opened in the CH Bay of the WHB, examined for contamination and damaged containers, placed on the facility pallet, and emplaced underground. As already noted above, aspects of handling of shielded containers are not completely and adequately described in the request, as required by the HWA and RCRA.

20 NMAC 4.1.900 (incorporating 40 CFR §270.42(b)(1)(iii)) requires that the request explain why the modification is needed. The request fails to discuss, let alone adequately explain, that a major need is to expand the available disposal capacity for RH waste in the Underground HWDUs (see discussion on pages 3-4 above). It is clearly a violation of the HWA and RCRA to not fully explain the need, and the request should be denied. Moreover, the discussion of need in the request is clearly inadequate or erroneous, and does not adequately explain the need.

As will be further discussed in #2 below, the request also does not meet the requirements for a class 2 modification request. Consequently, the request does not meet the requirements of RCRA and the HWA.

Response: The Department disagrees with this comment. The Department carefully reviewed the requirements of the HWA and RCRA and has determined that the modification adequately addresses handling of shielded containers.

21. Comment: It is clearly a violation of the HWA and RCRA to not fully explain the need, and the request should be denied. Moreover, the discussion of need in the request is clearly inadequate or erroneous, and does not adequately explain the need.

Response: 40 CFR §270.42(b)(1)(iii) states for Class 2 modifications, listed in Appendix I of this section, the permittee must submit a modification request to the Director that: "Explains why the modification is needed". The Department has reviewed the explanation and determined it to be adequate.

22. Comment: The request does not demonstrate that use of shielded containers will protect public health and the environment. 40 CFR §270.42(b)(7)(iii); §74-4-4 NMSA. The modification request does not discuss the characteristics of RH waste, including that it can have a surface dose rate of up to 1,000 Rem per hour and is highly dangerous to workers and the public. Because of the difficulties of safely permitting RH waste at WIPP, RH waste was not allowed until a Class 3 modification was approved on October 16, 2006, effective November 16, 2006.

Response: See response to Comment 5. The comment is erroneous as once the waste is placed in the shielded container the surface dose rate of the shielded container is no greater than 200 millirem per hour.

23. Comment: As discussed on pages 4-5 above, the use of shielded containers substantially increases the number of packages containing RH waste being handled at WIPP, substantially increases the number of containers arriving at the site and being stored in the PAU, WHB, and Underground HWDUs. In addition to significantly increasing the operations at the site, those increases pose dangers and increased risk to public health and the environment that are not discussed in the request. The request does not demonstrate that such an increase in the number of packages with RH waste would not endanger public health and the environment. On the contrary, increasing the actual number of RH waste packages could endanger public health and the environment by requiring additional handling of RH waste, thereby increasing exposures and the likelihood of accidents and releases.

Response: It is not known whether the actual number of RH waste-bearing containers would increase or decrease based on the modification because waste shipment is based on generator site management decisions. The number of actual individual containers that would be managed under the modification could increase, but provided permit conditions are met, the permit does

not restrict the number of "types" of containers that can be accepted once approved by the permit. Also see response to Comment 8.

24. Comment: The request (p. 5) states:

Upon arrival at the WIPP facility, the shielded containers will be processed as CH TRU mixed waste using CH TRU mixed waste handling equipment and operating procedures.

SRIC objects to shielded containers being handled identically to CH waste because RH waste and CH waste are significantly different. Shielded containers will have much higher surface dose rates (an order of magnitude or more) than most CH waste containers. The higher radiation dose in a container could generate gases at a higher rate. The higher radiation dose and different waste characteristics could also generate different gases than CH containers. The higher radiation doses can pose an increased risk of releases to the environment and threat of worker exposures. The permittees should have performed a time motion study for each waste handling step for shielded containers and calculated expected radiation doses and included such study in the request. Such a study could demonstrate that certain procedures should be adopted for shielded containers to minimize personnel exposures, both for workers directly handling shielded containers and for other workers in the PAU, CH Bay, and Underground HWDU. For example, additional worker protective equipment, such as a respirator, may be indicated for personnel doing radiological surveys required by Permit Attachment G3. Specifying additional minimum distances in aisle spaces and limiting the number of shielded containers in the PAU and CH Bay could minimize personnel exposures. Specifying emplacement locations and distances and limiting the number of shielded containers in the Underground HWDU could minimize personnel exposures. Thus, if shielded containers are to be used, revised procedures should be discussed and analyzed to determine the need for changed permit requirements. The permittees reluctance to discuss such requirements may be because they do not want to be subject to class 3 processes. Regardless, technical analysis of these matters should be required to protect public health and the environment.

