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PETER MAGGIORE
SECRETARY

December 21, 2001

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

Dear Concerned Citizen:

The New Mexico Environment Department (NMED) has taken final administrative action on three Class 2 permit modification requests to the WIPP Hazardous Waste Facility Permit, as submitted to the Hazardous Waste Bureau in the following document:

- Request for Class 2 Permit Modifications and Temporary Authorization, Letter Dated 8/28/01, Rec'd 8/29/01

The Department of Energy Carlsbad Field Office and Westinghouse TRU Solutions LLC (**the Permittees**) identified three separate items in their modification submittal:

- Item 1 (Using Composite Headspace Gas Data and Compositing up to 20 Samples)
- Item 2 (Establishing Safety Conditions for Visual Examination (VE) of Waste Containers)
- Item 3 (Taking Samples of Headspace Gas through Existing Filter Vent Holes)

On September 24, 2001, NMED denied the Permittees' request for temporary authorization, ordered the Permittees to clarify some of the conflicting statements in their proposed modification regarding the classification of the request, and required them to reissue a public notice for the modifications. On September 28, 2001, the Permittees submitted revisions to their modification request as public comment. On November 27, 2001, after consideration of all public comment, NMED approved Items 1 and 3 with changes, and denied Item 2.

These modifications were processed by NMED in accordance with the requirements specified in 20.4.1.900 NMAC (incorporating 40 CFR §270.42(b)), and were subject to a sixty (60) day public comment period, which ran from September 4 through November 2, 2001. NMED



December 21, 2001

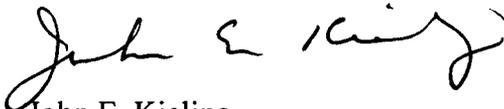
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received written comments from ten individuals and organizations, including you, during this time. Attachment 1 lists all commentors, Attachment 2 incorporates NMED's specific response to all comments, while Attachment 3 incorporates NMED's general responses to summarized comments.

Further information on this administrative action may be found on the NMED WIPP Information Page on the World Wide Web at <<http://www.nmenv.state.nm.us/wipp/>>.

Thank you for your participation by submitting comments on these permit modification requests. If you have any questions regarding this matter, please contact Steve Zappe at (505) 428-2517.

Sincerely,



John E. Kieling
Manager
Permits Management Program

Attachments

cc: James Bearzi, HWB
Steve Zappe, HWB
Inés Triay, DOE/CAO
John Lee, Westinghouse

Comments Received by NMED on WIPP Permit Modifications
Modifications Submitted to NMED on:
August 28, 2001
Headspace Gas Compositing
Safety Conditions for VE
Sampling Through Vent Holes

		<u>Receipt Date</u>	<u>Author</u>	<u>Organization/Citizen</u>	<u># Pages</u>	<u>Mod Request #</u>				
						<u>1</u>	<u>2</u>	<u>3</u>	<u>General</u>	
A	1	28-Sep-01	Inés Triay	CBFO	45	1	1	1		
	2	02-Nov-01	Inés Triay	CBFO	99	1	1	1		
B	3	31-Oct-01	Deborah Reade	CARD	6	1	1	1		
C	4	01-Nov-01	Matthew Silva	EEG	10	1	1	1		
D	5	01-Nov-01	Bonnie Bonneau	Citizen	2	1	1		1	
E	6	01-Nov-01	Penelope McMullen	Sisters of Loretto	2	1	1	1	1	
F	7	02-Nov-01	Lindsay Lovejoy	NMAGO	11	1	1	1		
G	8	02-Nov-01	Joni Arends	CCNS	4	1	1	1		
H	9	02-Nov-01	Don Hancock	SRIC	7	1	1	1	1	
I	10	02-Nov-01	Geoffrey Petrie	Nuclear Watch	4	1	1	1	1	
J	11	02-Nov-01	Barbara and Ray Stevens	Citizen	4		1			
<hr/>										
9 commentors					Total Pages =	194	10	11	9	4

- 1 Headspace Gas Compositing
- 2 Safety Conditions for VE
- 3 Sampling Through Filter Vent Holes

