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*Hazardous Waste Bureau*
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***BILL RICHARDSON***
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*SECRETARY*

***DERRITH WATCHMAN-MOORE***
*DEPUTY SECRETARY*

March 15, 2004

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

Dear Concerned Citizen:

On September 11, 2003, the New Mexico Environment Department (**NMED**) took final administrative action on several Class 2 permit modification requests (**PMRs**) to the Waste Isolation Pilot Plant (**WIPP**) Hazardous Waste Facility Permit. The Department of Energy Carlsbad Field Office and Washington TRU Solutions LLC (**the Permittees**) submitted the PMRs to the Hazardous Waste Bureau in the following documents:

- Request for Class 2 Permit Modification (Combined PMR), Letter Dated 5/13/03, Rec'd 5/14/03
- Request for Class 2 Permit Modification (PCBs), Letter Dated 5/21/03, Rec'd 5/23/03

The Permittees identified six (6) separate items in their PMR submittals:

1. Packaging-Specific Drum Age Criteria (**DAC**) for New Approved Waste Containers
2. Removal of Underground Booster Fans
3. LANL Sealed Sources Waste Streams Headspace Gas Sampling and Analysis Requirements
4. Remove Formaldehyde as a Required Analytical Parameter for LANL
5. Addition of New Hazardous Waste Numbers
6. Revise Polychlorinated Biphenyl (**PCB**) Prohibition

The PMRs listed above were evaluated and processed by NMED in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)). They were subject to a sixty (60) day public comment period, which ran from May 16 through July 14, 2003 for the Combined PMR and from May 28 through July 28, 2003 for the PCB PMR. NMED

received written comments from a total of twelve individuals and organizations during the public comment period on the Combined PMR and from a total of ten individuals and organizations during the public comment period on the PCB PMR. You are receiving this mailing because you provided public comment on one or more items in these modifications.

On September 11, 2003, NMED approved Items 2, 4, 5, and 6 as submitted and denied Items and 3 for the reasons specified in the attached response to comments. The revised permit issued on that date also included all Class 1 permit modifications submitted between February and June 2003 with the exception of a February 27, 2003 Class 1* PMR for Change of Operation, which required further agency review prior to approval.

Attachment 1 lists all commentors; Attachment 2 incorporates NMED's specific response to all comments; and Attachment 3 incorporates NMED's general responses to summarized comments. Further information on this administrative action may be found on the NMED WIPP Information Page at <http://www.nmenv.state.nm.us/wipp/>.

Thank you for your participation by submitting comments on these permit modification requests. Please contact Steve Zappe at (505) 428-2517 or <steve_zappe@nmenv.state.nm.us> if you have further questions or need additional information.

Sincerely,

John E. Kieling
Manager
Permits Management Program

Attachments

cc: Sandra Martin, HWB
Chuck Noble, NMED OGC
Steve Zappe, HWB
R. Paul Detwiler, DOE/CBFO
Steven Warren, Washington TRU Solutions LLC

Attachment 1
Commentor List

## Comments Received by NMED on WIPP Permit Modifications
## Modifications Submitted to NMED on:
## May 14, 2003
## Combined Class 2 PMR

| | | Receipt Date | | Author | Organization/Citizen | # Pages | Mod Request # G | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 | 22-May-03 | | Cindy Hong | Citizen | 2 | 1 | 1 | | 1 | | |
| B | 2 | 28-May-03 | * | Dana-Renee Lee | Citizen | 1 | 1 | 1 | | 1 | | |
| C | 3 | 07-Jul-03 | * | Tony Stewart | Citizen | 1 | 1 | 1 | | 1 | | |
| D | 4 | 08-Jul-03 | | Dorelen Bunting | Citizen | 1 | | 1 | | 1 | | |
| E | 5 | 09-Jul-03 | * | Matthew Silva | EEG | 16 | | 1 | 1 | 1 | 1 | 1 |
| F | 6 | 10-Jul-03 | | Marina Day | Citizen | 1 | | | | | | 1 |
| G | 7 | 14-Jul-03 | * | Triay/Warren | CBFO/WTS | 78 | | 1 | 1 | 1 | 1 | 1 |
| H | 8 | 14-Jul-03 | * | Don Hancock | SRIC | 7 | 1 | 1 | 1 | 1 | 1 | 1 |
| I | 9 | 14-Jul-03 | * | Lindsay Lovejoy | NMAGO | 19 | | 1 | 1 | 1 | 1 | 1 |
| J | 10 | 15-Jul-03 | | Janet Greenwald | CARD | 1 | | 1 | | 1 | | 1 |
| K | 11 | 15-Jul-03 | * | Penelope McMullen | Sisters of Loretto | 5 | 1 | 1 | 1 | 1 | 1 | 1 |
| L | 12 | 15-Jul-03 | * | Geoff Petrie | Nuclear Watch New Mexico | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| | | | | 12 commentors | Total Pages = | 136 | 6 | 11 | 6 | 11 | 6 | 8 |

G General comment
1 DAC
2 Booster Fans
3 LANL Sealed Sources
4 Formaldehyde
5 New Haz Waste Numbers

* Denotes electronic comment submitted

## Comments Received by NMED on WIPP Permit Modifications
## Modifications Submitted to NMED on:
## May 23, 2003
## Remove PCB Prohibition

| | | Receipt Date | | Author | Organization/Citizen | # Pages |
|---|---|---|---|---|---|---|
| A | 1 | 04-Jun-03 | | Deirdre Lennihan | Citizen | 2 |
| B | 2 | 27-Jun-03 | | K.F. Wylie | Citizen | 1 |
| C | 3 | 02-Jul-03 | | Fred Woody | Carlsbad Dept of Development | 1 |
| D | 4 | 07-Jul-03 | | Robert C. Murray II | Citizen | 1 |
| E | 5 | 14-Jul-03 | | John Heaton | NM Representative | 2 |
| F | 6 | 21-Jul-03 | * | Matthew Silva | EEG | 4 |
| G | 7 | 24-Jul-03 | | Marina Day | Citizen | 3 |
| H | 8 | 28-Jul-03 | * | Lindsay Lovejoy | NMAGO | 3 |
| I | 9 | 28-Jul-03 | * | Don Hancock | SRIC | 4 |
| J | 10 | 28-Jul-03 | * | Inés Triay/Steven Warren | CBFO/WTS | 7 |
| | | | | 10 commentors | Total Pages = | 28 |