Response: The Department disagrees with this comment. Shielded containers will have the same surface dose rate restrictions that CH waste containers have. Also see response to Comment 22.

25. Comment: It is not exceeding NMED's authority to recognize the radioactivity in the mixed waste, and addressing radioactivity does not regulate radionuclides. NMED, the permittees, and the public have recognized during the past 20 years since the original draft WIPP permit was submitted that radiation monitoring was an essential part of WIPP's operations and is appropriate and necessary under the HWA. Such monitoring and radiological survey is necessary, and has always been part of the Permit, under the principle of co-detection, to determine whether a potential release of hazardous constituents has occurred. The permittees also have recognized that NMED has authority to include, or not include, RH waste in the WIPP permit. Indeed, the original Permit issued on October 27, 1999 included a prohibition on RH waste. Permit Condition II.C.3.h. The class 3 permit modification, approved on October 16, 2006, removed the RH waste prohibition, but included other provisions that limited RH waste, which were supported by the permittees. Thus, there is both state and federal legal and regulatory authority

and historic practice that provide that NMED may not approve, or may put various limitations on, RH waste in shielded containers.

Response: EPA's website <http://www.epa.gov/osw/hazard/wastetypes/mixed.htm> clearly states "The U.S. Nuclear Regulatory Commission (NRC) and the US Department of Energy (DOE) regulate the radioactive portion of mixed waste under Atomic Energy Act (AEA) authority, while EPA regulates the hazardous waste portion of mixed waste under RCRA authority", but in the Land Withdrawal Act, Congress delegated regulatory authority to develop disposal criteria to US EPA (Office of Radiation and Indoor Air), and EPA thus certifies the WIPP facility with respect to compliance with these criteria which include radiological aspects of the waste. The Department is authorized by EPA for the RCRA Program, so the Department regulates the hazardous waste portion of the mixed waste. The Commentor is correct that radiologic monitoring under the principle of co-detection has been used and is still used but it is used as a tool, not as a policy allowing the regulation of the radioactivity.

EPA conducts facility operations inspections and it is these inspections where issues associated with radiologically focused RH waste management would be addressed. EPA certifies the radiological aspects of the waste and implements the inspection criteria of 40 CFR 194 during its own annual facility audits.

26. Comment: If NMED does not deny the request, it must process the request as a class 3 permit modification under 40 CFR §270.42(c). Pursuant to 20.NMAC 4.1.900 (incorporating 40 CFR §270.42(b)(6)(i)(C)), NMED may determine that the modification request must follow the procedures for a class 3 modification because there is substantial public concern about the proposed modification or the complex nature requires the more extensive procedures of class 3. Both requirements are met regarding shielded containers. There is substantial public concern about shielded containers, and there is very substantial public interest in WIPP and RH waste, as has been demonstrated repeatedly over the past 15 years with the WIPP permitting process in which hundreds of people have participated in addition to several organizations, including SRIC, that represent hundreds of other people.

Response: Per 40 CFR 270.42(b)(6)(i)(C)(1), it is the Director (Cabinet Secretary of the Environment Department) who makes the determination whether the public concern is significant as provided under the Hazardous Waste Act 74-4-4.2.I NMSA 1978, "...the secretary determines that there is significant public interest in the minor modification." Comment may be provided to the Secretary but it is the Secretary who makes the decision regarding the significance of the public interest.

27. Comment: The complex nature of using shielded containers also has been demonstrated by the above comments regarding matters that are not adequately discussed in the request. Handling RH waste at WIPP is demonstrably complex and was subject to class 3 modification procedures in 2005 and 2006. Shielded containers would continue the complexity of the existing RH operations and add new procedures. Thus, shielded containers would multiply the complexity of managing RH waste at WIPP.

Response: The Department disagrees that use of the shielded containers is complex. The modification makes language changes to accommodate shielded containers and not process changes to manage these containers.