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
1.0	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Commentor proposes permit section modifications to clarify the conditions under which headspace gas samples may be composited. Justification given is that use of Method 8260 is applicable to gas samples, and that Method 8260 indicates samples may be composited. Text edits are provided for permit sections B-3a(1), B2-3, B3-1, B3-5, B3-10, B3-12b(3), Table B6-1, Table B6-2, and Table B6-4.	NMED concurs with the Permittees request to composite samples, and has included suggested and additional edits to the permit.
1.1	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Commentor proposes permit modifications to incorporate additional TIC identification criteria that specifies that TICs less than 10% of the nearest internal standard will not be reported. The Permittees also proposed a scaled TIC to internal standard ratio to account for sample compositing of headspace gas samples. The justification for the proposed modification is to provide clarification to the generator/storage sites in interpreting signal noise when evaluating TICs as cited in clarification CAO-00-065 (June 2000). Text edits are provided for permit sections B-3a(1), B2-3, B3-1, B3-5, B3-10, B3-12b(3), Table B6-1, Table B6-2, and Table B6-4.	NMED concurs with the addition of TIC criteria.
1.2	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Proposed text change by Permittees for a.1. Section B-3a(1), the Permittees added a sentence that indicates that if composite samples are used, containers used in the composite sample must be from the same waste stream with no more than 20 containers being included in a single composite sample.	NMED concurs with the proposed revision.
1.3	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Proposed text change by Permittees for b.1. Section B2-3: After Equation B2-10, the Permittees proposed that when composite headspace gas sample results are used, the mean, standard deviation and t-statistic will be based on the number of composite samples analyzed, rather than the number of drums sampled.	NMED revised the Permit to state, in section B2-3 "When composite headspace gas sample result are used, the mean, standard deviation and t-statistics are based on the number of composite samples analyzed, rather than the number of drums sampled.
1.4	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Proposed text change by Permittees for c.1. Section B3-1: The Permittees added text that indicates that the use of reference spectra for TIC identification may be limited to VOCs when analyzing headspace gas samples.	NMED concurs with the edit. NMED notes that the limitation of reference spectra to VOCs applies only to headspace gas analysis, where VOCs are the only constituents of interest. Appropriate reference spectra must be used for identifying TICs for all total analysis.
1.5	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Proposed text change by Permittees for c.2. Section B3-5, Completeness: The Permittees add text that indicates that a composited sample will be treated as one sample for the purposes of completeness, because only one sample is run through the analytical instrument.	NMED concurs with the proposed revision.
1.6	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Proposed text change by Permittees for c.4. Section B3-12b(3): WIPP WWIS Data Reporting: The Permittees proposed modified text that indicates that if a container was part of a composite headspace gas sample, the analytical results from the composite sample must be assigned as the container headspace gas data results, including associated TICs.	NMED concurs with the proposed revision.
2.0	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Permittees propose to establish safety conditions for selecting containers that are subject to visual examination (VE) as a QC check on radiography. The Permittees propose that generator/storage sites establish container safety criteria, that all safety conditions must be based on characteristics of the waste and the site specific operation safety requirements for VE. The Permittees also propose that the method for determining safety conditions will be subject to CBFO approval, that an alternate randomly selected waste container may be chosen if a selected container does not meet safety criteria. Associated text changes to permit sections a.1.B-3d(2) and b.1. Table B6-1.	NMED denied the proposed modification because it was sufficiently vague as to require additional clarification before modifying the permit to incorporate the change.
2.1	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Proposed text change by Permittees: a.1. Section B-3d(2): Add the following sentences and bullets to the end of paragraph one: " A site may establish container safety condition that must be met prior to opening containers for VE as a QC check on radiography. The establishment and use of container safety conditions are subject to the following criteria: 1) All container safety conditions must be based on characteristics of the waste and the site specific operational safety requirements for VE (e.g., VE facility limitations and Hazardous Analysis, presence of excess broken glass in the container, high radioactivity);	See response to Comment 2.0