* Denotes electronic comment submitted

Attachment 2
Specific Response to Comments

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 1.1 | Cindy Hong/ Citizen | DAC | A | The previous DAC modification was implemented as a Class 3 permit modification. This modification should be a Class 3 modification. | In the previous DAC Class 3 permit modification hearing, the viability of the VDRUM software model to accurately predict DAC values for different size volumes and container configurations was affirmed. NMED has concluded that the modification was appropriately identified as a Class 2 Modification request. |
| 1.2 | Cindy Hong/ Citizen | DAC | A | Experiments using the new container sizes should be performed and the Permittees must provide proof that characterization equipment and procedures designed for 55 gallon drums produce accurate results for the larger containers. | Because the viability of the VDRUM model was affirmed in the previous hearing, obtaining additional experimental test data for the TDOP, 85 gallon drum, and 100 gallon drum would not be necessary. However, obtaining experimental test data for drums containing compacted drums may be appropriate in the event that the Permittees cannot adequately demonstrate that the compacted drums behave as a constant VOC source.<br><br>The nature of the waste packaging in a compacted drum has not been adequately explained to date by the Permittees, in that the Permittees' assumptions that the exposed poly liners of all compacted drums in a larger waste container are in equilibrium with each other is not conservative or appropriate; and the Permittees have not demonstrated that all layers of confinement will be adequately breached. Therefore, the Permittees must provide additional information or justification for their proposed DAC values for containers containing compacted 55 gallon drums. |
| 2.1 | Dana-Renee Lee/ Citizen | DAC | B | These comments are a duplicate of those summarized in Comments 1.1 and 1.2. | See the response to Comments 1.1 and 1.2. |
| 3.1 | Tony Stewart/ Citizen | DAC | C | These comments are a duplicate of those summarized in Comments 1.1 and 1.2. | See the response to Comments 1.1 and 1.2. |
| 4.1 | Dorelen Bunting/Citizen | DAC | D | The DAC PMR is not accurate or complete and should not be a Class 2 modification. | See the responses to Comments 1.1 and 1.2. |
| 5.1 | Matthew Silva/ EEG | DAC | E | Direct loaded 85 gallon containers are not currently acceptable for transportation. NMED may wish to enquire about the status of their approval. | Although the transportation status of waste containers is of interest to NMED, the permit does not address the applicability of waste containers for transportation. The permit regulates containers only to ensure that they are appropriate for storage and disposal activities at the WIPP, and to ensure that waste characterization activities such as headspace gas sampling appropriately accounts for container characteristics. |
| 5.2 | Matthew Silva/ EEG | DAC | E | The sorption capability of other liners in compacted drums in a larger container would impact the drum age criteria for containers with compacted drums | NMED concurs with this comment. The Permittees did not adequately address the differences in sorption capabilities of the poly liners in the compacted drums when the compacted drums have variable poly liner equilibrium concentrations. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 5.3 | Matthew Silva/ EEG | DAC | E | The diffusion characteristics within a compacted waste container may change upon compaction. NMED may want to seek demonstration that the DAC for 100 gallon drums containing compacted waste containers has been analyzed for this possibility. | NMED concurs with this comment. The Permittees assertion that the compacted drum will behave as a constant VOC source is valid only if all layers of confinement in the compacted drum have been sufficiently breached. The Permittees did not provide documentation in the PMR to demonstrate that all layers of confinement would be breached during the compaction process. The Permittees must provide further information regarding the diffusion characteristics of compacted containers to allow NMED to determine if the VDRUM model is appropriate for use when the waste is compacted drums. |
| 5.4 | Matthew Silva/ EEG | DAC | E | The major intent of the PMR is to establish DACs for compacted drums containing S5000 debris wastes. Table B1-10 Scenario 3 does not include debris wastes. Table B1-9 for S5000 wastes is an analogous table for Debris wastes. The commentor recommends that Table B1-9 be referenced and references to Table B1-10 be removed. | The Permittees in a response to this comment (Permittees Response to Public Comment 21) clarified that the reference to Table B1-10 in section B1-1a(1) of Attachment B1 was incorrect and should instead reference Table B1-9. The Permittees also indicated that although there are no current plans for generator/storage sites to compact S3000/S4000 drums, the text in Section B1-1a(2) should remain in the event that these wastes may also be compacted in the future. NMED concurs with the proposed correction to the PMR. Additionally, the Permittees request to extend these additional DACs to S3000/S4000 waste is appropriate. However, as indicated in responses to other comments, NMED cannot accept the use of the 55 gallon container DAC values as the DAC for 85 and 100 gallon containers. Additionally, NMED does not accept the DAC values calculated for packaging configuration 7 because the differences in poly liner solubility within each of the compacted drums was not properly accounted for in the VDRUM model calculations. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 5.5 | Matthew Silva/ EEG | DAC | E | Reaching DACs for individual waste containers to be compacted is not necessary because the closed system of the waste containers will be destroyed upon compaction. Instead the DAC should be calculated from the time the compacted drums are placed inside the 85 or 100 gallon drum. | NMED concurs with this comment. There will likely be differences in the headspace gas concentrations of each compacted drum and those differences will result in each of the poly liners having a different equilibrium concentration. Therefore, the time for the poly liners of the compacted drums to reach new equilibrium concentrations once emplaced in the 100 gallon container must be accounted for in the DAC calculations. The Permittees assumed that all compacted drums will have the maximum source concentration, which is not an appropriately conservative assumption for the DAC calculation. Therefore, the Permittees should evaluate whether the requirement to meet the uncompacted waste container DAC prior to compaction is appropriate, and should alternately consider the appropriateness of calculating the DAC from the time the compacted wastes are placed in the larger waste container. |
| 5.6 | Matthew Silva/ EEG | DAC | E | The commentor was concerned that PMR language created confusion as to what types of liner bags would be appropriate for use and would be used in DAC calculations. | The Permittees further clarified in their response to this comment (Permittees Response to Public Comment 23) that the liner bags for the TDOP would be the same as those used for the SWB and proposed clarifying language to that effect. NMED concurs with the clarification proposed by the Permittees. |
| 5.7 | Matthew Silva/ EEG | DAC | E | Footnote d of table B1-9 discusses headspace gas samples collected between inner and outer drum lids. However, footnote b of Table B1-8 refers to a double drum lid where the drum lid and a drum liner lid, often found in 55 gallon drums, are meant. Clear differentiation between these terms should be provided. | The Permittees further clarified in their response to this comment (Permittees Response to Public Comment 24) that the waste containers in which there was an outer drum lid and an inner drum lid would be referred to as double lid drums. Clarifications to that effect were proposed by the Permittees in response to this comment. NMED concurs with the clarification proposed by the Permittees. |
| 5.8 | Matthew Silva/ EEG | DAC | E | The current TRAMPAC does not allow the use of a steel inner drum lid. If the intent is to use a steel inner drum lid in the computer modeling in order to simulate diffusion across the barrier that the inner lid provides, then the PMR should say so. However the TRAMPAC authorized polypropylene lid may also create a VOC sink that would retard the achievement of steady state equilibrium. | See the response to Comment 5.1. NMED evaluated the PMR based upon the packaging configurations and containers allowed in the permit or proposed within the PMR. If TRAMPAC specifies different configurations, the Permittees should submit an additional PMR to propose and justify the use of the configurations specified in the TRAMPAC. |
| 5.9 | Matthew Silva/ EEG | DAC | E | For the 100 gallon drum in which HSG samples are collected inside the filtered steel inner drum lid prior to placement of the hypothetical innermost layers, the Permittees should clearly state that the innermost layers are very thin, to simulate a non-existent innermost layer of packaging. | See the response to Comment 5.11. The Permittees did adequately document the use of small variable values to represent non-existent layers of packaging, drum liners, and drum liner lids as appropriate. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 5.10. | Matthew Silva/ EEG | DAC | E | The void space volumes used in the calculations for the 55 gallon drums would not apply to the 85 and 100 gallon drums. Assumptions for void volumes must be provided, or the Permittees should demonstrate that the assumptions are unnecessary. | NMED concurs with this comment. The Permittees must provide VDRUM model results to confirm their assertion that void volume differences between the 55, 85, and 100 gallon drums do not change the calculated DAC in each of the packaging scenarios. Additionally, by proposing to use the same DAC for 85 and 100 gallon drums as is currently used for the 55 gallon waste containers, the Permittees did not account for the additional poly liner surface area in the 85 and 100 gallon drums. The poly liner surface area has a significant impact on the drum age (as evidenced by the DAC for a drum liner versus the DAC for the same drum with no liner). Therefore, it is not appropriate for the Permittees to de facto assign the same DAC to 55, 85, and 100 gallon containers. |
| 5.11 | Matthew Silva/ EEG | DAC | E | The methodology presented in BWXT (2000) did not appear to allow the substitution of one parameter type for another. Specifically, the inner metal drum lid is being modeled as a liner that is normally a polymer. NMED may wish to consider whether this change is sufficient in nature that further approval of DAC methodology is necessary. | NMED does not concur with this comment. The Permittees have used very small variable parameters to represent the poly liner drum lid in order to simulate a scenario where a metal inner lid was used. This approach is was also used to simulate drums with no poly liner or no layers of confinement in the previous DAC PMR. |
| 5.12 | Matthew Silva/ EEG | DAC | E | In the event that the equilibrium time and DAC are to be met at the same time, the Permittees must demonstrate that the temperature difference between the equilibrium hold temperature and the DAC hold temperature does not effect the calculated DACs. | NMED concurs with this comment. Unless the Permittees can demonstrate that the difference in equilibrium and DAC temperature requirements would not change the time to reach 90% VOC steady state equilibrium concentration in a waste container, then the proposed PMR language found in footnote e of Tables B1-9 and B1-10 of the PMR should be removed. |
| 7.1 | Inés Triay/ CBFO | DAC | G | Several comments from the public comment period suggested that the DAC PMR should be reclassified as a Class 3 modification request because of the complex nature of the modification. In their response to these comments made during the public comment period, the Permittees indicated that the same model that was approved for use is being used for these DAC calculations. Therefore, an additional Class 3 hearing is not necessary. The additional DAC values are determined through changing specific input variables. | See the response to Comment 1.1. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 7.2 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicates that assumptions regarding the void volumes used for 85 gallon drums, 100 gallon drums, and TDOPs should be provided or that the assumptions are unnecessary. In response, the Permittees indicated that the same model used to calculate the DAC for 55 gallon drums and SWB is applicable to 85 gallon, 100 gallon, and TDOP containers. All governing equations and physical properties are the same in all container sizes proposed. Furthermore, no scaling adjustments are needed in the DAC calculations for the 85 and 100 gallon drums | NMED does not concur with the Permittees' response to this comment. Scaling of the poly liner surface area would have a significant impact on the drum age calculation. Additionally, the Permittees should demonstrate the negligible effect of the void space on the DAC time through VDRUM calculations of 85 and 100 gallon containers. Also see Response to Comment 5.10 |
| 7.3 | Inés Triay/ CBFO | DAC | G | Comments provided indicated that there are several inconsistencies in Tables B-8 regarding the applicability of the DAC values to 85 and 100 gallon drums. In response, the Permittees indicated that Footnote a of Table B1-8 should be retained, and the following referenced caption in B1-8 should be revised to read: Packaging Configuration Group 3 includes 55 gallon drums, 85 gallon drums, and 100 gallon drums. | The assumption that the 55 gallon drum DAC is applicable to 85 and 100 gallon drums is not supported by the information provided by the Permittees. Differences in the poly liner surface area of 85 and 100 gallon drums support separate DAC calculations for each container size. |
| 7.4 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period requested clarification that there would be no layers of confinement in packaging configuration 7 and that it is unclear that no bags or confinement of any type will be placed in the containers that substantially enclose the compacted waste containers. In response, the Permittees reiterated that packaging configuration 7 would be used if the packaging could be demonstrated and confirmed by the site and that if the packaging could not be confirmed that configuration 3 would be used. | NMED concurs that packaging configuration 7 should only be used if the configuration of waste packaging as well as the filter diffusivity values can be verified. However, NMED does not concur that the use of packaging configuration 3 is appropriate for 100 gallon and 85 gallon drums because the Permittees did not adequately account for the additional poly liner surface area in the 85 and 100 gallon containers. Additionally, scenario 3 may not be appropriate for containers that contain compacted drum wastes because of the likely differences in poly liner equilibrium concentrations within the compacted drums. |
| 7.5 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period sought clarification regarding the types of liner bags that would be used in the TDOP and if the liner bags were equivalent to those used in the SWB. In response, the Permittees clarified that the liner bags for SWB and TDOP would be the same. | NMED concurs with the Permittees' proposed clarification. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 7.6 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicated that the DAC should be calculated from the time the compacted drums are placed in the 100 gallon container and that the DAC compliance prior to compaction is not necessary because the closed system of the waste container will be destroyed upon compaction. In response, the Permittees reiterated that the individual waste container DAC must be met for each compacted drum to ensure that the poly liner is at equilibrium at the time it is placed in the larger container. | Once compacted drums with different HSG concentrations (and different poly liner equilibrium concentrations) are placed into a larger container, then equilibrium between the compacted drum poly liners must occur before 90% steady state can occur. Although meeting the waste container DAC will likely decrease the time needed to reach 90% steady state VOC concentrations, the DACs for the waste container with the compacted drums will likely be longer than those presented in waste packaging configuration 7. The DACs proposed by the Permittees inappropriately assumed that all poly liners would be in equilibrium with each other and the only time needed was for the concentration to stabilize as a result of mixing within the void volume. However, the DACs must also account for the additional time needed for the poly liners in the different compacted drums to achieve equilibrium. |
| 7.7 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicated that the Permittees did not provide assumptions or justification for why the void volumes for 85 and 100 gallon drums would be the same as for 55 gallon drums. In response, the Permittees indicated that the differences in void volumes between 55 and 85 gallon drums is minimal because of the volume consideration of the void outside the inner layers of confinement is a minimal contributor to the DAC. | The Permittees should prepare and provide calculations using VDRUM to confirm their assumption that there would be no appreciable difference in the DAC values based upon the void volume in a drum. Additionally, the Permittees must justify assumptions and provide calculations that demonstrate that the void volume in a TDOP is equivalent to those in a SWB. However, the Permittees did not account for differences in the poly liner surface area in the 85 and 100 gallon containers that could have a more significant difference in the DAC values calculated for the 85 and 100 gallon containers. Also see Response to Comment 5.10. |
| 7.8 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period requested clarification that there would be no layers of confinement for packaging configuration 7 (for the compacted drums in an 85 or 100 gallon container) and that it is unclear if bags or other types of confinement will be included that substantially enclose the compacted waste containers. In response, the Permittees reiterated that packaging configuration 7 would only be used if the absence of liner bags and inner bags can be demonstrated. | See the Response to Comment 7.4 and 9.10. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 7.9 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period requested further clarification for the derivation of the inner lid diffusivity values used to calculate the DAC values. In response, the Permittees indicated that the filters of the 85 gallon and 100 gallon inner lid are within the acceptable diffusivity value specified in the TRUPACT-II SAR. | NMED concurs with the Permittees' comment. The DAC assigned for a particular packaging configuration is only applicable if the information regarding the packaging and filter diffusivities are known. Otherwise, the more conservative default diffusivity and packaging configurations are assigned. See Response to Comment 9.11. |
| 7.10. | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period requested that the Permittees indicate how the filter diffusivities of inner lid filters would be determined once the outer lid has been placed on the drum. In response, the Permittees indicated that filter types on inner lids will be known through auditable procurement records that would identify the filter type. | NMED concurs with the Permittees' comment. The audit process has been used to determine if the generator/storage site has adequate procurement and process controls in place to ensure that the diffusivity of the filters are known. See Response to Comment 9.1. |
| 7.11 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period requested additional clarification of the applicability of the VDRUM model when an inner lid filter is in place. In response, the Permittees indicated that the VDRUM DAC model could simulate several packaging configurations by varying the model input parameters and that the inner drum diffusivity could be simulated by varying the dimensions of the vent hole. | NMED concurs with the response to comment provided by the Permittees. However, the Permittees did not provide adequate illustration through example calculations that the liner lid vent hole parameters used to simulate the inner lid diffusivity were appropriate. See Response to Comment 9.11. |
| 7.12 | Inés Triay/ CBFO | DAC | G | A comment made during the public comment period requested further clarification for the headspace gas sampling scenario where samples would be collected inside the inner drum lid headspace. Specifically, the comment sought clarification as to whether the non-existent innermost layers of confinement would be represented by using very small variables for the thickness of the layers. In response, the Permittees reiterated that the HSG samples collected inside the inner drum lid through the inner lid filter would be collected assuming that the inner layers of confinement would be set to very small values to simulate a condition where there were no layers of confinement. | NMED concurs with the Permittees' response to this comment. Assumptions that non-existent poly liners and layers of confinement would be represented by very small values to simulate the actual configuration being modeled using the VDRUM model is appropriate. See Response to Comment 5.9. |
| 7.13 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicated that the 85 gallon container had not yet been approved for transportation purposes. In response, the Permittees agreed with comments that the direct loaded 85 gallon container was not yet approved for use by the NRC and that 85 gallon drums would only be shipped upon approval by NRC. | See the response to Comment 5.1. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 7.14 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicated that the sorption capability of the compacted drum poly liners was not taken into account and would impact the DAC. In response, the Permittees indicate that when compacted drums with different VOC concentrations are placed in a larger container, that desorbption and adsorption may occur in the liners. However, the presence of liner material does not impact the steady state conditions in the 100 gallon drum. | NMED does not agree with the Permittees' response. Evaluation of the DAC contribution from poly liners indicates that the poly liners do contribute substantially to the calculated DAC values for various packaging scenarios. The Permittees must demonstrate how the presence of additional liner material from compacted drums does not contribute to the DAC under scenario 7, especially when the compacted drum liners are not in equilibrium with liners in other drums. Also see the response to Comment 5.2. |
| 7.15 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicated that the diffusion characteristics within a waste container may change upon compaction and that NMED should seek demonstration that the DAC for 100 gallon drums containing compacted wastes has been analyzed for this possibility. The Permittees indicated in their response that the compacted waste container would serve as a steady VOC source and that diffusion characteristics within the compacted drums would not apply. | The Permittees must provide additional information to confirm their assumption that the compacted drums will behave as a steady VOC source. If adequate explanation cannot be provided, the Permittees may be required to obtain experimental test data to confirm their assumptions that the compacted drums are steady VOC sources as defined for VDRUM modeling. The Permittees must also provide additional information to demonstrate that the poly liner with a specific equilibrium concentration within the closed system of a drum does not become a secondary VOC source after compaction has occurred. See the response to Comment 5.3 for additional information. |
| 7.16 | Inés Triay/ CBFO | DAC | G | Comments made during the pubic comment period indicated that an incorrect reference to Table B1-10 was made in the text of Section B1-1a(1). In response, the Permittees proposed that the referenced text in attachment B1, Section B1-1a(1), Summary Category S5000 Requirements, be revised to refer to Table B1-9 instead of Table B1-10. Similar text in Attachment B1, Section B1-1a(2) will be retained for S3000/S4000 category wastes should the compaction of those wastes be contemplated in the future. | See the response to Comment 5.4. |
| 7.17 | Inés Triay/ CBFO | DAC | G | Based upon comments made during the public comment period, the need to reach the waste container DAC prior to compaction was questioned because the commentors indicated that the DAC should be calculated from the time the compacted drums are placed in the 100 gallon drum. In response, the Permittees indicated that the waste container DAC time is needed to ensure that liners in compacted drums have reached equilibrium. | See the response to Comment 7.6. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
|---|---|---|---|---|---|
| 7.18 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicated that the Permittees should clarify the use of a double drum lid. In response, the Permittees suggested that footnote d to tables B1-9 and B1-10 should be modified to include the additional text :"Packaging Configuration Group 7 DAC values apply to drums with two lids". | NMED concurs with the clarification to the PMR language proposed by the Permittees to clearly indicate that the scenario in packaging configuration 7 applies to those drums with two lids. See Response to Comment 5.7. |
| 7.19 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicate that the current TRAMPAC does not allow the use of a steel inner drum lid. In response, the Permittees indicated that the TRAMPAC revision 20 submittal currently being prepared by the Permittees addresses the specifications for 85 and 100 gallon drums including the use of inner drum lids and inner drum lid filters. | See the response to Comment 5.8. |
| 7.20. | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicated that the Permittees should clarify assumptions used in VDRUM variable assignments when non-existent layers of confinement or drum liners are modeled. The Permittees response indicated that VDRUM DAC modeling utilizes very small values of diameters to represent the absence of layers of confinement. | NMED concurs with response to this comment provided by the Permittees. This approach was used in the previous DAC modification to simulate drums without a poly liner or drums without inner layers of confinement. See Response to Comments 5.9 and 5.11. |
| 7.21 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicates that the Permittees had performed "ad hoc" substitution of one parameter type with another when calculating the DAC for drums with two separate filtered lids. The Permittees responded by indicating that although VDRUM does not specifically address two layers of drum filters (inner lid and outer lid), the parameters of the vent hole can be modified to approximate the filter diffusivity of the inner lid filter, and therefore the substitution is appropriate. | The Permittees must provide additional calculations to demonstrate how the parameters of the vent hole were modified to approximate the inner drum lid filter and to verify that the assumed vent hole characteristics resulted in the correct inner lid filter vent diffusivity. See Response to Comment 8.5. |
| 7.22 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period indicated that the equilibrium time and DAC time should not be concurrent unless the Permittees can demonstrate that the temperature differences between these two activities do not impact the DAC. In response, the Permittees indicate that the footnotes indicating that equilibrium time and DAC time for small DAC drums could be simultaneous was simply added to clarify that the sampling and analysis requirement also had to be met. | See the response to Comment 5.12. |

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| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
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| 7.23 | Inés Triay/ CBFO | DAC | G | Comments made during the public comment period requested additional clarification as to why the TDOP packaging configurations would be the same as those for a SWB. In response, the Permittees indicated that the packaging configuration for the TDOP includes normal packaging of bulk items and that in addition the cumulative filter diffusivity of the TDOP is greater than that of the SWB. Consequently, using the SWB DAC values for the TDOP is appropriate. | The Permittees must provide further justification and clarification for the assumptions that were made in the VDRUM calculation for the TDOP container. Specifically, the Permittees must demonstrate that the increased cumulative filter diffusivity and differences in void volumes do not cause the TDOP DAC to be longer than that for the SWB. See Response to Comment 9.7. |
| 8.1 | Don Hancock/ SRIC | DAC | H | The DAC PMR should be a Class 3 modification because of the complexity of the request and the need for the detailed considerations of a Class 3 modification process. SRIC also pointed out that errors were identified during the previous Class 3 DAC PMR that resulted in changes to the proposed modification. | See the response to Comment 1.1. NMED agrees that the Permittees need to provide additional information to justify the assigned DAC values and that the accuracy of the information and resulting modeling results of theoretical DAC values should be carefully reviewed by all parties prior to incorporation into the permit. However, this review can effectively be implemented under a Class 2 modification request, because the adequacy of the VDRUM model calculating a DAC for different packaging configurations and container sizes was established during the previous Class 3 DAC modification PMR hearings in 2002. |
| 8.2 | Don Hancock/ SRIC | DAC | H | The commentor objects to the piecemeal Class 2 modifications that have been submitted for DACs for same or similar matters that would have been subject to Class 3 procedures. | NMED does not have the regulatory authority to limit the content or frequency of permit modification requests made by the Permittees. |
| 8.3 | Don Hancock/ SRIC | DAC | H | The methodology used for this DAC is not identical to the DAC used for 55 gallon drums and standard waste boxes. | The methodology used (e.g., assignment of variables in VDRUM to simulate certain packaging configurations) is similar to that used for modeling DAC values for the 55 gallon and SWB containers. However, some critical assumptions made in assigning variables are not appropriate. The difference in poly liner surface area was not accounted for in the 85 and 100 gallon containers. The Permittees' assumptions regarding the equilibrium of poly liners among compacted drums is not appropriate for a scenario where the compacted drum is no longer a closed system and there are compacted drums with different headspace and drum liner equilibrium concentrations. |
| 8.4 | Don Hancock/ SRIC | DAC | H | Actual experiments with real containers must be included to validate the calculated DAC values. | See the response to Comment 1.2. |