28. Comment: Also, as noted above on page 3, the permittees previously requested that some RH waste not in canisters be handled at WIPP. As a result of the class 3 permit modification – HWB 06-01 (M) - Permit Section 3.1.1.10.ii was approved to allow RH waste not in canisters to be handled in 55-gallon drums in the Hot Cell. But shorter time limits were established on such RH waste, as compared with CH waste or RH waste in canisters. As part of the class 3 process, more detailed information would be provided as to what time limits should apply if shielded containers are included in the Permit. This complexity requires class 3 processes.

That class 3 modification for RH waste also imposed volume limits on the amounts of RH waste not in canisters that could be in the Hot Cell. Permit Section 3.1.1.11. As part of the class 3 process, more detailed information would be provided as to what volume limits should apply if shielded containers are included in the Permit. This complex situation also requires class 3 processes.

To incorporate shielded containers also requires additional changes to the permit that the permittees have not included in the request. The need for such additional changes also shows the complexity of the request.

Response: See response to Comment 27.

29. Comment: Moreover, on October 24, 2011, NMED Secretary David Martin made a determination that the Los Alamos National Laboratory (LANL) class 2 permit modification request for TA-63 Transuranic Waste Facility would be processed as a class 3 modification (which is ongoing) because of a “long history of substantial public concern regarding the management of hazardous waste at LANL.” (Page 2). The NMED Secretary also determined that the modification “would require complex changes to the facility and its operations.” (Page 2).

Response: Secretary Martin’s decision to process the LANL Hazardous Waste Facility permit modification request as a Class 3 modification was based on different circumstances and cannot be equated to this modification.

30. Comment: There is an even longer history of substantial public concern regarding the management of hazardous waste at WIPP, dating back at least 20 years. That public concern has been manifested repeatedly in the original permitting process, including the public hearing that lasted 19 days in 1999; and in public involvement in numerous permit modification requests over the past 13 years, including the request that allowed RH waste to be managed at WIPP. As already discussed, the use of shielded containers would require complex changes to many aspects of RH management at WIPP.

Response: See response to Comment 27.

31. Comment: Additionally, other regulations require shielded containers to be a class 3 modification. 40 CFR §270.42, Appendix I.F.1.a requires that a modification “resulting in greater than 25% increase in the facility’s container storage capacity...” is a class 3 modification. Also noted above, there are no limits on the amount of RH waste that could be stored in shielded containers in the PAU and CH Waste Bay, so the amount of RH waste allowed in those areas is certainly more than a 25% increase and the amount of RH waste in the WHB can increase by more than 25%.

Response: See response to Comment 8. The amount of waste in the Waste Handling Building (WHB) will not increase and therefore 40 CFR §270.42, Appendix I.F.1.a does not apply.

32. Comment: Regarding the Underground HWDUs, the request (p. 3) states:

According to Crawford, et.al., 2007¹, 1,922 m³ of RH TRU mixed waste could potentially qualify for shipment in a shielded container.

The existing permitted Underground HWDU capacity for RH waste is 2,635 m³. Table 4.1.1. The amount of RH waste that could potentially be in shielded containers is much more than a 25 percent increase in that storage capacity. Moreover, as described on page 4 and in Attachment 1, even assuming that panels 9 and 10 would be permitted for the maximum number of RH canisters, the capacity would be about 3,545 m³. The amount of RH waste that could potentially be in shielded containers is much greater than a 25 percent increase of that RH container storage capacity.

Response: The cited RH waste disposal capacity limitations apply to both RH waste in canisters and RH waste in shielded containers. Based on site experience through audits, the Department has observed that estimated waste volume and actual waste volume for a given waste stream can differ substantially based on any number of factors. Therefore, the assumption that RH waste capacity will be exceeded based on inventory estimates may or may not prove true, and cannot be a basis for modification denial or elevation.

33. Comment: 40 CFR 270.42, Appendix I.F.3.a requires that modifications “[t]hat require additional or different management practices than those authorized in the permit” are class 3. The purpose of shielded containers is to require additional and different management practices for RH waste than those in the Permit. As also discussed on page 8, there should be some different management practices for shielded containers as compared with CH containers. Here again, shielded containers require a class 3 modification.

Thus, based on the HWA and RCRA regulations and because of current NMED practices, shielded containers must be processed as a class 3 modification, if the modification request is not denied.

Response: The Department reviewed management practices with regard to the use of shielded containers and determined that management practices will not change beyond those presented in the modification. This is because shielded containers will be managed in the same manner as the already permitted CH containers.