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
2.2	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Proposed text change by Permittees: a.1. Section B-3d(2): Add the following bullets: 2) The method for determining the container safety conditions, the analysis performed, and the actual conditions established must be part of the site's documentation that is submitted to the CBFO for approval (e.g., QAPJP, SOP); 3) If a randomly selected container does not meet the container safety conditions, another randomly selected container from the same Summary Category Group must be visually examined in its place; and 4) Container safety conditions that are established may not reduce the number of containers that are visually examined based on the statistical requirements of Permit Attachment B2.	See response to Comment 2.0
2.3	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Proposed text change by Permittees: b.1. Table B6-1, add No. 28a: Add: If a site has established container safety conditions that must be met prior to opening containers for VE as a QC check on radiography, is there documentation that the following criteria have been used: 1) All container safety conditions must be based on characteristics of the waste and the site specific operational safety requirements for VE (e.g., VE facility limitations and Hazardous Analysis, presence of excess broken glass in the container, high radioactivity);	See response to Comment 2.0
2.4	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Proposed text change by Permittees: b.1. Table B6-1, add No. 28a: Add: 2) The method for determining the container safety conditions, the analysis performed, and the actual conditions established must be part of the site's documentation that is submitted to the CBFO for approval (e.g., QAPJP, SOP); 3) If a randomly selected container does not meet the container safety conditions, another randomly selected container from the same Summary Category Group must be visually examined in its place; and 4) Container safety conditions that are established may not reduce the number of containers that are visually examined based on the statistical requirements of Permit Attachment B2. (Section B-3d(2)).	See response to Comment 2.0
3.0	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Permittees propose to define requirements for headspace gas sampling through an existing filter vent hole and establish equivalent requirements for performing the sampling. The request was proposed to reduce the creation of waste (e.g., punctured filters) and to provide an alternative to punching drums that are already filtered. Text modification include permit sections a.1. TOC, a.2. B1-1a(1), a.3. B1-1a(2), a.4. B1-1a(3)(ii), a.5. B1-1a(3)(iii), a.6. B1-1c(5), b.1. Table B6-4. b.2. Table B6-5 and b.3. Table B6-5.	NMED concurs with edits pertaining to the self tapping screw, but has edited the proposed revision with respect to filter vent hole sampling to be specific to pipe overpacks.
3.1	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees: to TOC, add "By Drum Punching" to B1-1a(3)(ii) and add "B1-1a(3)(iii) Sampling Through an Existing Filter Vent Hole".	NMED concurs with the revision to B1-1a(3)(ii), but edited the proposed revision to B1-1a(3)(iii) to be pipe-overpack specific.
3.2	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.2. B1-1a(1) Manifold Headspace Gas Sampling: Insert into last sentence of paragraph "or a sampling head with an airtight seal for sampling through an existing filter vent hole".	NMED concurs with the proposed revision, with the understanding that the modification applies to pipe-overpacks only.
3.3	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.3. B1-1a(2) Direct Canister Headspace Gas Sampling: To second sentence of second paragraph, add "a sampling head with an airtight seal for sampling through the existing filter vent hole" and "or penetrating the septum in the orifice of the self-tapping screw".	NMED concurred with the premise of the modification, but edited the proposed change to read: " These heads shall form a leak-tight connection with the canister and allow sampling through the drum-lid filter, through the drum lid itself (by use of a punch or self-tapping screw), or using and airtight seal to collect the sample through the filter vent hole of a pipe overpack container.
3.4	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.3. B1-1a(2) Direct Canister Headspace Gas Sampling: The Permittees proposed the use of self tapping screws as alternative to a drum punch or sampling through a filter.	NMED concurs with the premise of the proposed modification; see response to Comment 3.3.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/Affiliation	Topic Area	Commentor Number	Comment Summary	Response
3.5	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.4. Section B1-1a(3)(ii): Add to Section title Sample Through the Drum Lid "By Drum Punching". Also to first sentence add "at the time of drum punching or shortly thereafter". To the second sentence add "at the time of drum punching or shortly thereafter". To the second bullet, delete "drum-punch". To the fifth bullet, replace "potential" with "excessive" and add "potential" before "pressure". To the eighth bullet, modify the first sentence to "While sampling through the drum lid using manifold sampling, a flow-indicating device or pressure regulator to verify flow of gases shall be ..."	NMED concurs with the proposed modifications, except that the word "shortly" was removed from the phrase "shortly thereafter" for two reasons. First, the term "shortly" is vague and unenforceable. Second, one of the requirements allowing use of the punch stipulates that it may be performed "if an airtight seal can be maintained." Maintaining an airtight seal obviates the need for sampling to occur "shortly" after installation of the punch. Thus, the final language specifies that sampling can occur at the time of drum punching or anytime thereafter.
3.6	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.5. Attachment B1-1a(3)(iii). Add this section. B1-1a(3)(iii) Sampling Through an Existing Filter Vent Hole. Sampling through an existing vent hole may be performed as an alternative to sampling through the container's filter if an air tight seal can be maintained. To sample the container headspace-gas through an existing filter vent hole, an appropriate airtight seal shall be used. The sampling apparatus shall form an airtight seal between the container surface and the manifold or direct canister sampling equipment.	NMED concurs with the Permittees' proposed edits to Section B1-a(3)(iii), except that the method application is limited to pipe overpack containers.