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| 8.5 | Don Hancock/ SRIC | DAC | H | The HSG sampling location for the 100 gallon drums are variable. The PMR does not adequately explain why different sampling locations are used nor does it demonstrate that the different sampling locations provide identical, accurate results. | NMED assumes that the commentor is referring to the sampling scenario in which the sample is collected in the drum headspace between the inner and outer drum lids. If so, NMED has evaluated the Permittees rationale for using the inner lid filter diffusivity and found it to be appropriate pending review of calculations to be provided by the Permittees demonstrating that they have accurately simulated the inner lid diffusivity values through the modification to the VDRUM variables for the liner vent hole characteristics. |
| 8.6 | Don Hancock/ SRIC | DAC | H | The void space assumptions for the container volume outside of waste packaging is not supported by actual data. The Permittees have not demonstrated that the 20% void volume is conservative or that the assumption is valid. | NMED concurs with this comment and further has determined that the assignment of the 55 gallon DAC to the 85 and 100 gallon drums is not appropriate because of the differences in the poly liner surface areas for the three drum types. |
| 8.7 | Don Hancock/ SRIC | DAC | H | The 85 gallon drum has not been approved for use by NRC. Thus, requirements that NRC may place on these containers would require an additional DAC revision. Without demonstrating that the specifications used in the modeling are consistent with the actual Certificate of Compliance, the PMR is incomplete. | See the Response to Comment 5.8. |
| 8.8 | Don Hancock/ SRIC | DAC | H | The nature and configuration of the compacted waste containers were not adequately described to ensure that any assumptions and data used in the modeling are correct. | See Response to Comment 5.3. NMED concurs that the Permittees must provide additional information regarding the diffusion characteristics and input variables of the compacted drums. |
| 8.9 | Don Hancock/ SRIC | DAC | H | There are significant inconsistencies in the proposed permit language in the request. For example the default for containers not repackaged would be packaging configuration 3. Table B1-8 indicates that configuration 3 is only applicable to 55 gallon drums. The commentor believes that if 55 gallon drums are not repackaged then the DAC must be the conservative default value whether or not that drum is placed in a larger container. | The Permittees must calculate and propose separate DAC values for 85 and 100 gallon drums because of the differences in the poly liner surface area and, to a lesser extent, the void volume between the three different containers. Additionally, the DACs for packaging configuration 3 are only applicable to those containers that do not have compacted drums as the payload. |
| 9.1 | Lindsay Lovejoy/ NMAGO | DAC | I | DOE should establish the basis for assuming the range of diffusivity values stated for the inner lids of 85 and 100 gallon drums. DOE must indicate how the diffusivity value of the inner lid filter is to be identified after the drum is closed. | The Permittees further clarified in their response to this comment (Comment 7.10) that the filter diffusivity values are based on filter manufacturer specifications and would be mandated as part of their transportation approvals from NRC. NMED concurs with the response provided by the Permittees to this comment. |
| 9.2 | Lindsay Lovejoy/ NMAGO | DAC | I | The previous DAC permit modification request followed Class 3 requirements. If DOE cannot show the grounds for the various modeling assumptions, this matter should be heard under Class 3 Procedures. | See the response to Comment 1.1. |

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| 9.3 | Lindsay Lovejoy/ NMAGO | DAC | I | The new container types have not historically been used to store DOE legacy waste. Therefore, the containers will contain newly generated waste and the new DAC should be limited to newly generated waste. | The Permittees indicated in their response to Public Comments that although they expect these new container types to contain compacted S5000 drum wastes, that they wished to propose similar DAC values for S3000/S4000 waste in the event they wish to compact that waste as well. NMED concurs that the Permittees are allowed to propose DAC values for wastes that may be generated at a future date. However, the DAC values provided in this PMR are not appropriate. |
| 9.4 | Lindsay Lovejoy/ NMAGO | DAC | 9 | What is the basis for assuming that the headspace voids of 85 and 100 gallon drums are 20% of the volume outside the packaging? | See the response to Comment 8.6. |
| 9.5 | Lindsay Lovejoy/ NMAGO | DAC | 9 | Why does DOE assume the TDOP packaging configuration will be the same as for a SWB? | NMED concurs with this comment. The Permittees must provide further justification for assuming that the TDOP configurations and DAC values will be the same as those for SWB containers. |
| 9.6 | Lindsay Lovejoy/ NMAGO | DAC | I | It is not clear how layers of confinement will be applied with respect to waste drums that have been treated by compacting. | See the response to Comment 5.3. NMED concurs that the Permittees must provide additional information regarding the diffusion characteristics and input variables of the compacted drums. |
| 9.6 | Lindsay Lovejoy/ NMAGO | DAC | I | Why does DOE assume that compacted waste containers will have met the DAC before compacting? | The Permittees have indicated in their response to Comment 5.5 that meeting the individual waste container DAC would allow the poly liners to be in equilibrium within each compacted drum, thereby, limiting the remaining DAC to the time necessary to achieve mixing within the void volume. However, the Permittees incorrectly assumed that the poly liner between each of the compacted drums would be at the same equilibrium concentration, thereby eliminating the advantage of meeting a separate DAC for uncompacted containers prior to compaction. |
| 9.7 | Lindsay Lovejoy/ NMAGO | DAC | I | What is the DOE basis for assuming that the inner bags and liner bags used in packaging a TDOP will be the same as for a SWB? | See the response to Comment 5.6. |
| 9.8 | Lindsay Lovejoy/ NMAGO | DAC | I | Assumptions presented in Attachment C should be supported by design drawings and filter specifications. | NMED concurs that this information would be useful in fully understanding the proposed packaging configurations and container configurations that are intended to be represented by the additional DAC values presented in this PMR. |
| 9.9 | Lindsay Lovejoy/ NMAGO | DAC | I | There is ambiguity in Table B1-8. The footnote indicates that if a packaging configuration is not determined for 55, 85, and 100 gallon drums, that Group 3 is chosen. However Group 3 is captioned as applicable to 55 gallon drums only. | See the response to Comment 5.10. |

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| 9.1 | Lindsay Lovejoy/ NMAGO | DAC | I | 85 and 100 gallon drums come exclusively within the packaging configuration group 7, which allows no inner bags or liner bags. It appears that such drums will not contain bags. It should be clarified whether this means that no bags of any size will be placed within such containers or such bags are not counted as confinement layers if they do not enclose substantially the waste containers. | The Permittees clarified in their response to this comment that this configuration would mandate that there are no layers of confinement. However, the Permittees indicated that punctured bags, open bags, and loose pieces of plastic surrounding the waste would not qualify as layers of confinement. Additional clarification should be provided to ensure that the definition of plastic wrapped around the waste does not include shrink wrapping or other packaging techniques that would functionally be equivalent to a layer of confinement. |
| 9.11 | Lindsay Lovejoy/ NMAGO | DAC | I | The model sets the release rate of the outer layer of confinement to the diffusivity of the inner liner filter. Further explanation of the justification for such an approach should be provided. | NMED assumes that the commentor is referring to the sampling scenario in which the sample is collected in the drum headspace between the inner and outer drum lids. If so, NMED has evaluated the Permittees rationale for using the inner lid filter diffusivity as the diffusion rate to the headspace between the inner and outer lids and found the approach to be appropriate. The Permittees should provide a detailed calculation to establish that the correct input parameters were used to effectively simulate the diffusivity of the inside drum lid filter. |
| 10.1 | Janet Greenwald/ CARD | DAC | J | The DAC PMR should be a Class 3 modification because of the complexity of the request and the need for the detailed considerations of a Class 3 modification process. | See the response to Comment 8.1. |
| 10.2 | Janet Greenwald/ CARD | DAC | J | The commentor is opposed to the collection of HSG samples prior to the 90 % steady state equilibrium being reached. | NMED concurs that HSG samples should not be collected until the VOCs have reached 90% steady state equilibrium concentrations or have reached a concentration that will exceed the 90 % steady state equilibrium concentration. In some circumstances, it may be possible to collect HSG samples prior to the drum reaching a 90 % steady state equilibrium. However, the Permittees have proposed this approach in their PMR. Application of an appropriate DAC time to each drum is the methodology that will be used to ensure that drums have reached or exceeded the appropriate steady state VOC equilibrium concentration.. |
| 11.1 | Penelope McMullen/ Sisters of Loretto | DAC | K | Previous experiments have been conducted on smaller containers, new experiments need to be conducted for each of the larger containers. There is no evidence that the characterization techniques used on smaller containers are appropriate for the larger containers. | See the response to Comment 1.2. |
| 11.2 | Penelope McMullen/ Sisters of Loretto | DAC | K | Sampling data should be provided in addition to AK because AK is not always accurate, especially for older wastes. | See the response to Comment 1.2. |

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| 12.1 | Geoff Petrie/ NWNM | DAC | L | Placing compacted waste containers that have met the DAC inside of 85 and 100 gallon drums is inappropriate because the waste containers would no longer be considered closed systems once compacted. | See the response to Comment 5.5. |
| 12.2 | Geoff Petrie/ NWNM | DAC | L | The DAC Permit Modification should be Classified as a Class 3 in order to ensure that all questions and concerns regarding the assumptions used in the DAC model. | See the response to Comment 1.1. |

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| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Identifier | Comment Summary | Response |
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| 5.1 | Matthew Silva, EEG | Booster Fans | E | The commentor indicates that the booster fans in the WIPP underground were required during construction of the WIPP, but are no longer deemed necessary. The proposal to remove these fans was originally submitted to NMED as a Class 1* modification (June 10, 2002), but was withdrawn (July 11, 2002) due to public comments on the proposal. The commentor further indicates that changes to the HWFP proposed in this PMR would also remove references to air flow reversal in the WIPP underground.<br><br>The PMR also indicated that an expert mine ventilation contractor (hired to assess the WIPP underground ventilation system) considered airflow reversal a problem under these hazardous conditions and listed several factors that could make air reversal during an underground fire problematic.<br><br>Thus, approval of this PMR would initiate the process for removing what appears to be a potential health and safety hazard from the WIPP. The proposed changes to the HWFP text eliminate sections discussing use of the booster fans during off-normal events. Approval of this PMR will enhance, and not detract from, safety and health considerations at the WIPP. | The NMED concurs with the commentor's conclusion. The fact that a mine ventilation contractor, Mine Ventilation Services, Inc. and a report from the Mine Safety and Health Administration Mine Ventilation Investigation Section, have evaluated this issue, and support the assessment that the air reversal system now in place would not meet the regulatory criteria is sufficient reason to approve this modification.<br><br>NMED believes this is a compelling reason to support this PMR. In addition, the modification is in the best interest of human health and the environment. |
| 8.1 | Don Hancock, SRIC | | H | The commentor indicates that on June 17, 2002, the commentor submitted comments in opposition to a previous proposed class 1* modification for the same purpose. The Permittees subsequently withdrew the request. Thus, the commentor is pleased that this modification request is a Class 2 request and contains much more detailed information to justify the request. The commentor does not object to this modification request. | See response to Comment 5.1 |
| 9.1 | Lindsay Lovejoy, NMAGO | | I | The commentor indicates that the Permittees states that the removal of the booster fans will not compromise the ability of WIPP to afford protection to workers in event of a mine fire. For such reason, and in reliance on 20.4.1.900 NMAC, incorporating 40 CFR 270.42, App. 1, Item B.6.a, Permittees have classified this modification as a Class 2 modification. | See response to Comment 5.1 |

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| | | | | The commentor indicates that the Permittees assert that expert studies have determined that the booster fans (a) are unnecessary, (b) do not contribute to safety, (c) could cause adverse consequences to workers in event of emergency, and (d) should be removed. (at A-12). This commentor provides many of the same comments as commentor 5.1, regarding the fact that a mine safety specialist was hire to evaluate the mine ventilation system, and that the Mine Safety and Health Administration support the fact that the air reversal would not meet the regulatory standards. The commentor concluded by stating that they support the proposed modification. | |
| 11.1 | Penelope McMullen, Sisters of Loretto | | K | The commentor urges NMED to deny this request. This PMR does not answer the questions that was asked when the request was a class 1 PMR (and denied). The commentor recommends leaving them intact just in case a failure should occur in the ventilation system. WIPP has plenty of space, so removal needs not be a priority. | NMED believes that the issues raised during the previous class 1* PMR, has been sufficiently addressed. There is no reason to leave equipment in place which will not be used, or is not needed. NMED has determined that the modification should be approved. |
| 12.1 | Geoff Petrie, Nuclear Watch New Mexico | | L | The commentor indicated that the Permittees have submitted this PMR for a second time. The commentor also indicated that the Permittees explained that in the early 1990's the booster fans may be used to assist in the event of a fire through airflow reversal mode. The Permittees now believe that this is not the case, and that using the airflow reversal mode may actually do more harm than good. The question that the commentor has is why was the Permittee was required to use the airflow reversal mode at all? The Permittee does not state that this is an automated program that will happen in the case of a fire, and it does not state that there is no way to deactivate the fans from going into airflow reversal mode. The commentor questioned if the fans should be left in place and what the space was going to use for? | It is NMED's position that the modification should be approved and that it is in the best interest of human health and the environment to do so. The Permittees provided compelling evidence from a mine ventilation contractor (Mine Ventilation Services, Inc.) and a report from the regulatory agency in charge of mines, the Mine Safety and Health Administration, Mine Ventilation Investigation Section that the present system of air reversal would not meet the regulatory criteria.<br><br>With regard to the specific questions, NMED sees no reason to require the Permittees to leave useless equipment in place if the Permittees do not wish to do so. NMED is unaware of how the space left vacant in the roof after the fan is removed will be used, and believes that its future use is not directly relevant to the permit modification request. As mentioned above, NMED's position is that this PMR should be approved for health and safety reasons. |

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| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Identifier | Comment Summary [Original comment, DOE response to the comment] | Response |
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| 1.1 | Cindy Hoang, Citizen | Sealed Sources | A | The commentor is opposed to continuing efforts of the DOE to change procedures in the WIPP Permit to reduce existing regulatory requirements, especially related to waste characterization. Therefore, the commentor urges NMED to deny the modification requests for LANL sealed sources. | The Permittees may propose permit modifications, including those to waste characterization requirements. See Response to Comment 7.15 |
| 1.2 | Cindy Hoang, Citizen | Sealed Sources | A | The modification request is not complete and accurate as required by regulations. Neither request is properly a class 2 modification. By eliminating headspace gas sampling for sealed sources, a basic characterization requirement of the permit would be dramatically changed, without the required public hearing. | See Response to Comment 7.1 and 7.15 |
| 1.3 | Cindy Hoang, Citizen | Sealed Sources | A | The sealed sources are not defense waste and cannot legally be disposed at WIPP. Yet the modification includes no adequate safeguards nor NMED monitoring procedures to prevent such wastes from coming to WIPP. | The defense status of wastes in waste streams containing sealed sources would be determined during audits, but the Permit holds no specific restrictions with respect to defense waste. See Response to Comment 7.12. |
| 2.1 | Dana-Renee Lee, Citizen | Sealed Sources | B | These comments are a duplicate of those summarized in Comments 1.1 , 1.2, and 1.3 | See Response to Comments 1.1, 1.2, and 1.3. |
| 3.1 | Tony Stewart, Citizen | Sealed Sources | C | These comments are a duplicate of those summarized in Comments 1.1 , 1.2, and 1.3 | See Response to Comments 1.1, 1.2, and 1.3. |
| 4.1 | Dorelen Bunting, Citizen | Sealed Sources | D | The commentor urges NMED to deny the modification request for LANL sealed sources. The modification request to the WIPP permit is not complete and accurate, or properly a class 2 modification. | See Response to Comment 1.2. |
| 5.1 | Matthew Silva, EEG | Sealed Sources | E | The commentor agrees that headspace gas sampling of these wastes would not appear to be necessary. However, there are a number of comments that the NMED should be made aware of prior the approving this PMR.<br><br>The testing for average VOCs should be repeated if there is: (1) a change in the packing material which may cause an increase in the VOCs or, (2) the supplier of the packing material changes since there is not assurance that the "new" packing material would be identical to what was tested. | No response required.<br><br>See below. |