34. Comment: The request on page 5 states:

In order to meet the stacking stability requirements of Permit Attachment A2, Section A2-2b, shielded containers will not be stacked more than two high, and no other waste assemblies or backfill MgO sacks will be placed on top of three-pack assemblies of shielded containers.

However, those stacking requirements are not proposed for inclusion as permit language.

Permit Section A2-1 provides:

The CH TRU mixed waste containers may be stacked up to three high across the width of the room.

Since the request includes no change in that provision and states that shielded containers would be handled as CH waste, other CH waste containers could be placed on top of a 3-pack assembly or a 3-pack assembly could be placed on top of CH TRU mixed waste containers. The request does not demonstrate that such stacking would protect workers or public health and the environment, and indeed the request states that such stacking is not appropriate. SRIC objects to allowing 3-packs of shielded containers to be stacked on top of CH TRU waste containers or to CH TRU waste containers being stacked on top of shielded containers. The Permit should include specific provisions related to handling and stacking of shielded containers. Again, the request does not include a DSA or other technical analysis that stacking of shielded containers in like manner as CH waste is protective of public health and the environment.

Response: The permit language from Section A2-1 allows CH TRU mixed waste containers to be stacked up to three high by stating that waste may be stacked up to three high. It does not require that they be stacked up to three high. It is important to understand that the language as written, allows the Permittees to develop procedures to determine a stacking height as appropriate depending upon certain containers or combination of containers.

35. Comment: The request proposes to revise Permit Part 4, Table 4.1.1 to remove the container equivalent column. SRIC strongly objects to such a revision. The limit on the number of RH TRU canisters, which is indicated in the column, was supported by public comment and technical testimony in the class 3 modification process that added RH waste to the Permit. The information proposed to be stricken is accurate and would remain so if shielded containers were approved. In the request, the permittees have provided no adequate technical basis to remove the column and the limits. The request states that “this column is not used to meet any compliance requirement.” (Page 6). There are many parts of the Permit that do not state a “compliance requirement,” so that is not a basis to remove the column.

Further, Permit Part 4, Table 4.1.1 as included in the request is not consistent with the current Permit regarding Panel 5 Final Waste Volume, so it could not be included in the Permit.

Response: Permit conditions should be based on regulatory requirements and be enforceable. Redundant information that provides no additional requirements should be avoided. The Department has determined that the container equivalent column merely repeats the maximum capacity requirement and is not necessary or appropriate. It is agreed that the modification Table

4.1.1 does not show the final waste volume of 15,926.93m³ CH waste and 153.37m³ RH waste that is entered in the existing permit. The issued permit will have these entered.

36. Comment: The permittees included in the request Appendix D “Why the Shielded Container Modification is not a Class 3 Modification.” At best, the permittees discussion is incomplete. For example, in Part 1 there is no mention that Permit Section 3.3.1 includes seven acceptable storage containers, not solely the four containers included on page D-5 (and pages 8-9 of the request). Thus, three of the permitted storage containers were not included as class 2 modifications. 55-gallon drums and SWBs were part of the original permit application and approved in the 1999 Permit. The RH TRU canister was approved as part of the class 3 modification to permit RH waste.

In the Part 1 discussion, there is no mention of the requirement that increasing facility container storage capacity by more than 25 percent is a class 3 modification. There also is no mention that 40 CFR 270.42(d)(1) specifically allows the permittee to submit a class 3 request even if not sure of the proper classification.

Response: This Appendix was a supplement to the modification and does not have a requirement. The examples provided were adequate as examples.

37. Comment: There is no mention of the requirement that increasing facility container storage capacity by more than 25 percent is a class 3 modification. There also is no mention that 40 CFR 270.42(d)(1) specifically allows the permittee to submit a class 3 request even if not sure of the proper classification.

Response: As previously explained the facility container storage capacity will not be increasing. Also see response to Comment 31.

38. Comment: There also is no mention of the HWA requirement for a public hearing “on a minor permit modification if the secretary determines that there is significant public interest in the minor modification.” Section 74-4-4.2.I NMSA 1978. The permittees should have saved themselves, NMED, and the public the time, resources, and inconvenience of twice debating the classification by submitting the request as a class 3 modification.