3.7	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.5. Attachment B1-1a(3)(iii). Add to this section. To assure that the sample collected is representative, all of the general method, sampling apparatus and QC requirements specified in EPA's Compendium Method TO-14 (EPA 1988) as appropriate, shall be met in addition to the following requirements: 1) The seal between the container surface and sampling apparatus shall be designed to minimize intrusion of ambient air;	See response to Comment 3.6
3.8	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.5. Attachment B1-1a(3)(iii). Add these bullets: 2) The filter shall be replaced as quickly as is practical with the airtight sampling apparatus to ensure that a representative sample can be taken. Generator/storage sites must provide documentation demonstrating that the time between removing the filter and installing the airtight sampling device has been established by testing to assure a representative sample; 3) All components of the sampling system that come into contact with sample gases shall be cleaned according to requirements for direct canister sampling or manifold sampling, whichever is appropriate, prior to sample collection; 4) Equipment blanks and field reference standards shall be collected through all the components of the sampling system that contact the headspace gas sample;	See response to Comment 3.6.
3.9	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.5. Attachment B1-1a(3)(iii). Add these bullets: 5) The lid of the container's 90-mil poly liner shall contain a hole for venting to the container. A representative sample cannot be collected until the poly-liner has been vented to the container. If headspace gas samples are collected prior to venting the 90-mil liner, the sample is not acceptable and a nonconformance report shall be prepared, submitted and resolved; 6) Nonconformance procedures are outlined in Permit Attachment B3. Note as an option, the same airtight seal sampling apparatus may include a needle to penetrate the rigid liner;	Fifth bullet regarding lid of 90-mil poly liner was not incorporated, since pipe overpacks don't use poly liners. Also, see response to Comment 3.6.
3.10	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.5. Attachment B1-1a(3)(iii). Add these bullets: 7) During sampling, openings in the container shall be sealed to prevent outside air from entering the container; and 8) A flow-indicating device shall be connected to sampling system and operated according to the direct canister or manifold sampling requirements, as appropriate.	See response to Comment 3.6.
3.11	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to a.6. B1-1c(5) Sampling Head Cleaning. To first sentence, insert "or airtight seal" after "needle in both the first sentence and last.	NMED concurs with the proposed revision.
3.12	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	The Permittees proposed a modification that would eliminate the requirement that the filter used in HSG drums be carbon filter drums.	The Permittees previously eliminated requirements for carbon filters in a Class 1 modification dated November 1, 2000, Item 7.a. NMED also made other changes at that time for consistency. This modification was unnecessary.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
3.13	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to b.2. B6-Table B6-5. To No. 190, modify the second bullet to read: "Sampling heads are capable of punching through the metal lid of the drums providing an airtight seal when sampling through the existing filter vent hole, or penetrating a filter, or penetrating the septum in the orifice of a self-tapping screw".	NMED believes that all modifications to the B6 checklist should reflect the NMED's text revisions and therefore will not specifically reflect the wording proposed by the Permittees.
3.14	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to b.3. B6-Table B6-5. Add No. 197a: If sampling through an existing filter vent hole with an airtight device is used, are procedures in place to ensure that a sampling head with an airtight seal for sampling through an existing filter vent hole is available? (Section B1-1a(1); B1-1a(2); B1-1c(5)).	See response to Comment 3.13.
3.15	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to b.3. B6-Table B6-5. Add No. 197a: If sampling through an existing filter vent hole is used, are the following criteria met: 1) The seal between the container surface and sampling apparatus shall be designed to minimize intrusion of ambient air; 2) The filter shall be replaced as quickly as practical with the airtight sampling apparatus to ensure that a representative sample can be taken; 3) All components of the sampling system that come into contact with sample gases shall be cleaned according to requirements for direct canister sampling or manifold sampling, whichever is appropriate, prior to sample collection; 4) Equipment blanks and field reference standards shall be collected through all the components of the sampling system that contact the headspace gas sample;	See response to Comment 3.13.
3.16	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to b.3. B6-Table B6-5. Add No. 197a: If sampling through an existing filter vent hole is used, are the following criteria met: 5) The lid of the containers 90-mil poly liner shall contain a hole for venting prior to the container. A representative sample cannot be collected until the poly-liner has been vented to the container. If the headspace gas samples are taken prior to venting the 90-mil poly liner, the sample is not acceptable and a nonconformance report shall be prepared, submitted and resolved. Nonconformance procedures are outlined in Permit Attachment B3. Note, as an option, the same airtight seal sampling apparatus may include a needle to penetrate the rigid liner;	See response to Comment 3.13.
3.17	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to b.3. B6-Table B6-5. Add No. 197a: If sampling through an existing filter vent hole is used, are the following criteria met: 6) During sampling, opening in the container shall be sealed to prevent outside air from entering the container; and 7) A flow indicating device shall be connected to sampling system and operated according to the direct canister or manifold sampling requirements, as appropriate. (Section B1-1a(3)(iii)).	See response to Comment 3.13.
3.18	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Proposed text change by Permittees to b.3. B6-Table B6-5. Add No. 197c: If sampling through an existing filter vent hole is used, are the following criteria met, does the site must have documentation that demonstrates that they have determined through testing the appropriate length of time for exchanging the filter with the sampling device to assure representative samples are collected. Is the time for completing the exchange incorporated into appropriate headspace gas sampling procedures. (Section B1-1(3)(iii)).	See response to Comment 3.13.