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| 5.2 | Matthew Silva, EEG | Sealed Sources | E | NMED should obtain some assurances that VOC generation from a loaded drum (containing packing materials and sealed sources) would be no greater than VOC generation from packing materials alone. | The Permittees have proposed modifications to include a pipe overpack in the packaging materials headspace gas, but offered no assurances in the PMR as suggested by the commentor. |
| 5.3 | Matthew Silva, EEG | Sealed Sources | E | The sealed sources must meet statutory and regulatory requirements relating to transuranic radioactive waste left from the atomic energy defense activity. | See Response to Comment 1.3. |
| 5.4 | Matthew Silva, EEG | Sealed Sources | E | The commentor understands that each source will be leak tested (wipe test, identifying removable contamination) prior to packaging. This is a good practice. It would be useful if the Permittees quantify the limits (dpm/wipe) which will be used to determine if the source is leaking. | See Response to Comment 7.4. |
| 5.5 | Matthew Silva, EEG | Sealed Sources | E | It would be helpful to obtain a list of the different sources; i.e., 239PuBe, 241AmBe, 241AmLi, 241AmF, 241AmB, 239PuF and the approximate number of sources of each type and composition. In addition, the commentor supports the NMED request for clarifications addressing the types of quantities of any sources containing water reactive, light elements such as lithium (May 8, 2003 letter from NMED to the Permittees regarding waste stream profile form LA-OS-00-01) The Permittees should address any non-radioactive constituents of the sources that have the potential to exhibit characteristics of reactivity, toxicity, corrosivity, etc. | NMED agrees that additional information pertaining to the types of sources, VOCs and other hazardous wastes/constituents within these sources should have been provided in support of the Permittees contention that these materials are present, although given what sealed sources were used for, we agree that it is unlikely that VOCs would be present. We also agree that the presence of potential pyrophoric materials should be addressed. |
| 5.6 | Matthew Silva, EEG | Sealed Sources | E | NMED should be aware of the potential amount of sealed sources that may be sent to the WIPP.<br><br>The approval of this PMR may mean that all of the more than 14,000 GTCC sealed sources that, according to the GAO report, are expected to be collected by the LANL OSRP by 2010 would fall under the elimination of headspace gas characterization proposed in the modification. This number would be significantly greater than the "approximately 1,000" sealed sources citied in this PMR (p. 4). | See below<br><br>See Response to Comment 7.12, wherein NMED expresses concern regarding the definition of waste streams. We are aware that this PMR could open the door for many times more containers than those identified by the PMR, depending upon how waste streams are defined, "future" regulatory allowances, etc. NMED may take into account any aspects of the PMR as raised by commentors. |

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| 5.7 | Matthew Silva, EEG | Sealed Sources | E | The "allowance for statistical headspace sampling and analysis when characterizing waste streams that have no VOC-related hazardous waste number assigned" still requires representative sampling across each of these waste streams (homogeneous and thermally treated). The argument presented is one that supports using a similar statistically-based representative sampling process to those used for high-heat processed wastes, but statistical sampling of the waste is not what is proposed in this PMR. | See Response to Comment 7.15. |
| 5.8 | Matthew Silva, EEG | Sealed Sources | E | The PMR does not address how headspace gas sampling and analysis for the relatively small proportion of "the large number of excess and unsecured sealed sources remaining in the environment" that meet the standards for WIPP disposal have significantly impeded the task assigned to the DOE. Thus, this second argument does not tie the removal of a sample-and-analysis requirement to the events of September 11, 2001. Neither this argument nor the one discussed in the previous comment provide any substantive statement as to why the HWFP modification is needed. | NMED agrees with the Commentor, in that the arguments for removal of headspace gas sampling are not adequately supported. |
| 5.9 | Matthew Silva, EEG | Sealed Sources | E | This PMR eliminates headspace gas sampling of sealed source waste containers, and offers a process for assigning VOC values for these containers based on analysis of packaging material samples. It is the waste, however, not the packaging, that a Hazardous Waste Facility Permit (and the regulations behind it) is meant to address. Thus, data packages should emphasize that the waste qualifies for the exemption, rather than substituting average packaging VOC values that the PMR text accentuates. Areas in the Permittees proposed changes where an emphasis change is required includes: section B-3a(1) of the HWFP (text change a.2, p. B-2 of the Item); Section B-3a(1)(iii); Table B-6; section B3-10b(1); and Section B3-10b(2) | NMED agrees that the PMR deals with waste, not packaging material. See Response to Comment 7.15. |

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| 6.1 | Mariana Day, Citizen | Sealed Sources | F | The commentor stated that for the class 2 proposed permit change submitted by DOE concerning WIPP on May 13, 2003, it seems like a good idea. | See Response to Comment 7.15. |
| 7.1 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that this is a such a significant change in the existing procedures for waste characterization that it should be considered in a Class 3 modification process (Comment Number 31). DOE responded, stating that this PMR is very similar to the two previous Class 2 PMRs which modified headspace gas sampling and analysis requirements. Both were approved as Class 2 requests. | NMED concurs that revisions to allow statistical sampling of headspace gas for certain wastes was approved as a class 2 modification. This request, too, singles out a waste form for specific consideration, much as these previous PMRs did. NMED believes that the public concern, nature of the request to eliminate sampling/analysis, and lack of comprehensive supporting information/justification warrants denial of the PMR at this time. |
| 7.2 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the proposal seeks to substitute headspace gas volatile organic compound (VOC) values based on packaging material for measured values determined by sampling in the case of sealed sources that do not contain VOCs in the source material (Comment 32). The basis for doing so is the existence of acceptable knowledge showing that no VOCs are contained in the source material. Thus, the ground for the modification must be the adequacy of such acceptable knowledge. DOE responded, stating that the sealed sources are verified at the time of packaging to contain no VOCs by verifying that the sealed sources are metal canisters containing no VOC bearing material. | NMED agrees that the basis for the Permittees request to eliminate headspace gas sampling is sealed source acceptable knowledge, which the Permittees state contain no hazardous constituents that would result in assignment of hazardous waste codes that would be confirmed by headspace gas sampling. While it may be logical to assume that no such material is present in sources, the Permittees are required to provide examples of acceptable knowledge information specific to this waste stream supporting the assertion. Without the provision of information supporting the Permittees contention, NMED is left in the difficult position of assessing a request that, while on the surface would appear logical, has no information as part of the PMR to back up the assertion that the sealed source interior is non hazardous. Also, NMED agrees that sampling of the packaging material is not relevant to determining whether the actual waste is hazardous. |

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| 7.3 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the proposal would add permit terms identifying the matters that must be documented as to each individual waste container qualifying for treatment as a sealed source (Comment 33). The permit would adopt the regulatory definitions in 10 CFR 30.4, 10 CFR 70.4, 49 CFR 173.403, and 49 CFR 173.469. The permit should state in additional detail how compliance with such regulations, in particular the DOT regulations, will be established. DOE responded, stating that LANL has proceduralized DOT processes and the procedures have been approved by the NMED to allow the shipment of sealed sources meeting these regulatory definitions. The regulatory requirements that LANL must meet are incorporated by reference to ensure that these standards are met on any sealed sources sent to the WIPP facility. | The specific requirements must be incorporated by reference, as indicated by the Permittees, if the PMR was accepted. However, NMED has had difficulty incorporating non-EPA requirements (i.e., NQA) in the permit, because regulatory authority when a requirement is not met is complicated by inclusion in the permit. Also note that the Permittees response implies that NMED has already allowed shipment of wastes without the specific inclusion of said requirements in the permit. This is because sealed sources were allowed shipment as Waste Stream LA-OS-00-01, and the wastes underwent 100% headspace gas sampling. There is no indication that the sampling compromised the internal sealed sources, and the WWIS does not indicate that any volatile organics were identified in the headspace from these specific drums (214 sources in 149 55-gallon drums). |
| 7.4 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the proposal calls for contamination survey results that validate the integrity of each sealed source. (B-22). The requirement should be stated quantitatively, so that it is clear how "integrity" is determined (Comment 34). Further, the permit should state how sealed sources that do not meet the integrity test are managed. DOE responded, stating that the applicable DOT regulations define integrity in quantitative terms. It is requested that Section B-3a(1)(iii), 4th bullet be revised to read as follows "The integrity of each sealed source must be validated by documented contamination survey results to meet the requirements of 10 CFR 34.27, which must be assembled as part of the AK documentation." | 10 CFR 34.27 states:" Each licensee who uses a sealed source shall have the source tested for leakage at intervals not to exceed 6 months. The leak testing of the source must be performed using a method approved by the Commission or by an Agreement State. The wipe sample should be taken from the nearest accessible point to the sealed source where contamination might accumulate. The wipe sample must be analyzed for radioactive contamination. The analysis must be capable of detecting the presence of 185 Bq (0.005 microcurie) of radioactive material on the test sample and must be performed by a person specifically authorized by the Commission or an Agreement State to perform the analysis." It appears reasonable to assess releases based on a specified microcurie amount, but the Permittees must specify actions taken if a leaking source was detected. |

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| 7.5 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the permit modification seems to call for visual examination (VE) at the time of packaging; i.e., it calls for verification of the use of a sealed container less than four liters in size and made of non-VOC bearing materials (Comment 35) . It should be stated that such VE is to be performed at the generator site as part of the waste characterization process, rather than being recorded as acceptable knowledge. DOE responded, stating that because all sealed sources are already generated, they are retrievably stored waste and have significant amounts of AK associated with them. Because they are being packaged at LANL prior to disposal at WIPP, the WIPP permit requires that they meet all of the characterization requirements of newly generated waste. This means that as they are packaged the AK is verified visually using the VE technique and no subsequent AK verification is required (i.e., subsequent radiography is not needed). | It is agreed that sealed sources are already in existence and are therefore retrievably stored waste. Other waste placed in overpacks (e.g., Rocky Flats) was considered retrievably stored waste. The Permittees are correct in stating that the permit requires repackaged waste to be characterized as newly generated waste (i.e., allowing use of the visual examination technique), and subsequent radiography is not required. With respect to the AK record, updating this record to present information gleaned during RTR/VE is typically done, but this information is clearly delineated in the AK Summary as originating from the confirmation process. |
| 7.6 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that it is not clear how visual examination will determine that the outer casing is of non-VOC bearing material. (B-22). This should be made specific (Comment 36). DOE responded, stating that the containers for sealed sources are metallic. As such they are not VOC bearing material. | The Permittees response appears appropriate, although PMR could have specified container composition to ensure that the outer casing is always made of metal(s). |

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| 7.7 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the proposal states that a waste stream VOC source term for packaging is to be established based on sampling of five or more containers holding packaging materials "typical and representative" of such materials in the waste stream. (at B-4). It is not stated whether all sealed sources in the waste stream in question will be repackaged using substantially similar methods and materials, although that is the implication. This should be made explicit (Comment 37). DOE responded, stating that all LANL OSR Program TRU sealed sources are packaged in a Pipe Overpack Component assembly payload container. There are four variations currently approved and used. | The DOE's response appears reasonable, as information concerning the pipe overpacks was provided. The proposed permit modification request language changes appear reasonable. |
| | | Sealed Sources | | These containers are described in LANL procedures and approved by NMED as part of the sealed sources program. These containers and packaging components are described in detail within Attachment D of the PMR. Section B-3a(1)(iii) will have two changes added. These are: Headspace gas sampling and analysis of a waste container containing a pipe overpack component belonging to the LANL sealed sources waste stream...All LANL sealed sources will be characterized as newly generated waste. | The proposed language change does not address the commentor's concerns, as the commentor wished assurances that all packaging materials would indeed be of similar materials. However, the proposed changes appropriately mandate the collection of the five proposed samples of the packaging material used to contain a pipe overpack component. The PMR also appropriately states, as required in the permit, that all LANL sealed sources will be characterized as newly generated waste (that this does not mean the waste is newly generated waste, but will be characterized as repackaged waste, that is, using visual verification). |
| 7.8 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the basis for choosing a sample of five containers is not stated. Statistical support must be offered for use of five (rather than a smaller or larger number) "typical and representative" containers to derive VOC values (Comment 38). DOE responded, stating that the selection of 5 samples to estimate the mean and standard deviation was selected because values are generally expected to be very small compared to the regulatory threshold values used in Attachment B2. These estimates are used to determine statistically the actual number of samples needed by applying the methodology in Section B2-3b of the HWFP. | NMED concurs with the Permittees. The selection of five samples is commensurate with procedures associated with the reduced headspace gas already present in the permit. The proposed language change, requiring re-evaluation of source terms is any change in material or manufacturer occurs, appears appropriate. |

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| 7.9 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the proposal simply calls for re-evaluation if the packaging materials are significantly changed. (B-4). It would be more appropriate if regular samples were taken to determine the existence of any change (Comment 39). DOE responded, stating: "The data in Attachment D indicates that additional sampling and analysis will yield no significantly different data. If packaging materials are changed, new source term data will be required. We are suggesting that Section B-3a(1)(iii) be revised to read as follows: 'The VOC sources term also must be re-evaluated if any significant (e.g., change in material or change in manufacturer) is made to the packaging materials used in the sealed sources waste stream.' " | NMED agrees with the Permittees that addition of a clause in the PMR to re-evaluate the source term if material or manufacturer changes occurs is appropriate, but the nature of this re-evaluation (i.e., resampling) should also be specified in the PMR. |
| 7.10 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that there should be some data to indicate that adding a sealed source to a drum does not yield any additional VOCs (Comment 40). DOE responded, stating that the assurances for this are implicit in the basic understanding that it is physically impossible for a sealed source to be a VOC generator or a source for radiolysis if the source is sealed. There are data in Attachment D in the Section entitled "Potential VOCs from Radiolysis". | NMED understands that while it is believed obvious by the Permittees that VOCs cannot be present in the sealed sources, specific information to this end should be supplied to support this assertion. The referenced AK document was not included in the PMR; if this document contains sensitive material, then DOE should so indicate, so that appropriately cleared personnel can examine the data. |
| 7.11 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that it is not clear why new terms for sealed sources should apply to retrievably stored waste. (B-6). It is implied in the presentation that sealed sources will be newly packaged waste (Comment 41).<br>DOE responded, stating that all sealed sources from LANL are retrievably stored waste that are required by the HWFP to be characterized as newly generated waste. Clarifying language in Section B-3a(1)(iii) was indicated in a previous response. All LANL sealed sources will be characterized as newly generated waste. The reference to LANL sealed sources in Section B-3d(2) should be removed. | NMED agrees that the permit specifies repackaged waste to be characterized as newly generated waste, although this requirement does not change the categorization of the waste from retrievably stored to newly generated. This requirement basically states that repackaged waste must be visually examined (via VE technique) during repackaging to confirm AK, not that the waste status be changed from that of retrievably stored. |