As regards the Part 2 discussion of stakeholders concerns, it does not fully reflect SRIC’s comments of December 5, 2011 or those at the June 7, 2012 pre-submittal meeting. Moreover, the discussion does not reflect the WIPP permit record, which clearly shows substantial public concern regarding the dangers of RH waste and impacts on public health and the environment and that permit requirements regarding RH waste have always included public hearings. There was substantial public concern about RH waste, and support for the RH waste prohibition, during the several year process for issuance of the Permit. There was very substantial public concern about the RH waste permit modification, which was submitted as a class 3 modification request. There was significant public interest in the 2011 shielded containers request, and there is even more significant public concern, and more people commenting, on the current request.

Response: Public concern regarding RH waste has been expressed at both EPA and the Department hearings and meetings. However, this modification regards container management and the Department has determined that the modification does not constitute a significant change to warrant a Class 3 modification determination and public hearing. The addition of RH waste through a Class 3 permit modification was bundled with other permit changes required by Congress through Section 311 of Pub. L. 108-137. While the public is clearly concerned with RH waste as a whole, the Department reviewed this modification in the context of the modification being sought and agrees that a Class 2 modification is the appropriate class based on the information reviewed.

39. Comment: As described in the request, shielded container three-pack assemblies include items not in CH waste containers. Figure 2 of the request includes a “stiffener,” upper and lower “axial dunnage,” “radial dunnage,” and “pallet,” which is also described as a “triangular pallet” (page 5). Figure 2 also shows a “bottom slipsheet.” Page 5 of the request also mentions a “plastic reinforcing plate.” None of those items are described or incorporated into the Permit, and they may need to be. At a minimum, the request should describe why they should not be incorporated into the Permit.

Slipsheets are typically used with CH waste and are discussed in Permit Section A2-2a(1). The request should clarify whether the shielded container “bottom slipsheet” serves the same purpose as it does for CH waste and whether the “bottom slipsheet” can be used with the forklifts with a push-pull attachment. Page 5 of the request states: “The three-pack assembly will be placed singly on the floor using the slipsheet.” However, the request in other places states that shielded containers may also be stacked, so that narrative description is not complete and accurate as regards where the assembly will be emplaced or as to how the slipsheet is used for stacking.

Response: Items such as a “stiffener,” “axial dunnage,” “radial dunnage,” “pallet,” “triangular pallet” or “bottom slipsheet” are not included in the permit. It is inappropriate to regulate such items which are not part of the waste. The Permittee must be allowed to use such items as necessary and with flexibility so that workers can be protected.

40. Comment: The proposed changes to Permit Section E-1b(1) are not appropriate. RH waste in shielded containers is to be counted toward the RH waste volume limits. The inspection requirements for shielded containers should be separately described in this section, rather than changing the container inspection requirements for CH and RH waste. Changes proposed for “off-site waste” should not be approved. “Off-site” is the term used in the Permit to distinguish it from “on-site” derived waste. There should be no derived RH waste at WIPP.

Response: The changes proposed do not alter the fact that the waste in the shielded containers will be counted toward the RH waste volume limits. Permit section 2.2.1 explains that the Permittees may receive off-site TRU mixed waste in compliance with the requirements and conditions specified in the Permit. The Permittees may only receive TRU mixed waste from those sites which comply with the applicable requirements of the Waste Analysis Plan (WAP) specified in Permit Section 2.3.1 and Permit Attachment C, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.13(a)) and as verified through the Audit and Surveillance Program specified in Permit Section 2.3.2.

Permit section 2.3.5 explains derived waste as any WIPP-generated waste derived from adequately characterized, WIPP-accepted TRU mixed waste generated at an off-site facility. Therefore even under the current permit, there is a possibility of RH derived waste.

41. Comment: SRIC requests a public hearing on any shielded containers modification request. RH waste and shielded containers are a matter of significant interest and concern to SRIC and the public. As demonstrated by these comments, the use of shielded containers would be complex, and stringent measures are required to protect public health and the environment. The complexity of the matters and the incompleteness of the request require a public hearing so that the matters may be adequately examined and questions answered, and the required determinations regarding protecting public health and the environment can be adequately made. Therefore, any permit modification to allow use of shielded containers is a major modification, and SRIC requests a public hearing on the current, or any other, shielded containers permit modification request.