4.0	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Permittees state that headspace gas compositing is necessary to allow the generator/storage site to improve waste management practices. Compositing will allow reduction in the number of required analyses, reduce data validation/verification and lead to more timely completion of waste analyses activities. Modification requested under premise of permits serving as a living document as outlined in 53 FR 37912.	NMED agrees that compositing will reduce the number of analyses performed.
5.0	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Permittees believe modification is necessary to ensure workers are not exposed to undue hazards and dangers during VE of certain waste materials, as caused by sharp items puncturing gloves resulting in cuts and exposure. Believe added safety measures will improve waste management practices.	NMED denied the proposed modification because it was sufficiently vague as to require additional clarification before modifying the permit to incorporate the change. NMED supports activities that improve worker safety, but believes the Permittees and sites can already implement additional administrative controls to protect workers without modifying the permit.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
6.0	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Permittees request permit modification to allow sampling through the existing filter vent hole to facilitate sampling pipe overpacks, to reduce worker exposure, and to improve waste management practices.	NMED agrees that sampling through the existing filter vent hole of a pipe overpack will facilitate sampling activities performed at the site without unnecessarily compromising sample quality or representativeness.
7.0	Dr. Inés R. Triay, CBFO	General	A	The Permittees provided responses to public comments submitted during public meetings.	No NMED response required..
7.1	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Permittees response to Comment: Commentor asked Permittees what the USEPA Contract Laboratory Program (CLP) reference to the 10% of the nearest internal standard was. A reference and a web address was provided by Permittees.	No NMED response required..
7.2	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Permittees response to Comment: Commentor asked Permittees what material is used for the gas tight seal. Permittees discussed the self-tapping screw developed by LANL, which is made of Vitron, manufactured by DuPont. DuPont materials also provided.	No NMED response required..
7.3	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Permittees response to Comment: Commentor asked Permittees for the definition of random and how does this apply to selecting containers for visual examination. Definition of random was defined in three ways (simply a number selected from a known set of numbers in such a way that each number in the set has the same probability of occurrence) and discussed how random applied to the modification and VE. Permittees stated randomness was used to ensure the selection process is not biased.	No NMED response required..
7.4	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Permittees response to Comment: Commentor asked Permittees for all questions and responses that had been submitted regarding USEPA's Methods Information Communication Exchange (MICE) Service. In addition, Permittees response to Comment: Commentor asked what the number five is based on, in relation to the compositing of five to one found in Method 8260. Permittees provided discussion of the largest syringe size appropriate for the analysis is 25 mL and that is used as the basis for the 5 samples, and also stated there was nothing that said you couldn't used more than five samples.	NMED has modified the permit to allow headspace gas compositing.
7.5	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Permittees response to Comment: Commentor asked Permittees if data has been generated on sampling through the existing filter vent hole for 55 gallon drums. Permittees responded by stating that testing was conducted on POCs inside of 55-gallon drums to evaluate the methodology, but no other containers were tested.	NMED has modified the permit to allow sampling from the filter vent holes, but only for pipe overpacks.
7.6	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Permittees response to Comment: Commentor asked Permittees if there are any limitations on the use of syringes in compositing. Permittees points to paragraph in Attachment B that requires the generator/storage sites to assure equal aliquots of field samples are composited and Permittees also points to QAOs.	No NMED response required..
7.7	Dr. Inés R. Triay, CBFO	General	A	Permittees response to Comment: Commentor asked Permittees if the modifications clarify or establish guidelines. Permittees responded with: the Class 2 modification request is a modification that established requirements to be used during compositing.	No NMED response required..
7.8	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Permittees response to Comment: Commentor asked Permittees why there was no mention of method 8240. Permittees stated Method 8240 has been eliminated by EPA (40 CFR 264 Appendix IX Footnote 5).	No NMED response required..
7.9	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Permittees response to Comment: Commentor asked Permittees what was meant by accuracy and precision. Permittees pointed to definitions in Attachment B3, Section B3-1.	No NMED response required..
7.10	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Permittees response to Comment: Commentor asked Permittees if it was necessary to establish minimum performance standards or requirements on instruments for compositing samples. Permittees responded with the minimum performance standards established in the QAOs and the MDLs listed for headspace gas analyses in Attachment B3.	No NMED response required..
7.11	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Permittees response to Comment: Commentor asked Permittees how a generator deals with data which causes a new hazardous waste number to be added to the waste. Permittees stated that there were no changes in this modification for how hazardous waste numbers are assigned.	No NMED response required..
7.12	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	Permittees response to Comment: Commentor asked Permittees to define the factor in equation B2-10 (ta, n-1S). Permittees stated terms are defined in Chapter 9, Table 9-2 of SW-846. A copy was provided.	No NMED response required..