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| 7.12 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that there is an underlying question whether the sealed sources in question are defense waste, qualifying for disposal in WIPP. Some of the documentation asserts that the materials are being assembled at LANL from "locations that are not secure." (Att. D at 1). It should be explained by the Permittees how it is that defense materials containing transuranic elements are stored at insecure locations and whether all the waste at issue is actually known to be defense waste, based on acceptable knowledge or other information. Since some of the sealed sources are clearly not defense waste, it should be made clear how it is determined, and on what criteria, whether an item is defense waste (Comment 42). DOE responded, stating that the WIPP Waste Acceptance Criteria (Section 3.1.5 ) requires that all waste shipped to WIPP be defense-related. | NMED agrees that the defense status is not clearly supported by information presented in the PMR, but also points out that the Permit has no specification regarding defense related status of waste. As an observation, the defense status of the waste should be clearly and fully evaluated during audits, but this could be impacted by how LANL defines this waste stream. LANL could combine all sealed sources into a single waste stream, thereby defining the entire waste as "defense related" because some material, in part, is of this status. However, the wastes are not "hopelessly commingled" as with other sites dealing with the challenge of mixed defense/non-defense wastes. |
| 7.13 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the permit should specify the limit in dpm/wipe which determines whether a sealed source is leaking (Comment 43). DOE responded, stating that this information is derived from 10 CFR 34.27 and is quantified in LANL procedures which are part of the approved sealed source program. A value of <0.0005 microcuries removable radioactivity indicates the source is not leaking. The requirement in the HWFP to meet 10 CFR 34.27 incorporates this requirement. | NMED concurs with the Permittees' statements. |
| 7.14 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public questioned what will happen if WIPP is allowed to receive greater-than-Class-C (GTCC) non-defense sealed sources (Comment 44). DOE responded, stating that this PMR makes no request to receive anything other than defense-related sealed sources. | NMED understand the concerns of the public, but agrees that, at the current time, the WIPP is required to accept only defense related waste as per the LWA. |

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| 7.15 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the PMR does not indicate why the modification is needed (Comment 45). DOE responded, stating the first paragraph in the PMR (page 4, 1st paragraph, item 3) states the following: "The proposed modification is needed to obtain relief from characterization requirements that should not be applied to the LANL sealed sources waste streams. These changes to the headspace gas characterization requirements are requested because these are non-VOC bearing waste streams and it is therefore, unnecessary to perform this characterization technique." | NMED believes that the technical need for the PMR is similar to that for other waste streams that were allowed reduction in headspace gas. That is, if there is logical information to indicate that hazardous wastes may not be present in a given waste (e.g., solids that have undergone thermal treatment), then the wastes should not be subject to 100% headspace gas. Because the Permittees did not provide substantial AK data for all sealed sources and because NMED does believe that through AK audits it is likely that LANL may ultimately show that hazardous wastes are not present within sealed sources, the logical extension of these observations would be to subject the waste to reduced headspace gas sampling assuming technical practicability of this approach. In this manner, the Permittees are allowed substantial relief from characterization requirements, while affording the public the necessary checking of actual waste, not only a surrogate assembled to resemble the subject waste. |
| 7.16 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the text in Section B-3a(1) should be revised (Comment 46). DOE responded, stating in order to clarify the location of the VOC sampling requirements the Permittees suggest that the text in Section B-3a(1) be changed to read " LANL waste containers that meet the conditions specified in Section B-3a(1)(iii) for sealed source containers are to be assigned VOC concentration values as directed in Section B-3a(1)(iii)." | NMED concurs that the proposed language change would clarify the issue raised by the commentor. |
| 7.17 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public questioned if NMED is a participant in the review and approval of the LANL QAPjP (Comment 47)? DOE responded, stating that all revised QAPjPs are reviewed and approved by the CBFO and upon approval the QAPjP is sent to NMED for review. NMED also reviews and approves QAPjPs during the audit process. | NMED is provided QAPjPs by the Permittees, but it does not review them. Although audit report approvals might be construed to imply approval by NMED of all procedures and generator site documents, NMED in fact does not explicitly approve indivudual documents such as the QAPjP. |

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| 7.18 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that new language in Table B-6 does not seem appropriate since it references statistical sampling (Comment 48). DOE responded, stating that when the statistical headspace gas sampling modifications were approved the required change in Table B-6 was not included. Since a revision to this table was being made it was appropriate to include all necessary revisions to make the permit correct. | NMED concurs that changes unrelated to the PMR being requested are generally unacceptable, but those made only to correct a previous oversight with respect to reflecting a previous permit modification request are acceptable |
| 7.19 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that a list of sources would be helpful (Comment 49). DOE responded, stating that the type of sources is part of each AK package and will be available for review during audits. | NMED agrees that all sources must be available for review during audit, but actual AK information (not just listings of documents in the AK record) should have been included in the PMR, if this information is not classified. |
| 7.20 | Triay/Warren, CBFO/WTS | Sealed Sources | G | In public comments concerning sealed sources, the public stated that the modification should address reactive and hazardous constituents (Comment 50). DOE responded, stating that the sealed source waste stream destined for disposal at WIPP is a non-mixed, non-hazardous waste stream that will not be considered reactive as indicated in the response to the NMED letter of May 8, 2003. | NMED agrees that the PMR focused on the presence of VOCs, and additional information concerning other hazardous wastes should have been spelled out. |
| 8.1 | Don Hancock, SRIC | Sealed Sources | H | Thirty-five pages of the Permittees' responses relate to the Drum Age Criteria (DAC) and sealed sources permit modifications which were submitted as class 2 modification requests, and which SRIC believes are "major modifications" for which a public hearing is required. NMSA 74-4-4.2.H, SRIC also notes that the voluminous responses indicate that the modification requests were incomplete, which is grounds for denial of the requests. 40 CFR 270.42(b)(7). | NMED notes that while the responses were "voluminous", the actual proposed changes to the permit embedded within the responses were not extensive for sealed sources. For example, see Response to Comment 7.2 regarding the status of the PMR as a Class 2, and also Comments 5.5, 7.2, 7.10 regarding the completeness of the submission with respect to supporting data. |
| 8.2 | Don Hancock, SRIC | Sealed Sources | H | In their responses, the Permittees now explicitly propose to allow leaking sealed sources to be permitted and submit new language that was not included in the request. Comment 34 response. Public comment could point the lack of technical analysis of the effects of such leaking containers and the specific incompleteness of the modification request in that regard. | NMED agrees that the PMR proposes no method for management of containers with detected sealed sources. See Response to Comment 7.4. |

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| 8.3 | Don Hancock, SRIC | Sealed Sources | H | Deny the DAC and sealed sources permit modification requests, as SRIC and others stated in written public comments. | See Response to Comments 1.1, 1.2, and 1.3. |
| 8.4 | Don Hancock, SRIC | Sealed Sources | H | The commentor strenuously objects to the proposed modification, which is not properly a class 2 modification, but rather must be submitted by the Permittees and considered by NMED as a class 3 modification. The modification request must be denied. | See Response to Comment 1.2. |
| 8.5 | Don Hancock, SRIC | Sealed Sources | H | Sealed sources were not included in the Baseline Inventory Report (BIR), so the Permittees have not provided sufficient information about the new waste form, nor is the modification request consistent with the permit application. | NMED agrees that information pertaining to the specific waste of question is lacking; see Response to Comments 5.5, 7.2, and 7.10. |
| 8.6 | Don Hancock, SRIC | Sealed Sources | H | The modification request must also be denied because it is not in compliance with 40 CFR 270.42(b)(1)(iii) which requires that the request "explains why the modification is needed." The requests states that there are two reasons that the modification is needed (already allowed precedence with respect to reduced HSG sampling and homeland security), but neither actually explains or establishes that the modification request is needed. Thus, the Permittees modification request not only does not describe the need for the modification, as required by the regulations, but it provides inaccurate information, contrary to the requirement of 40 CFR 270.11(d). | NMED agrees that the homeland security argument can be countered by language, observations, and information provided by the commentor. NMED also notes that the actual precedence set with respect to headspace gas sampling is the reduction, not elimination, of said sampling. See Response to Comment 7.15. |
| 8.7 | Don Hancock, SRIC | Sealed Sources | H | The permit modification request, if approved, would clearly violate the requirements of the Hazardous Waste Act to protect public health and the environment. Section 74-4-4.A, NMSA; 40 CFR 270.42(b)(7)(iii). For example, the request would allow leaking sealed sources to be brought to WIPP. Sealed sources may be damaged and leak; any such sources should be prohibited at WIPP. Yet the proposed permit language does not ensure that leaking sources would not be sent to WIPP. | The Permittees have proposed modifications to detect leaking sealed sources, but NMED agrees that the Permittees have not proposed what shall be done if these leaking sealed sources are detected; the PMR must do so. |

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| 8.8 | Don Hancock, SRIC | Sealed Sources | H | The permit modification request does not include procedures to ensure that no VOC-bearing material is in the sealed sources or waste packaging. | The Permittees believe that the sealed sources contain no VOCs, and has provided information which they believe supports the contention that packaging materials contain no VOCs. |
| 8.9 | Don Hancock, SRIC | Sealed Sources | H | The permit modification request does not include procedures to ensure that only defense-related sealed sources could be shipped to WIPP. Even more disturbingly, Attachment D indicates that sealed sources that are not now defense waste, "may be determined to meet this WIPP eligibility requirement at some time in the future." | See Response to Comment 1.3. |
| 9.1 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | The commentor believes the elimination of headspace gas sampling for this particular waste stream would have no bearing on the need for such characterization of other waste streams. In any other circumstance the modification of characterization procedures in such a basic fashion would call for Class 3 treatment. | See Response to Comment 1.2. |
| 9.2 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | The basis for the proposed modification is the existence of acceptable knowledge showing that no VOCs are contained in the source material. Thus, the ground for the modification must be the adequacy of such acceptable knowledge. | NMED agrees that Acceptable Knowledge is the basis for the proposed modification, and that the modification must therefore address the acceptable knowledge record in this regard. See Response to Comment 7.2. |
| 9.3 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | The permit should state in additional detail how compliance with such regulations, in particular the DOT regulations, will be established. | The Permittees indicate that specific DOT requirements shall be met and these shall be assessed during Audits as part of the Acceptable Knowledge evaluation. However, it is unclear whether this is the appropriate venue to evaluate all of these requirements, and NMED does have reservations about including requirements from other agencies based on difficulties in implementing these requirements with regard to who has appropriate authority; see Response to Comment 7.3. |

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| 9.4 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | The proposal calls for contamination survey results that validate the integrity of each sealed source. (B-22). The requirement should be stated quantitatively, so that it is clear how "integrity" is determined. It is appropriate to state specifically that visual examination (VE) is accompanied by a swipe test to determine radioactivity present on the item and that a stated level of radioactivity is deemed to indicate leakage. Further, the permit should state how sealed sources that do not meet the integrity test are managed. At a meeting with DOE representatives we were shown a miniature overpack device that serves this purpose. The permit should direct use of such device. | See Response to Comment 8.7 |
| 9.5 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | VE at the time of packaging should be performed at the generator site as part of the waste characterization process, rather than being recorded as acceptable knowledge. | See Response to Comment 7.5. |
| 9.6 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | It is not stated how visual examination will determine that the outer casing is of non-VOC bearing material. (B-22). It would be appropriate to direct that characterization at the generator site incorporate reference to serial numbers of the sealed sources and corresponding manufacturers' specifications, which indicate the materials used in fabricating sealed sources and the presence or absence of any hazardous constituents. | NMED agrees that specification of certain information during visual examination and repackaging and subsequent comparison of this information to the AK record would support the Permittees assertions. See Response to Comment 7.6. |
| 9.7 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | The proposal states that a waste stream VOC source term for packaging is to be established based on sampling of five or more containers holding packaging materials "typical and representative" of such packaging materials in the waste stream. (at B-4). It would be clearer to direct in the permit that all containers in the waste stream in question will be packaged using pipe overpack containers and substantially similar methods and materials. Further, the basis for choosing a sample of five containers is not stated; possibly the number is arbitrary. | See response to Comment 7.8 regarding the selection of five containers. The restriction of packaging materials to certain types is unnecessary if the Permittees document the materials used to perform the sampling/analysis, and are required to re-assess (i.e., resample/analyze) if these materials have different compositions or are acquired from different manufacturers. |

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| 9.8 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | The proposal calls for re-evaluation if the packaging materials are significantly changed. (B-4). It would be more appropriate if regular samples were taken to determine the existence of any change. | See Response to Comment 7.8 and 9.7. |
| 9.9 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | The proposed terms for sealed sources should not apply to retrievably stored waste (B-6), since the sealed source waste stream will be entirely newly generated waste. | See Response to Comment 7.5. |
| 9.10 | Lindsay Lovejoy, NMAGO | Sealed Sources | I | There is an underlying question whether the sealed sources in the waste stream are defense waste, qualifying for disposal in WIPP. | See Response to Comment 1.3. |
| 10.1 | Janet Greenwald, CARD | Sealed Sources | J | Commentor stated that she was opposed to expansion of WIPP's mission, including the disposal of sealed sources. | See Response to Comment 1.1 |
| 11.1 | Penelope McMullen, Sisters of Loretto | Sealed Sources | K | The commentor urges NMED to deny this request. This also should be a class 3 request because it is a substantial change that merits a public hearing. | See Response to Comment 1.2. |
| 11.2 | Penelope McMullen, Sisters of Loretto | Sealed Sources | K | This proposal is relying on "acceptable knowledge" (AK) which is not "acceptable" to the public because of its known inadequacies and LANL's poor record keeping. | See Response to Comment 9.2 |
| 11.3 | Penelope McMullen, Sisters of Loretto | Sealed Sources | K | Many of the sealed sources contain non defense wastes which are prohibited at WIPP. The PMR does not explain how LANL will make that determination, so the commentor stated she cannot trust that it will be done correctly. | NMED has observed how defense determinations are ascertained through audit, and we believe that this can be accomplished adequately if the Permittees auditors are thorough and evaluate all information. See Response to Comments1.3 and 7.12. |
| 11.4 | Penelope McMullen, Sisters of Loretto | Sealed Sources | K | DOE says that headspace gas sampling would destroy the sealed source. The commentor cannot believe that with today's technology there are no ways to take a sample without destroying the capsule. | NMED has not been provided specific information regarding the nature of the pipe overpack configuration, but NMED does point out that LANL has shipped sealed sources in the past and has obtained headspace gas sampling and analysis of these wastes. The Permittees must provide additional information supporting contentions that the sealed sources would be destroyed upon sampling. |
| 11.5 | Penelope McMullen, Sisters of Loretto | Sealed Sources | K | At the public meeting the commentor heard that DOE headquarters' plans to add new items to the list of materials that go into sealed sources. Since they don't know what these future items might be, NMED should deny changes to sealed-source procedures. | NMED cannot deny the PMR based upon speculation; similarly, NMED cannot approve the PMR without adequate justification and supporting information. |