Response: The Department has determined that the shielded container modification falls within the Class 2 designation in 40 CFR 270.42(b) Appendix 1, Item F.3.b. Class 2 modifications provide for public comment by mandating a permit submittal meeting and a sixty day public comments period. In addition to these requirements, the Permittees held a pre-submittal meeting and additional public meetings. The Department has addressed the commentors concerns in this document and does not agree that there are remaining issues that have not been adequately examined.

42. Comment: There is a concern that the true reason for the Department of Energy's (DOE's) need for this PMR has not been given. It is stated that, "These changes do not reduce the ability of the Permittees to provide continued protection to human health and the environment." (Pg. 1) It is unclear if these changes will increase the ability of the Permittees to provide continued protection. Please request that the Permittees explain how the use of shielded containers will increase safety.

Response: The Department accepts the given reason for the modification. The Permittee's do not claim an increase in safety.

43. Comment: Page 9 states, "*The Permittees believe the use of shielded containers will be beneficial because the shipment of RH TRU mixed waste in shielded containers in the HalfPACT may be more efficient than shipment in canisters using the RH 72-B Cask.*" Believe? May be? What, if any, are the exact benefits?

Response: The RCRA regulations do not require the Permittee to state the benefits. The Permittees are required to provide an explanation for the need for the change as required by 40 CFR 270.42(b)(1)(iii). The Permittees statement of "believe" is also reasonable for the situation as until fully implemented the analysis cannot be verified. In the sentences that follow the statement, the Permittees go on to substantiate the statement with data. See response to Comment 21.

44. Comment: Page 9 states, “Shielded containers are expected to reduce the time and personnel necessary for the packaging of RH TRU mixed waste at generator sites and the management, storage, and disposal of that waste at the WIPP facility.” Are expected? What are the exact management, storage, and disposal time and personnel reductions?

Response: This is not relevant to the Permit. The Permit does not regulate activities at the generator sites.

45. Comment: If this PMR is a money-saving measure, please have the Permittees state how much will be returned to the taxpayers annually with the use of shielded containers. We have all already spent much time and effort on this issue.

Response: Fiscal aspects are not addressed in the Permit.

46. Comment: The September 2011 PMR stated, “The use of the shielded containers will enable DOE to significantly increase the efficiency of transportation and disposal operations for RH TRU waste at the Waste Isolation Pilot Plant (WIPP).” This statement is missing from the current July 2012 revision. Has it been decided that shielded containers will not increase the efficiency was operations?

Response: Transportation and efficiency are not regulated by the Permit. The Permittee stated the presiding need for the modification to be to accommodate anticipated usage by TRU waste generators. The Department considers this to be a valid reason.

47. Comment: In the September 2011 PMR, DOE claimed “negligible effect on long-term performance” of the shielded containers. This claim is no longer made. What are the effects of shielded containers on long-term performance?

Response: It appears the commenter is concerned about “long-term” meaning beyond the RCRA post-closure period. If so, then this comment falls outside the Department’s authority and US DOE and US EPA are the appropriate regulatory agency to comment.

48. Comment: No mention is given of any thermal effects of remote-handled waste stored in shielded containers. The thermal effects of remote-handled waste stored in shielded containers on the waste matrix at WIPP must be studied.

Response: The thermal distribution discussed during the RH TRU waste permit modification included an explanation of thermal loading and how the volume of waste in a waste Panel meets those criteria. This modification does not alter the amount of RH TRU waste in a Panel.

49. Comment: It seems that we have been getting less information on shielded containers, not more. What we do know is that much of the planned RH space in the walls of underground rooms is not available because DOE brought contact handled waste to WIPP while RH waste was prohibited. Available RH space for emplacement in some of the panels was lost. And, from the time RH waste was permitted, DOE still has not shipped RH waste at a rate sufficient to use the available capacity. Is this PMR an effort

to catch up on lost opportunities to emplace RH in WIPP? In this Permit Modification Request, DOE must state a valid reason to use shielded containers.

Response: The Permittee stated the presiding need for the modification to accommodate anticipated usage by TRU waste generators. The Department considers this to be a valid reason.

The commentor's concern regarding CH vs. RH waste inventory and what capacity there will be for each does fall within NMED's authority. Table 4.1.1 in the Permit specifies the volume of RH and CH waste that may be emplaced in each panel. The Land Withdrawal Act, implemented through EPA's certification criteria, also specifies that:

- 1) No more than 5 percent by volume of the remote-handled transuranic waste received at WIPP may have a surface dose rate in excess of 100 rems per hour,
- 2) remote-handled transuranic waste received at WIPP shall not exceed 23 curies per liter maximum activity level (averaged over the volume of the canister),
- 3) the total curies of the remote-handled transuranic waste received at WIPP shall not exceed 5,100,000 curies, and
- 4) the total capacity of WIPP by volume is 6.2 million cubic feet of transuranic waste.