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/Affiliation	Topic Area	Commentor Number	Comment Summary	Response
7.12	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Permittees response to Comment: Commentor asked Permittees how a generator deals with the NRC requirements for flammable gas limits on composite samples. Permittees stated that the 500 ppm limits is reduced by a factor based on a number of containers composited and that appropriate actions would be implemented if the composite results exceeded that value.	No NMED response required.
7.13	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	Permittees response to Comment: Commentor asked Permittees to list examples of which wastes would meet the criteria for exemption of VE. Listed examples (not all inclusive) by Permittees included sharps (metals or glass), glass shards, drums with high radionuclide content, and containers that exceeded glovebox weight limits.	While NMED appreciates the difficulty in establishing a specific list of safety hazards, the proposed permit modification should have been more specific with respect to general categories of applicable safety hazards to ensure appropriate hazard designation, and not leave it to each site to independently establish their own criteria.
8.0	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	c.1.Section B3-1. Permittees proposed text addition to end of Item 1.c.1 in the modification request: "Headspace Gas compositing Analytical Method Requirements": Headspace gas compositing shall be performed using a modified SW-846 Methods 8260. In accordance with SW-846 convention, a composite sample shall be made up of equal sample aliquots from each of the containers that are part of the composite sample. The generator/storage site shall document the method used to assure equal sample aliquots are used in site-specific procedures for implementing the modified SW-846 Method 8260, including any limitation on the method used.	The Permittees are required to follow SW-846 convention, and the suggested language offered clarification in this regard. Also, because composite results are applied to every container in the composite, NMED assumed this requirement included the use of equal sample aliquots from each composited container as specified in SW-846 Method 8260. Although the permit was not revised to reflect the specific language, NMED expects that headspace gas compositing will be performed using a modified SW-846 Methods 8260, including the collection of equal aliquots from each container to be composited and that processes are reflected in site-specific procedures.
8.1	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	c.1.Section B3-1. Permittees proposed text addition to add to end of Item 1.c.1 in the modification request: "Headspace Gas compositing Analytical Method Requirements": The sample will be composited into a SUMMA or equivalent canister that meets the cleaning and leak check requirements of Permit Attachment B1, Section B1-1c(1). Equipment used to transfer the sample aliquots to the SUMMA or equivalent canister containing the composited sample will be cleaned or disposed of between composite samples using the procedures for sampling heads listed in Permit Attachment B1, Section B1-1c(5). The modified SW-846 Method 8260 used for compositing must meet the QAOs listed in Section B3-5 of this attachment. The number of samples composited and the method used for compositing the samples must be considered when demonstrating compliance with the QAOs in Section B3-5 of this attachment.	The Permittees are required to follow SW-846 convention, and the suggested language offered clarification in this regard. Also, NMED assumed that implementation of sample compositing would follow applicable convention prescribed in the permit. Although the permit was not revised to reflect the specific language, NMED expects that the sample will be composited into a SUMMA or equivalent canister that meets the cleaning and leak check requirements of Permit Attachment B1, Section B1-1c(1). Equipment used to transfer the sample aliquots to the SUMMA or equivalent canister containing the composited sample will be cleaned or disposed of between composite samples using the procedures for sampling heads listed in Permit Attachment B1, Section B1-1c(5). The modified SW-846 Method 8260 used for compositing must meet the QAOs listed in Section B3-5 of this attachment. The number of samples composited and the method used for compositing the samples must be considered when demonstrating compliance with the QAOs in Section B3-5.
8.2	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	D.1.Table B6-1.Permittees proposed correction so Item 1.d.1.Add. 51a: Are procedures in place to ensure that is a container was part of a composite headspace gas sample, the analytical results from the composite sample are assigned as the container headspace gas data results in the WWIS? B3-12b(3).	See response to Comment 3.13.