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| 12.1 | Geoff Petrie, Nuclear Watch New Mexico | Sealed Sources | L | Los Alamos National Laboratory (LANL) has a poor acceptable knowledge (AK) history, and that this PMR is based on LANL's AK. Furthermore, DOE is implementing the use of National Security as a reason for a PMR, something that the commentor is very leery of. | See Response to Comment 9.2 |
| 12.2 | Geoff Petrie, Nuclear Watch New Mexico | Sealed Sources | L | The commentor firmly believes that the PMR applies to LANL only and additional sites beyond LANL should not be approved to dump sealed sources at WIPP through a Class 1 PMR. | NMED agrees that the PMR applies only to LANL, and the language in the PMR is specific to LANL. |
| 12.3 | Geoff Petrie, Nuclear Watch New Mexico | Sealed Sources | L | Will there be a "double-checking" of LANL's classification and characterization of the sealed sources waste? If so, who will be doing that checking? Again, the commentor firmly believes that LANL should be required to have additional checks in place to make certain that the sealed sources waste is what it believes it is, and this should be so stated in the HWFP. | The contents of sealed sources shall be evaluated during audits. The Audit process, as observed by NMED, requires the Permittees to use the B6 checklist from the Permit to evaluate the adequacy of AK information with respect to sealed sources. |
| 12.4 | Geoff Petrie, Nuclear Watch New Mexico | Sealed Sources | L | DOE should also state how much of the sealed waste at LANL is or is not defense related waste, as any non-military sealed sources waste would be prohibited at WIPP. NMED should be made truly certain that this is the case, and that fail-safes are in place to prevent prohibited sealed sources waste from coming to WIPP. | See Response to Comments 1.2 and 7.12. |
| 12.5 | Geoff Petrie, Nuclear Watch New Mexico | Sealed Sources | L | The commentor believes that this is not a properly classified request. NMED should deny this as a Class 2 PMR and require DOE to resubmit this PMR as a Class 3. | See Response to Comment 1.2. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
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| 5.1 | Matthew Silva/ EEG | Formaldehyde | E | EPA requires the use of the TCLP sampling to support delisting petitions submitted under 40 CFR 260.22. For all delisting demonstrations, agency requires that the TCLP be used to predict the leaching potential of any Appendix VIII constituents. If NMED views this as a delisting procedure then the need for TCLP sampling should be considered. | NMED does not concur with this comment. Based upon information provided by the Permittees in the PMR, the Permittees are seeking to modify a misclassification of LANL wastes in order to allow LANL to remove formaldehyde from their VOC solids and HSG analyses target lists. The action of the PMR is not subject to the delisting procedures identified in 40 CFR 260.22. |
| 7.1 | Inés Triay/ CBFO | Formaldehyde | G | Public Comments (Comment 53) indicated that the Permittees must delist formaldehyde under provisions of 40 CFR 260.22 and that TCLP analyses of wastes must be conducted to support the delisting process. The Permittees, in their response, indicated that the proposed modification does not constitute a delisting procedure and as a result, TCLP confirmatory sampling and analysis is not needed to support a decision to remove from the VOC target lists for LANL. | NMED concurs with the Permittees' Response to Comments 5.1 and 8.2. See the response to comment 5.1 for additional NMED response. |
| 7.2 | Inés Triay/ CBFO | Formaldehyde | G | Several public comments (Comments 51 and 52 in the Permittees' Response package) indicated that the AK information provided was not sufficient to establish that at no time has formaldehyde been present in wastes generated at the RLWTF. In response to these comments from the public comment period, the Permittees indicated that because of formaldehyde being listed as a U-listed waste (discarded chemical products, container residues), that AK would be a more appropriate means of assigning or not assigning the U122 waste code for formaldehyde. | NMED concurs with the Permittees Response to Comments. In the comment period for the revised draft permit prior to its issuance in 1999, LANL submitted a comment seeking to have formaldehyde removed from the VOC target lists for LANL. However, because the Permittees did not offer this comment, NMED could not take action upon the request at that time. The original Baseline Inventory Report (BIR) generated by the Permittees indicated that formaldehyde may be in some wastes at LANL. However, the standards for AK information that are imposed via the Permit were not in place at the time the initial BIR was developed. Subsequent AK information was collected by LANL following a more rigorous protocol and is therefore more supportive of the request to remove formaldehyde from the LANL VOC Solids and HSG target lists. |
| 7.3 | Inés Triay/ CBFO | Formaldehyde | G | The information needed to justify removal of formaldehyde is contained in the process acceptable knowledge report for nitrate and chloride operations at TA55. (Comment 52) | See the Response to Comment 7.2. |

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| Comment Number | Commentor/ Affiliation | Topic Area | commentor Identifier | Comment Summary | Response |
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| 8.1 | Don Hancock/ SRIC | Formaldehyde | H | There is not sufficient information in the attached AK summary to justify removing formaldehyde from the target list for LANL. | NMED believes that adequate AK information has been provided to justify removal of formaldehyde from VOC HSG and Solids target lists at LANL. If available sampling results indicate that formaldehyde is not present in samples collected to date, that would provide further justification for removal of formaldehyde from the LANL target lists for VOC Solids and VOC HSG analyses. TIC analysis and reporting requirements will still apply to these waste streams, and the presence of formaldehyde as a TIC in these waste streams could trigger the reinclusion of formaldehyde as a target analyte. |
| 8.2 | Don Hancock/ SRIC | Formaldehyde | H | Rather than rely on AK documentation that has proven to be inaccurate, the Permittees should provide documentation based upon Toxicity Characteristics Leaching Procedure (TCLP) sampling of actual wastes. | See the response to Comment 5.1. |
| 9.1 | Lindsay Lovejoy/ NMAGO | Formaldehyde | I | The AK information provided in not adequate to establish that at no time formaldehyde was ever present in S3000 wastes at the RLWTF or TA-55. | See the Response to Comment 7.2. |
| 11.1 | Penelope McMullen/ Sisters of Loretto | Formaldehyde | K | The Permittees did not provide adequate evidence that formaldehyde may not appear in LANL TRU waste streams. Therefore, formaldehyde should not be taken off the list of analytes that require testing. | See the Response to Comment 7.2. |
| 12.1 | Geoff Petrie/ NWNM | Formaldehyde | L | DOE did not clearly justify why the modification to remove formaldehyde from the LANL target list is necessary, how much money would be saved, and how this modification would increase the safety of the worker. | NMED partially concurs with this comment. While NMED is concerned about worker safety, NMED has no authority to regulate such issues. Worker safety is generally regulated under the Occupational Safety and Health Administration and the Mine Safety and Health Administration. However, the TIC identification and reporting provisions of the permit ensure that formaldehyde will be identified if it is in the wastes. |
| 12.2 | Geoff Petrie/ NWNM | Formaldehyde | L | The acceptable knowledge summary provided in the PMR does not directly show that there is no formaldehyde in the LANL waste. | See the Response to Comment 7.2. |

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| Comment Number | Commentor/ Affiliation | Topic Area | commentor Number | Comment Summary | Response |
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| 5.1 | Matthew Silva/ EEG | New Hazardous Waste Numbers | E | It was not clear if the LDR treatment standards via UV oxidation and/or alkaline chlorination applied to the cyanide compounds in addition to the organic compounds in the new waste streams. | The Permittees further clarified in a response to this comment (Permittees Comment 7.3) during the public comment period that the UV oxidation process was applicable to cyanide wastes as well as Hexachlorobutadiene wastes. However, waste accepted for disposal at WIPP does not need to meet LDR treatment standards as specified in the WIPP Land Withdrawal Act. The decision to treat waste is left to the generator site and their regulator. Of course, waste must meet the WIPP WAC prior to acceptance for disposal. |
| 5.2 | Matthew Silva/ EEG | New Hazardous Waste Numbers | E | Table II.C.4 approves these HWNs for all sites, not just for RFETS. Therefore the treatment standards used at RFETS may not be occurring at other facilities. NMED may want to consider additional limitations on the receipt of waste with the proposed HWNs. | To date, NMED has not limited any hazardous waste numbers listed on Table II.C 4 to specific sites. Although the Permittees identified RFETS as one site where these wastes exist, NMED finds no reason to limit D033 or waste with other hazardous waste numbers to RFETS. For example, NMED's July 6, 2001 and November 25, 2002 approvals adding new hazardous waste numbers to Table II.C.4 did not limit the wastes to the sites identified in the PMR, such as SRS, LANL, and INEEL. With regard to treatment standards, see response to Comment 5.1. |
| 5.3 | Matthew Silva/ EEG | New Hazardous Waste Numbers | E | The commentor is concerned that the amended part A application may be incorrectly completed in that the quantity for each waste number was 344 metric tons, while the guidance for completing the part A indicates that these additional HWNs should state: "included with above". | The Permittees further clarified in a response to this comment (Permittees Comment 7.4) that the exact waste quantities for each waste code were not known and that the 344 metric tons was provided as a conservative estimate. The term "included with above" is not appropriate because the wastes codes are attributable to different waste streams. NMED concurs with the response to comment provided by the Permittees. |

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| Comment Number | Commentor/ Affiliation | Topic Area | commentor Number | Comment Summary | Response |
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| 5.4 | Matthew Silva/ EEG | New Hazardous Waste Numbers | E | Given the toxicity and quantity of Hexachlorobutadiene wastes NMED may want to consider adding Hexachlorobutadiene to the disposal room limits, and to the waste confirmation requirements for volatile and or semivolatile compounds. | Regarding estimated annual quantities of waste listed on the revised Part A Application, see response to Comment 5.3. Disposal room limits for VOCs were based on the VOC screening methodology described in Appendix D13 of the permit application, which identified nine VOCs responsible for 99 percent of the total risk. Because the current Confirmatory VOC Monitoring Plan (Permit Attachment N) includes requirements to investigate tentatively identified compounds (TICs) in every sample analyzed, NMED believes the existing program adequately addresses potentially new compounds such as Hexachlorobutadiene. Likewise, rather than add Hexachlorobutadiene to the target analyte lists for both VOCs and SVOCs, NMED believes the permit TIC requirements are sufficient to ensure that hazardous constituents will be added to the appropriate target analyte lists for those wastes containing Hexachlorobutadiene. |
| 7.1 | Inés Triay/ CBFO | New Hazardous Waste Numbers | G | A comment (First Comment 54) was made stating that the referenced citation related to modifications of containers in 40 CFR 270.42(b) was applicable to storage of containers and not directly applicable to disposal of containers. In response, the Permittees indicated that 40 CFR 270.42(b) Appendix I Item F.3.b is an appropriate citation for the use of containers for disposal in a Subpart X disposal unit as well as for storage above ground. | NMED concurs with the Permittees' response to First Comment 54 from the public comment period. See the response to Comment 9.2 for further clarification. |
| 7.2 | Inés Triay/ CBFO | New Hazardous Waste Numbers | G | A comment (Second Comment 54) made during public comment period asked for an explanation as to whether the original application considered the compatibility of Hexachlorobutadiene, and also sought clarification as to why Hexachlorobutadiene was not added to the disposal room monitoring. In response, the Permittees indicated that the compatibility analysis from the permit application included Hexachlorobutadiene. Additionally, no monitoring is required because the Hexachlorobutadiene is expected in only trace quantities. | Attachment E of the PMR reproduced the chemical compatibility analysis of waste forms and materials from the original permit application, Appendix C1. Hexachlorobutadiene was included in the chemical list for Group 17 (Halogenated Organics) in trace (<1 weight percent) quantities, which was then evaluated against all other chemical lists for compatibility. See also Response to Comment 5.4. |

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| Comment Number | Commentor/ Affiliation | Topic Area | commentor Number | Comment Summary | Response |
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| 7.3 | Inés Triay/ CBFO | New Hazardous Waste Numbers | G | A comment (Comment 55) was made during public comment period clarification of whether all of the wastes associated with the additional hazardous waste numbers from RFETS wastes were subject to the same LDR treatment. In response to Comment 5.1, the Permittees clarified that both cyanides and organics were treated to below LDR standards. (Comment 55) | See Response to Comment 5.1. |
| 7.4 | Inés Triay/ CBFO | New Hazardous Waste Numbers | G | A comment (Comment 56) received during the public comment period sought clarification as to whether the 344 metric tons value in the Part A Permit would include each of the hazardous waste numbers proposed by the Permittees. In response, the Permittees indicated that the 344 metric tons was applied to all hazardous waste numbers because the precise breakout of waste for each of the new hazardous waste numbers was not known and this value was provided to serve as an estimated value. | NMED concurs with the clarification provided by the Permittees. Also see Response to Comment 5.3. |
| 8.1 | Don Hancock/ SRIC | New Hazardous Waste Numbers | H | The commentor objects to the use of class 2 procedures for adding hazardous waste numbers to the permit. In particular with this waste stream, these wastes appear to make up approximately 14 % of all the waste from RFETS. | Although these wastes appear to make up a significant percentage of anticipated wastes from RFETS, the definition of Class 2 modifications includes "variations in the types and quantities of wastes managed at the facility", and this volume of additional wastes added would not warrant a Class 3 permit modification process. NMED further notes that all previous modifications requesting new hazardous waste numbers were processed as Class 2 PMRs. |
| 8.2 | Don Hancock/ SRIC | New Hazardous Waste Numbers | H | The commentor is concerned that Hexachlorobutadiene is chemically incompatible with other wastes at the WIPP. Actual data must be provided to demonstrate that the waste is not incompatible especially since more than 2 dozen other hazardous chemicals have now been approved for WIPP, which were not included in the chemical compatibility analysis done in 1996. | See Response to Comment number 7.2. All hazardous constituents added to the permit since issuance have evaluated the compatibility of these new chemicals using the methodology in Appendix C1 of the permit application, which included compatibility with halogenated organics such as Hexachlorobutadiene. |
| 8.3 | Don Hancock/ SRIC | New Hazardous Waste Numbers | H | The previous modification request to allow a single barrel of Hexachlorobutadiene waste from LANL does not equate to the current PMR, which specifies that 344 tons of Hexachlorobutadiene waste a year may be disposed of at WIPP. | See the response to Comment 5.3. |

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| Comment Number | Commentor/ Affiliation | Topic Area | commentor Number | Comment Summary | Response |
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| 9.1 | Lindsay Lovejoy/ NMAGO | New Hazardous Waste Numbers | I | The Permittees should explain whether the original application Appendix C1 considered the compatibility of Hexachlorobutadiene. | See the response to Comments 5.4 and 8.2. |
| 9.2 | Lindsay Lovejoy/ NMAGO | New Hazardous Waste Numbers | I | The cited RCRA reference for the modification is 40 CFR 270.42 Appendix I Item F.3.b, which is in regard to the storage of waste in containers. The correct reference should be Item J.6.B which describes landfill permit modifications involving different wastes that do not require additional management practices. Although WIPP is a miscellaneous unit and not a landfill, Subpart I is applicable through subpart X, but it would seem appropriate to rely upon a provision concerning changes in disposal practices in seeking this modification. | The Permittees provided further clarification as a response to this comment indicating that the reference to Appendix I Item F.3.b is applicable to storage on the surface prior to disposal within the miscellaneous Subpart X unit. The Permittees further indicated that applying this item to subsurface disposal as part of a Subpart X permitting processes is appropriate. NMED concurs with the conclusion made by the Permittees in their response to Comment 9.2. |
| 11.1 | Penelope McMullen/ Sisters of Loretto | New Hazardous Waste Numbers | K | The PMR does not show that the new waste numbers will not adversely affect the environment or human health. Specifically, Hexachlorobutadiene should not be approved. It is potentially incompatible with other materials, and significantly large quantities could be sent to WIPP if the modification is approved. Hexachlorobutadiene specifically needs to be tested for compatibility. | See the response to comments 5.4 and 8.2. |
| 12.1 | Geoff Petrie/ NWNM | New Hazardous Waste Numbers | L | The PMR to add new hazardous waste numbers appears to apply to all sites instead of only to the RFETS waste streams know to contain these hazardous waste numbers. | See Response to Comment 5.2. |
| 12.2 | Geoff Petrie/ NWNM | New Hazardous Waste Numbers | L | The Permittees did not provide adequate justification for assumptions that were used for adding these additional hazardous waste codes. | NMED believes the justification provided by the Permittees in the PMR was adequate. See also Response to Comments 5.1 and 5.2. |