There are no other federal or state requirements that mandate that any specific percentage of CH to RH waste be emplaced. Therefore, the concerns regarding how much remaining capacity would be available for CH waste in the Underground HWDUs are not relevant to this permit, as it is the Permittees responsibility to ensure that Permit, LWA and EPA criteria are met. As long as the CH and RH waste limits specified in Tables 3.1.1 and 4.1.1 of the WIPP permit are complied with (as well as other relevant permit requirements) the Permittee may manage the inventory of that waste in any combination necessary.

50. Comment: This shielded containers request is NOT a proper Class 2 permit modification. We request a public hearing and that the proposal for shielded containers be treated as a Class 3 modification so that there would be the opportunity for more extensive public comment and a hearing.

Response: See response to comment 26.

51. Comment: Given the inherent increased dangers of RH waste, the need for much more information, the complexity of the changes proposed, and the public concern about RH waste, shielded containers require a Class 3 modification request. This proposal is of more than sufficient significance that NMED should now designate DOE's request as a Class 3 modification and treat it as such.

Response: See response to comments 26 and 27

52. Comment: Contrary to what DOE says, shielded containers cannot be managed in a manner consistent with management of CH waste. This language must be changed in the PMR. There is the simple matter of the radically increased weight involved with shielded

containers, which logically would call for using different handling procedures than CH wastes.

Response: The weight limitations for management of containers are the same and are dictated by the capacity of the equipment. This is not changed for shielded containers.

53. Comment: The amount of RH waste allowed in the Waste Handling Building would greatly increase. The modification request includes no limits on the number of RH shielded containers that could be in the CH Bay, in effect substantially increasing the amount of RH waste allowed. The exact limits must be stated in the PMR.

Response: See response to Comment 5.

54. Comment: I live in Taos County, and though it is not in the fifty mile radius of a foreseeable disaster, the winds do blow this way. I remember the smell of the fires at Los Alamos a few summers ago, and how the smoke filled the skies. I don't believe there is anything safe about storing the waste, about the safety of shielded containers, or about the transportation of the plutonium rods or bits that would be part of all this. Though our nation needs a solution to nuclear waste, placing it in this pristine environment at the expense of poor and minority communities is wrong. We must all share the burden equally. Those who use the power should be expected to handle their share of the waste, so please don't let more waste come to New Mexico. Perhaps the first peoples walked on these lands in New Mexico some 12,000 years ago. A nuclear accident is not impossible with terrorism threats, poor management at LANL, and a lack of dedicated resources. Our world's history could be obliterated as well as the current occupants of the beautiful southwest. I pay my taxes, and support our constitution. Where does it say, the few should pay for the many? I urge you and this committee to act in accordance with the ordinary people who live here, who have made this area home. I will continue to educate myself and my family and my friends here in Taos [C]ounty, and around the world about the plans and activities at Area 55 and in New Mexico, generally. The world is with us.

Response: Comment noted.

55. Comment: As a life-long resident of New Mexico, I fully support the DOE/CBFO and Washington TRU Solutions LLC request to utilize a shielded container for the packaging and safe handling of RH waste. This request will not only expedite the ability of DOE/CBFO and its M&O contractor to handle and dispose of remote handled (RH) waste, but it will also further protect the WIPP workforce by reducing the potential for exposure to radiation. In my opinion, this is a "no-brainer" decision in that it reduces the amount of time (and money) spent on handling waste by speeding up the process and it promotes a safer work environment for the waste handlers and radiological technicians.

Response: Comment noted.

56. Comment: I fully support the proposed modification. Using small shielded containers with simplified emplacement underground will reduce worker industrial safety exposure to the handling of remote handled TRU waste compared to the currently approved wall emplacement

methods in the permit. Using small shielded containers that are never opened and minimally handled will also reduce worker radiological exposure. These industrial and radiological safety enhancements are sufficient to approve the proposed modification.

Response: Comment noted.