Comments Received By NMED on WIPP Class 2 Permit Modification Request

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/Affiliation	Topic Area	Commentor Number	Comment Summary	Response
8.3	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	d.4. Table B6-4. Permittees Revised Item 1.d.4: Add 222c: Headspace Gas Compositing Analytical Method Requirements: 1) Are procedures documented to ensure than the following criteria are met with regard to the headspace gas compositing analytical method requirements, 2) Headspace gas compositing is performed using a modified SW-846 Method 8260, 3) Composite samples are made up of equal sample aliquots from each of the containers that are part of the composite sample in accordance with SW-846 convention, 4) The method used to assure equal sample aliquots are used is part of the site-specific procedures for implementing the modified SW-846 Method 8260, including any limitation on the method used;	See response to Comment 3.13.
8.4	Dr. Inés R. Triay, CBFO	Headspace Gas Compositing	A	d.4. Table B6-4. Permittees Revised Item 1.d.4: Add 222c: Headspace Gas Compositing Analytical Method Requirements:5) Equipment used to transfer the sample aliquots to the SUMMA or equivalent canister containing the composited sample is cleaned or disposed of between composite samples using the procedures for sampling heads listed in Permit Attachment B1, Section B1-1c(5). 6) The modified SW0846 Method 8260 used for compositing meets the QAOs listed in Attachment B3, section B3-5. 7) The number of samples composited and the method used for compositing the samples were considered when demonstrating compliance with the QAOs in Attachment B3, Section B3-5.	See response to Comment 3.13.
9.0	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	a.1. Section B-3d(2), Permittees revised Item 2.a.1. to add text: A site shall establish container safety conditions that must be met prior to opening containers for VE as a QC check on radiography. The establishment and use of container safety conditions are subject to the following criteria: All container safety conditions must be based on characteristics of the waste and the site-specific operational safety requirements for VE (e.g., VE facility limitations and Hazards Analysis, presence of excess broken glass in the container, high radioactivity);	See response to Comment 2.0.
9.1	Dr. Inés R. Triay, CBFO	Safety Conditions for VE	A	a.1. Section B-3d(2), Revised Item 2.a.1. Permittees to add text: The method for determining the container safety conditions, the analysis performed and the actual conditions must be part of the site's documentation than this submitted to the CBFO for approval (e.g., QAPjP, SOP); If a randomly selected container does not meet the container safety conditions, another randomly selected container from the same Summary Category Group must be visually examined in its place; and Container safety conditions that are established shall not reduce the number of containers that are visually examined based on the statistical requirements of Permit Attachment B2.	See response to Comment 2.0.
10.0	Dr. Inés R. Triay, CBFO	Sampling Through Vent Holes	A	Item 3 (revised Item 3.b.3). Permittees proposed text addition to b.3. Table B6-5: 197c: If sampling through an existing filter vent hole is used, are the following criteria met, does the site have documentation that demonstrates that they have determined through testing the appropriate length of time for exchanging the filter with the sampling device to assure representative samples are collected? Is the time for completing the exchange incorporated into appropriate headspace gas sampling procedures (Section B1-1a(s)(iii)).	See response to Comment 3.13.
11.1	Deborah Reade, CARD	General	B	The commentor is concerned that the permit modification required modification by NMED prior to implementation. The commentor indicated that all three modifications must be denied because NMED cannot revise class 2 modifications.	NMED concurred with the Headspace Gas Compositing permit modification with some revision, but denied the Permit Modification Request dealing with VE Safety Conditions and accepted the Sampling through Vent Hole request specific to pipe overpacks. NMED is allowed to approve Class 2 modifications with changes under the regulations specified in 40 CFR 270.42(b).