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| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 1.1 | Deirdre Lennihan, Citizen | PCBs | A | The commentor stated that " if it isn't broken, don't fix it." The commentor believes that there should be no changes in the permit as it relates to the PCB requirements. The commentor believes there are contradictions in the EPA regulations regarding PCBs, and that these need to be identified. In addition, the commentor indicated that she believes that NMED has the authority to deny the modification and should do that. | The issuance of a TSCA PCB/TRU-mixed waste permit necessitates the involvement of the EPA Region 6 TSCA program in the site operations and permitting. All PCB/TRU-mixed waste issues will be regulated under TSCA authority, not NMED. It is NMED's position that there is no technical or regulatory reason to duplicate regulatory authority for PCB/TRU-mixed waste now that the facility has obtained a valid permit under the appropriate regulatory program. NMED does not believe that the EPA regulations are contradictory to the NMED regulations, and it is NMED's position that this modification should be approved. |
| 1.2 | Deirdre Lennihan, Citizen | PCBs | A | The commentor believes that NMED should at least insist on a firm PCB/ppm number. Otherwise the commentor believes that the Permittees will abuse the situation if such a number is not established. | See Response to Comment 1.1. |
| 2.1 | K. F. Wylie | PCBs | B | The commentor is concerned that PCBs in excess of 50 ppm will be accepted at the WIPP site. That sampling and/or analysis for PCBs will not be conducted prior to waste acceptance or after storage due to possible leaking. | Sampling and analysis of PCB/TRU-mixed wastes must meet the requirements contained in the EPA TSCA permit. |
| 2.2 | K. F. Wylie | PCBs | B | The commentor is concerned that WIPP will not be able to determine the PCB concentration in incoming debris and waste and being unable to determine incoming PCB concentration, WIPP does not want to conduct sampling and/or analysis for PCBs in runoff from the storage site. | See Response to Comment 2.1. |
| 2.3 | K. F. Wylie | PCBs | B | The commentor is concerned that DOE, WTS, EPA, and NM politicians (both in Washington D.C. and Santa Fe) have already signed-off on the Class 2 permit modification. | NMED evaluates all permit modifications based on their technical and regulatory merits. NMED has an EPA approved program to manage RCRA regulated waste, and based on that authority, the permit modification request was submitted to NMED as a Class 2 revision of the RCRA Permit to address removal of PCB. |
| 3.1 | Fred Woody, Carlsbad Dept. of Development | PCBs | C | The commentor indicated that the public meeting was very helpful and that they were reassured that the total PCBs would be less than 2% of the total facility volume of waste. The commentor is in support of the modification and believes that it is necessary for the closure of Rocky Flats and other nuclear facilities, and for national security. | NMED supports this permit modification. |

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| 4.1 | Robert Murray, Wells Fargo | PCBs | D | The commentor expressed support for the modification and believes that the half-mile underground salt mine is a good place to dispose of unwanted toxic waste. The commentor does not believe that the disposal of PCBs will affect the ability of WIPP to remain safe, and that it will help clean up the environment. | PCB/TRU-mixed waste will now be regulated under the EPA TSCA permit, and NMED believes that EPA has fully evaluated the disposal of this waste at the WIPP site when reaching the conclusion to issue a TSCA permit. |
| 5.1 | John Heaton, State House of Representatives - District 55 | PCBs | E | The commentor believes that the language in the Hazardous Waste permit that prohibits the disposal of PCB contaminated TRU waste has become automatically inapplicable since EPA Region 6 has issued a TSCA approval for the site. The commentor believes that the change in the permit should be an administrative modification and that deletion of the PCB language should be done by NMED. The commentor believes there should be no more delays in processing the modification. The commentor is also concerned that some members of the public believe this to be a Class 3 modification. The commentor expressed concern with the history of the modification and believes the initial class 1 modification which was submitted by DOE should have been granted. The commentor believes this is all a moot point with the issuance of the EPA permit and that NMED is wasting taxpayers money and time. | Legal and regulatory requirements contained in 20.4.1.900 NMAC (incorporating 40 CFR 270.42 Appendix I) determined the actions taken by NMED whereby a Class 2 permit modification was identified as the appropriate modification mechanism for this type of revision. Therefore, regardless of what might have appeared appropriate by the commentor, under regulation NMED did not have the legal option to simply administratively modify the permit based on this PMR submittal. NMED concurs that the modification should be processed as expeditiously as possible, taking into consideration the regulatory time constraints. NMED concurs with the commentor that the modification should be granted. EPA Region 6 supported NMED's authority in determining the appropriate classification of this permit modification request. |

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 6.1 | Matthew Silva, EEG | PCBs | F | The commentor indicated that the Permittees obtained approval to dispose of PCBs from EPA on May 15, 2003 in the form of a "Conditions for Approval for Disposal of PCB/TR and PCB/TRU Mixed Waste at the U.S. DOE WIPP Site, Carlsbad, New Mexico." The commentor was concerned that PCBs are still hazardous waste even with TSCA authorization and this modification request simply eliminates all references to PCBs from the HWFP. The commentor continues by saying that there is no indication that the Permittees have evaluated state of New Mexico regulations which may still apply. The commentor notes that PCBs are mentioned in the NM water quality regulations (at 20.6.2 NMAC) and there may be others. The commentor believes this may indicate a need to continue to address PCBs in the HWFP. The commentor indicates that NMED may wish to consider if they should regulate PCBs independent of the TSCA authorization. | The modification does not remove all references to PCB/TRU-mixed waste from the permit. In some cases, such as with emergency response procedures, the permit still contains information regarding PCB/TRU-mixed waste. With regard to other programs which regulate PCBs, the Permittees are required to comply with all applicable State environmental requirements. It is specifically the Permittees' responsibility to ensure compliance with the elements of their program, which does not require language in the HWFP to accomplish this. See Permittees Response to Comment 2. |
| 6.2 | Matthew Silva, EEG | PCBs | F | The commentor states that the permit modification seeks to remove the analytical testing for PCBs from the permit. The commentor indicates that it seems clear that the Permittees wish to replace the current HWFP analysis requirements with the "TSCA regulations" for analysis. However, the PMR does not indicate any method for reporting these analytical results to the WIPP, where these PCB-contaminated wastes will be stored and disposed. This information would be useful during amelioration of any mishap that might occur to these containers, or group of containers. The commentor suggests that the database on PCB waste containers be kept at the WIPP facility indicating the location of these containers and the PCB concentration be required to be maintained at the WIPP. The commentor suggests that the present WIPP Waste Information System (WWIS) might be an appropriate database. The commentor indicates that the Region 6 TSCA permit in Section III.D.4 already requires the WWIS be altered to show information on PCB waste. (cont.) | The TSCA permit requires that the Permittees maintain records of the disposal location of PCBs, as well as requirements that the containers be marked. The TSCA permit also requires that PCB information be maintained in the WWIS. NMED has access to the WWIS system, including the information that will be maintained under the TSCA permit. It is NMED's position that since that information is required under the TCSA permit and available for review by NMED, NMED does not need to require the information under the HWFP. (See Response to Public comment 3.) |

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 6.2 (cont.) | Matthew Silva, EEG | PCBs | F | (cont.). The commentor indicates that NMED may wish to obtain a plan from the Permittees for including generator site PCB container location, and PCB concentrations in those containers, in the WWIS, prior to approving the PMR. | Response above. |
| 6.3 | Matthew Silva, EEG | PCBs | F | The commentor indicates that the PMR alters Module II.C.3.f as follows: "PCB waste concentrations - wastes with polychlorinated biphenyls (PCBs) concentrations equal to or greater than 50 parts per million not authorized under an EPA PCB waste disposal authorization are not acceptable at WIPP". The commentor believes that rather than simply referencing "an EPA PCB disposal authorization", the language should be more specific. The commentor indicates that the current Region 6 TSCA permit, Section II.A.1 states that "PCB contaminated Transuranic Waste" are those allowed to be stored and disposed under 40 CFR 761.3 which defines "PCB contaminated" as follows: PCB contaminated means a non-liquid material containing PCBs at concentrations of greater than 50 ppm but less than 500 ppm...or where liquid material is unavailable for analysis, a non-porous surface having a surface concentration of greater than 10ug/100cm2, measured by a standard wipe test as defined in 40 CFR 761.123. The commentor indicates that the definition could be amended by stating (cont) | The TSCA permit does not intend to limit the upper concentration of PCB/TRU-mixed waste that can be stored or disposed of at WIPP to less than 500 ppm. Under the TSCA permit, Section IV.B.4, there is no upper bound for the PCB/TRU mixed waste. All PCB/TRU mixed waste issues will be regulated under TCSA authority, and not NMED. (See Response to Comment 1.1). Also, see Permittees' Response to Comment 5. |
| 6.3 (cont.) | Matthew Silva, EEG | PCBs | F | (cont) PCB waste-wastes with polychlorinated biphenyls (PCBs) at concentrations equal to or greater than 500 parts per million, or non-porous surfaces measured using the standard wipe test defined in 40 CFR 761.123 at equal to or greater than 100 ug/100 cm2, are not acceptable at the WIPP. Alternately, the prohibition could reference the exact EPA PCB waste disposal authorization that applies to WIPP. The commentor indicated that this applies to section B-1c, of the PMR, and section B-6 checklist. | |

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| 7.1 | Marina Day, Citizen | PCBs | G | The commentor indicated that she does not have a strong opinion on revising the permit to accept PCBs. She indicated that she wants the waste to be stored safely with strict laws and regulations. The commentor stated that the United States Senate, the United States House of Representatives, and the U.S. President are corrupt due to big money contributions, and big donors, and that poor people are left out. She indicated that she does not trust the government. She went on to say that the campaign contribution system needs to be changed and the amount of money accepted by candidates needs to be published on the internet. | NMED acknowledges the commentor's position on acceptance of PCBs at the WIPP site. NMED's authority in this instance is limited to administering RCRA's environmental laws and regulations, and within these guidelines, NMED strives to ensure facilities and operations follow these environmental laws and regulations and are protective of human health and the environment. NMED has no response to the other concerns which are unrelated to the PMR. |
| 8.1 | Lindsay Lovejoy, NMAGO | PCBs | H | The commentor indicated that the proposed modification would change the existing prohibition, which bars waste with PCB concentration in excess of 50 parts per million, to waste "not authorized under an EPA PCB waste disposal authorization" (e.g., B-2, B-3, B-14). The commentor indicated that EPA's permission is subject to enumerated "Conditions of Approval". The commentor states that the HWFP should refer to specific and known conditions and should not incorporate conditions that may be contained in future EPA authorization. The commentor provides, as an example, EPA's authorization letter containing limitations on the type of PCB items allowed for disposal. Further, there are restrictions on the disposal units allowed to receive PCBs, the change in capacity of disposal units, authorized storage areas, change in capacity of storage areas, addition of new storage areas, and the storage and packaging of PCB waste, closure of disposal units, personnel safety, operations, transportation, monitoring, recordkeeping, and other matters. (cont.) | See Response to Comment 6.3. |

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| 8.1 (cont.) | Lindsay Lovejoy, NMAGO | PCBs | H | (cont.) EPA's authorization also has a limit of five years. In the future EPA may amend these requirements upon Permittees' request. Action taken by EPA should not automatically modify the HWFP issued by NMED. Such action should not effectively modify the State permit. Thus, the PMR at present should be limited to permission to receive PCB-contaminated waste allowed by the May 15, 2003 EPA authority. | |
| 8.2 | Lindsay Lovejoy, NMAGO | PCBs | H | The commentor indicated that they had consulted with the Permittees in advance, and believe that EPA must be expected to insist upon compliance with the HWA permit. In addition, some of the conditions of EPA's approval of PCB-contaminated waste do not relate to management of hazardous waste, so it would be appropriate to simply incorporate by reference any future EPA authorization. The commentor then went on to say it is not certain what conditions EPA may apply to waste disposal in the future. If the Permittees believe that some of the conditions of EPA's current authorization do not apply to hazardous waste management, the Permittees may simply list those into the HWA permit as to PCB-contaminated waste. NMED should not grant to the Permittees and EPA a free hand in issuing future PCB authorizations which would then be incorporated into the State's Permit. | It is NMED's responsibility to ensure that the Permittees comply with the HWFP. NMED intends to work with EPA Region 6 with regard to PCB issues at WIPP, and this will include communicating with the Region whenever either permit is under going modification to insure the two permits are consistent. However, NMED acknowledges that EPA has primacy over PCB issues under TSCA, and does not intend to retain conditions in the permit that would limit EPA's ability to regulate PCBs. |
| 9.1 | Don Hancock, SRIC | PCBs | I | The commentor requests that NMED deny the permit modification because it is incomplete and does not adequately protect human health and the environment. Regulations under New Mexico Hazardous Waste Act (HWA) 20 NMAC 4.1.900, incorporating 40 CFR 270.42(b)(7) provide that NMED may deny a Class 2 modification. In addition, EPA's approval does not eliminate the necessity for the Permittees to have a permit modification approved by NMED, and NMED's authority and the requirements of the permit must apply to any and all waste, including containers of PCBs that are stored or disposed at WIPP. Any assertion to the contrary by the Permittees should be rejected by NMED. | NMED does not concur with this commentor's concern. NMED's position is that the issuance of the TSCA permit to regulate PCB/TRU mixed waste is a valid permit and that any issues associated with PCB/TRU mixed waste is under the authority of EPA, Region 6, the TCSA program. However, NMED agrees that it is necessary to modify the permit to effect this change. See Response to Comment 1.1 |

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 9.2 | Don Hancock, SRIC | PCBs | I | The commentor indicates that the language proposed in the request to change the PCB prohibition is inappropriate and must be rejected by NMED. The Permittees propose to change the PCB prohibition in Module II.C.3.f; Section B-1c; and Table B6-1, 12a to: "PCBs under an EPA disposal authorization." Such language is inappropriately broad as it could allow any subsequent EPA approval regarding PCBs to go into effect without the necessity of another modification request and NMED's approval. Any future PCB approval for remote-handled (RH)-PCB waste, for the Centralized Confirmation Facility, for increasing storage capacities, or other changes must also be subject to NMED approval through a modification process. The proposed language does not require such a future modification process. Any change in the PCB prohibition must specify that it relates only to the May 15, 2003 EPA disposal authorization and is valid for the 5-year term of that approval | See Response to Comment 8.2. |
| 9.3 | Don Hancock, SRIC | PCBs | I | The commentor states that the proposed change in the WIPP Waste Information System (WWIS) must be rejected. The permit modification request includes deletion of the "PCB concentration" required Data Field in the WWIS. Table B-6, page B-9. Such a change is inappropriate and should not be approved by NMED. Containers with PCBs and other contaminants do pose a threat to public health and the environment and data about the presence of PCBs in any containers that are to be stored or disposed at WIPP must be included in the WWIS. If specific containers of waste with unlimited amounts of PCBs are to be allowed at WIPP, information about the PCBs and other materials required to be documented must be included in the WWIS in order to ensure that adequate information related to public health and the environment is readily available to NMED. In addition, the proposed change also is not consistent with EPA's Condition of Approval D.4, which requires: (cont.) | This PCB approval changes the agency responsible for requiring PCB information in the WWIS from NMED to EPA. NMED will still have access to this information. See Response to Comments 1.1 and 6.2. |