57. Comment: I fully support the proposed permit modification proceeding as a Class 2 Modification. The proposed changes are simple and do not affect the total RH TRU waste volumes limited in the permit. Prudently expediting this modification will hasten the safety benefits derived from its approval.

Response: Comment noted.

58. Comment: Nuclear Watch New Mexico states: The amount of RH waste shipped to WIPP, stored above ground, and disposed underground would substantially increase. This is simply not true. The permittees are not asking for a change in storage capacity or volume limit. In fact, a prior argument made by some of Nuclear Watch's affiliates is that WIPP is falling behind in its RH disposal, which shielded containers could help remedy.

Response: Comment noted.

59. Comment: Nuclear Watch New Mexico states: Contrary to what DOE says, shielded containers cannot be handled the same as CH waste. Shielded containers that are damaged or leaking might not be able to be placed in over-pack containers without exposing workers and the public. "Might not be able" is interestingly speculative language, and the DOE and its contractors explained how overpack containers would be used during the recent hearings. I believe DOE has adequately explained and demonstrated its ability to handle shielded containers.

Response: Comment noted.

60. Comment: Nuclear Watch New Mexico states: DOE also plans to use shielded containers for hotter commercial waste, expanding WIPP beyond its legal limit of 175,564 cubic meters of TRU waste. I don't know what other potential uses of shielded containers the DOE might be considering for the future, but that's an entirely different issue not related to this permit modification. Shielded containers are a tool designed to increase efficiency. Because the waste in the shielded containers will meet all the criteria in the permit, then this argument is like saying we should not allow this waste stream at WIPP because WIPP might want to dispose of more of this waste stream in the future.

Response: Comment noted.

61. Comment: Nuclear Watch New Mexico states: Shielded containers have never been used. NMED denied a similar request on January 31, 2012 because of public opposition and the inadequacies of the request. Shielded containers have never been used because the permit modification has yet to be approved. That's the entire point to the permit modification request,

and it is a logical fallacy for justifying any opposition. This argument is basically saying we should oppose their use because we oppose their use.

Response: Comment noted.

62. Comment: The arguments currently presented by Nuclear Watch New Mexico in opposition to shielded containers have a feel to them of being obligatory placeholders, made only because the group feels compelled to make some sort of argument in opposition to anything at WIPP. I'd like to also note that the use shielded containers would actually decrease the number of RH trucks transporting waste to WIPP, a point that seems lost on its detractors. In fact, due to the increased transportation and waste handling efficiency, shielded containers will actually lessen the already very small risks to the citizens of New Mexico from WIPP operations, thereby making the Nuclear Watch New Mexico opposition actually opposite to the organization's stated goals.

Response: Comment noted.

3 Comment: I believe the Department of Energy and its contractors have done an excellent job addressing the technical questions asked by the NMED earlier this year and encourage your organization to approve this permit modification request.

Response: Comment noted.

64. Comment (Summarized): The Permittees are proposing to specifically identify and clarify that the shielded container being requested will be an authorized disposal container at the WIPP. The Permittees are providing proposed revised text for consideration for inclusion in proposed Part 3, Section 3.3.1.8 Shielded Container. The proposed text references previously proposed figure A1-37. Figure A1-37 is based on the specific drawing of the shielded container that was approved by the NRD.

Response: This proposed change will be made to the Permit. Condition 3.3.1.8 will have additional language that reads: "Shielded Container" refers to the container depicted in Figure A1-37.

65. Comment: I have always been opposed to transport of radioactive waste in NM!! First of all, as a teacher who was travelling in the summer months and was held up in Gallup, NM for hours, (which was when a truck carrying only inflammable materials overturned near a school). I helped the teachers who were frantic to get the children away from the accident and safely home to their parents. I helped to interview frantic parents and teachers, looking for children who had gone to homes of friends or attempted to WALK home. It was chaos – and THAT wasn't even nuclear. Your conceptions of safety are NOT adequate and will never be with nuclear items. I've gone to the meetings and protested. I have written letters to all sorts of significant people and I've sat in a "SIT-IN" about the WIPP site. You ignore us and do as you please, thinking your latest small concessions are adequate for safety – but you have never been in a real emergency. I was on Mtn. Rescue in Albuquerque for years. I helped relocate people to

Albuquerque from New Orleans, etc. Adding nuclear danger to the equations is IMPOSSIBLE!
WAKE UP and LIVE!!

Response: Comments noted.