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 9.3 (cont.) | Don Hancock, SRIC | PCBs | I | (cont.) "All PCB Items must be identified in the WIPP Waste Information System to show the date of waste certification for disposal." | |
| 9.4 | Don Hancock, SRIC | PCBs | I | The commentor indicated that the need for the modification has not been established. Regulations under the New Mexico Hazardous Waste Act (20.4.1.900 NMAC (incorporating 40 CFR 270.42(b)(1)(iii)) require the Permittees to explain why the modification is needed. The Permittees explanation on pages 2-4 contains assorted facts, assertions, irrelevant statements, and erroneous materials that do not explain or establish why the modification is needed. One reason cited -- "There are no other disposal options for PCB/TRU waste in the DOE complex" -- could be a significant reason, but gives an erroneous and misleading impression that all PCB/TRU waste would be disposed at WIPP. Not all PCB/TRU wastes could come to WIPP even if this modification request is approved. Clearly, RH-PCB/TRU waste is prohibited. Clearly, liquid PCB/TRU waste is prohibited. SRIC believes that additional PCB/TRU waste may also not be allowed at WIPP because of their container size, characterization problems with the containers or waste form, not being defense waste or other characteristics. (cont.) | See Response to Comments 1.1 and 9.1. |

## Comments Received by NMED on the WIPP New Hazardous Waste Numbers Class 2 Permit Modification Request

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 9.4 (cont.) | Don Hancock, SRIC | PCBs | I | (cont.) Thus, the "reason" is inaccurate because all existing PCB/TRU waste cannot be disposed at WIPP, and the fact that an additional disposal facility is needed for those wastes does not establish the need for some PCB/TRU waste to come to WIPP. The request also is incomplete because it does not include a comprehensive inventory of all PCB/TRU waste so that the proportion of such waste that might be disposed of at WIPP cannot be determined. Apparently, no such inventory was included in the March 22, 2002 application to the EPA (see the application on the WIPP website at http://www.wipp.carlsbad.nm.us/rcradox/final/02-3196_PCB_Initial_3-19-02_4-29-02.pdf). Neither was such an inventory included in the Baseline Inventory Report included in the WIPP Permit application. (cont.) | |
| 9.4 (cont.) | Don Hancock, SRIC | PCBs | I | (cont.) Other proffered "reasons" do not explain the need. That PCBs are regulated under the Toxic Substances Control Act does not establish a need. That EPA issued its approval does not establish a need, since there are other existing and possible disposal facilities. That Permittees have discussed PCBs in various public forums does not establish that the modification is needed. | |
| 9.5 | Don Hancock, SRIC | PCBs | I | The commentor indicated that the Permittees have not demonstrated that highly concentrated PCBs are compatible with all other waste, backfill, seal and panel closure materials, container and packaging materials, shipping container materials. Thus, the request is not complete and is not adequately supported technically to show compliance with all aspects of 40 CFR 264 and other applicable requirements, as is required by 40 CFR 270.42(b)(7)(ii). | EPA Region 6 evaluated the compatibility issue with regard to the PCB/TRU mixed waste and the other wastes which are disposed of at the site and determined that compatibility was not an issue. NMED accepts the EPA's findings. |

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 9.5 (cont.) | Don Hancock, SRIC | PCBs | I | (cont.) The commentor stated that on pages 2 and 4 of the request, Permittees assert that PCBs are compatible. But they provide no evidence to demonstrate such a fact. Instead, the request states that "EPA Region 6 considered ... compatibility of PCBs with other waste and backfill material.... Page 4. That statement is not supported by the EPA approval, which does not indicate that EPA did any study of PCB compatibility with all other wastes and materials at WIPP. The DOE's March 22, 2002 application to EPA includes only one paragraph on chemical compatibility. Page 24 of 44. The paragraph includes the assertion that a "review" has been conducted. But that review apparently was not attached to the application and it has not been included in the modification request. The application also includes the statement: "Changes to the types of wastes being received will be reviewed for compatibility prior to acceptance at WIPP." Id. (cont.) | |
| 9.5 (cont.) | Don Hancock, SRIC | PCBs | I | (cont) Such a statement could be contradictory to the assertion that there are no incompatibilities, and does not establish any procedure to ensure that such additional review is completed and is technically adequate. Thus, the modification request regarding this important issue is not technically adequate or complete. | |

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 9.6 | Don Hancock, SRIC | PCBs | I | The commentor stated that no adequate public process has been followed, and under the New Mexico HWA, a public hearing is required before any PCB modification request can be approved. The HWA provides that no "major modification" shall be approved "without an opportunity for a public hearing at which all interested persons shall be given a reasonable chance to submit data, views or arguments orally or in writing and to examine witnesses testifying at the hearing." NMSA §74-4-4.2.H. SRIC believes that allowing storage and disposal at WIPP of unlimited quantities of PCBs, as provided in the modification request, is a major modification and that an opportunity for a public hearing is required. Such an opportunity has not been provided. (cont.) | The NMED has determined that this permit modification is a Class 2 modification. This determination is based on the classifications for permit modification provided in 40 CFR 270.42. This determination has been evaluated both technically and legally. EPA Region 6 held a public comment period on the TSCA application for the Permittees, during which this commentor also participated. Also, see Comment 5.1. |
| 9.7 | Don Hancock, SRIC | PCBs | I | (cont.) The Permittees devote almost a page and a half of their 4-page overview of the request to describing "public participation" presumably regarding this request. None of the listed events was a public hearing. However, the significant number of stakeholders participating in those events (the list of which does not include SRIC, which has a significant interest in the request) also indicates that even if NMED does not consider the modification to be major, that there is "significant public interest" such that a public hearing is required under NMSA §74-4-4.2.I. | |

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| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 10.1 | Triay/Warren, CBFO/WTS | PCBs | J | DOE response to 8.1-Amendments to the EPA authorization will only impact PCB waste management regulated under the Toxic Substances control Act (TSCA). Amendments to the TSCA authorization and Conditions of Approval cannot, and will not, eliminate the "Duty to Comply" with the Waste Isolation Pilot Plant (WIPP) Hazardous Waste Facility Permit (HWFP), as stated in Permit Condition I.E1. This requirement has been incorporated into the EPA Condition of Approval VI.b, which states that "The owner/operator must comply with all Federal, State, and local regulations, approvals, and permits including the effective HWFP issued by the NMED." [Emphasis Added]. In addition, the EPA Conditions of Approval places requirements on the management of disposal of PCB/TRU waste that are not based on the HWFP (e.g., Certificates of Disposal, recordkeeping, contracted transporter requirements). Changes to these conditions will not have bearing on the HWFP (i.e., not require a HWFP modification in order to implement). (cont.) | NMED concurs with this comment, and supports the permit modification. |
| 10.1 (cont.) | Triay/Warren, CBFO/WTS | PCBs | J | (cont.) Therefore, based on the fact that changes to the Conditions of Approval do not affect compliance with the HWFP, and that some of the Conditions of Approval are specific to the authorization, the proposed language in the PMR is appropriate to assure the Permittees' compliance with conditions imposed by both EPA and NMED. | |

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| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 10.2 | Triay/Warren, CBFO/WTS | PCBs | J | The Permittees have provided responses to public comments from a meeting. This DOE response is to comment 6.1. This PMR was not intended to simply eliminate all references to PCBs form the HWFP. References in HWFP Module VII prohibiting PCBs for dust suppression and Table F-3 defining emergency response levels were intentionally left in the HWFP. In addition, the prohibitions were modified to prohibit those PCB waste not authorized by EPA. The revised or removed provisions from the permit were intended to allow implementation of the EPA PCB disposal authorization under its TSCA authority by removing specific disposal requirements from the HWFP issued under the Hazardous Waste Act and 20.4 NMAC. The Permittees have other programs and/or permits in place under other appropriate laws and regulations to address compliance with other NMED regulations including 20.6.2 NMAC water quality regulations. The HWFP is RCRA and HWA based; it is not an all inclusive, multi-media environmental permit. That is why the other permits are prepared to be compatible. | See Response to Comment 6.1, |

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 10.3 | Triay/Warren, CBFO/WTA | PCBs | J | The Permittees have provided responses to comment 6.2 of this matrix. First, no requirement exists under the Toxic Substances Control Act, the Resource Conservation and Recovery Act, the Hazardous Waste Act, the HWFP, or the Conditions of Approval that would require the Permittees to maintain the "generator site PCB container location." Second, the Conditions of Approval contain enforceable requirements under EPA's TSCA authority for identifying and reporting information related to PCB/TRU waste, therefore a duplicate set of requirements in the HWFP or an alternate plan is not necessary. These Conditions of Approval require containers and packages to be marked identifying that they contain PCBs (Condition III.D.3), which would be used in the event of any mishaps that might occur to these containers or to a group of containers. Pursuant to Conditions of Approval III.D.3, V.C.1, and VI.1.2, the Permittees are also required to maintain records of disposal locations for containers with PCBs. (cont.) | See Response to Comment 6.2. |
| 10.3 (cont.) | Triay/Warren, CBFO/WTS | PCBs | J | (cont.) WIPP operating records are maintained as defined in Modules I and II of the WIPP HWFP. The records identifying the location of waste containers emplaced are maintained in the WIPP Waste Information System (WWIS) computer database. This database records the location of the emplaced container by panel, room, row, column, and position in the column. Accordingly, this database will provide the three dimensional burial coordinates for PCBs and PCB items are required by 40 CFR 761.75(b)(8)(iv) and Module IV.H.2 of the HWFP. The database also provides for analytical data, analytical methods used, radioassay data, container shipments information, and other data pertinent to the characterization, transportation, and disposal of PCB/TRU waste. (cont.) | |

| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 10.3 (cont.) | Triay/Warren, CBFO/WTS | PCBs | J | (cont.) In the Waste Isolation Pilot Plant Initial Report for PCB Disposal Authorization" requesting authorization, the Permittees indicated that these requirements would be met using the WWIS, as the following passage from the initial report state: WIPP operating records are maintained as defined in Modules I and II of the WIPP HWFP. The records identifying the location of waste containers emplaced are maintained in the WIPP WWIS computer system. This database records the location of emplaced containers by panel, room row, column, and position in the column. Accordingly, this database will provide the three dimensional burial coordinates for PCBs and PCB items as required by 40 CFR 761.75(b)(8)(iv) and Module IV.H.2 of the HWFP. The database also provides for analytical data, analytical methods used, radioassay data, container shipment information, and other data pertinent to the characterization, transportation, and disposal of PCB/TRU waste. | |
| 10.4 | Triay/Warren, CBFO/WTS | PCBs | J | This is the DOE response to comment 6.3 in the matrix. The comment about "EPA-ORIA" is disingenuous; EPA may, of course, only act in accordance with their authority under applicable laws and regulations. The EPA PCB approval can only be made in accordance with formal EPA regulations and policies. | See Response to Comment 6.3. |
| 10.5 | Triay/Warren, CBFO/WTS | PCBs | J | The phrase "PCB contaminated transuranic waste" is being confused with the term "PCB-Contaminated" defined in 40 CFR 761.3. The term "PCB-Contaminated" has very specific uses by EPA and includes both a hyphen and a capitalized "C". This is not the term used in the Conditions of Approval. (cont.) | See Response to Comment 6.3. |

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| 10.5 (cont.) | Triay/Warren, CBFO/WTS | PCBs | J | (cont.) The Conditions of Approval did not intend to limit the concentration of PCBs for disposal at WIPP to less than 500 ppm. The Permittees had requested in the initial report authorization to dispose of TRU wastes containing PCBs in concentrations greater than 50 ppm without an upper bound. The Permittees had also indicated the intent to assume the concentrations of PCBs would be greater than 500 ppm in lieu of sampling and analysis. This request was recognized in the EPA letter authorizing the disposal of PCBs at WIPP, when they stated that "EPA hereby approves your request to dispose of TRU and TRU mixed waste containing PCBs pursuant to Section 761.75 subject to this letter and the enclosed "Conditions of Approval" and in Condition of Approval IV.B.4, which allows PCB/TRU waste shipments that are not sampled to be considered to contain a PCB concentration greater than 500 parts per million (ppm) (cont.) | |
| 10.5 (cont.) | Triay/Warren, CBFO/WTS | PCBs | J | (cont.) The permit language proposed by the Permittees is appropriate, reflects the respective responsibilities of both NMED and EPA, and should be incorporated into the permit. | |
| 10.6 | Triay/Warren, CBFO/WTS | PCBs | J | This is DOE's response to public comment number 1.1. As stated in Section 3 of the PMR, there are no other options available for the management of TRU wastes containing PCBs. This modification provides an environmentally sound mechanism for the management of TRU wastes containing PCBs, rather than having no management option. This would imply that the system is "broke" and as suggested by the PMR, WIPP is a technically feasible option to provide a disposal option for Transuranic wastes containing PCBs. | See Response to Comment 1.1. |

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| 10.7 | Triay/Warren, | PCBs | J | This is the DOE's response to the second part of comment 1.1 of this matrix. There are differences between the requirements for the management of PCB waste and those for the management of hazardous wastes. However, these are "differences" and not "contradictions" as may have been suggested. The Permittees have shown that compliance with both standards is possible and required. | See Response to Comment 1.1. |
| 10.8 | Triay/Warren, | PCBs | J | This is DOE's response to public comment number 1.2 of this matrix. It is true that NMED has authority to process permit modifications in accordance with their rules and regulations. However, it should also be recognized that the Toxic Substance and Control Act (TSCA) is the primary law affecting the safe management and disposal of PCB waste. Regulations under 40 CFR 761 implement the requirements under TSCA. These regulations require the same safety precautions and responses in the event of an accident involving PCBs greater than 49 ppm whether concentration is 50 ppm or 1 million ppm. The Permittees have received an authorization under TSCA that recognized that the WIPP facility provides for the safe management and disposal of Transuranic waste containing PCBs at any concentration. | See Response to Comment 1.1. |

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| Comment Number | Commentor/ Affiliation | Topic Area | Commentor Number | Comment Summary | Response |
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| 10.9 | Triay/Warren, | PCBs | J | This is DOE's response to comment number 2.2 of this matrix. The Permittees are seeking to remove sampling and analytical requirements associated with PCBs as allowed by 40 CFR 761.50(a)(5). However, this does not eliminate the requirement to identify which wastes contain PCBs. The regulations under 40 CFR 761, Subpart G (PCB spill Cleanup Policy), requires any spill be cleaned up immediately and the surface where these spills occurred must be tested to ensure the adequate cleanup of any residues. This policy also requires that any run-off from a spill be collected and managed in accordance with the disposal requirements in 40 CFR 761. WIPP is committed to the safe management and disposal of waste including those containing PCBs, and should an incident or release occur, WIPP will take appropriate actions in accordance with the requirements and standards set forth in our HWFP and Conditions of Approval. | See Response to Comment 2.1. |

Attachment 3
General Response to Comments