11.2	Deborah Reade, CARD	Headspace Gas Compositing	B	The commentor has concerns over language limiting the reference spectra to VOCs when analyzing headspace gas samples, as written in permits parts c.1. Section B3-1, d.2. Table B6-2:126a bullet 6 and d.4. Table B6-4, 222a bullet 6. Limiting spectra to VOCs is not protective to human health and the environment. Commentor also provides quote from NMED testimony that states the TIC permit condition based on SW-846 methods and Appendix VIII lists is reasonable and necessary.	See response to comment 1.4.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
11.3	Deborah Reade, CARD	Headspace Gas Compositing	B	The commentor is concerned that compositing at 20:1 may compromise sample results and cause false negative undetectable amounts. Even though it is possible to identify TICs with a minimum at 0.5%, minute instrument or calibration problems could interfere. Concerned that compositing samples at 20:1 will affect identification of small quantity TICs. The commentor is also concerned that compositing could impact the requirement to demonstrate that the relative intensities of major ions used in compound identification.	NMED shared the commentor's concern regarding identification of TICs, but believes that the modification request proposed by the Permittees to report TICs to within differing % areas of the standard depending upon the number of composite samples will mitigate concerns regarding identification and reporting of TICs.
11.4	Deborah Reade, CARD	Headspace Gas Compositing	B	The commentor is concerned that the INEEL and RFETS studies did not support DOE's conclusion for higher compositing levels. Because of this, is it possible that an Appendix VIII compound that occurs at 10% or greater in a single container be able to be detected and measured accurately when samples are composited?	See response to comment 1.4.
11.5	Deborah Reade, CARD	Safety Conditions for VE	B	Commentor believes that allowing the Permittees to eliminate a randomly selected container for safety conditions and substituting another randomly selected container taints the whole concept of randomness. The commentor suggests that if the first selected container is eliminated, it be set aside for special handling, and then another random container be selected, or handle container remotely.	See response to Comment 2.0.
11.6	Deborah Reade, CARD	Safety Conditions for VE	B	The commentor is concerned with the proposed container safety conditions that must be met prior to opening containers for VE as a QC check on radiography (page A-21). The commentor is concerned that safety could be used as an excuse to eliminate problem containers from VE. NMED should establish some type of control over these and all other safety conditions and methods used by the Permittees if they are allowed to eliminate a selected container from VE. Further, NMED should approve these conditions and methods at each site before they can be used and should continue to oversee the use of these methods and conditions.	See response to Comment 2.0
11.7	Deborah Reade, CARD	Safety Conditions for VE	B	Commentor believes that if a second container is allowed to be randomly selected, the container should be selected from the same waste stream as the first container, not just from the same Summary Category Group.	See response to Comment 2.0
11.8	Deborah Reade, CARD	Sampling Through Vent Holes	B	The commentor is concerned that if contamination of POC contents could be a problem, it may be that a re-design of the container is in order.	See response to Comment 2.0
11.9	Deborah Reade, CARD	Sampling Through Vent Holes	B	The commentor is seeking clarification as to why sampling between the overpacking and the POC is not required.	Containers within the pipe overpack should be vented, so that sampling of the headspace within the pipe overpack would be representative.
11.1	Deborah Reade, CARD	Sampling Through Vent Holes	B	The commentor is concerned that samples collected through a filter vent hole are not representative due to the vague description of the sampling process, possible sampling impracticalities, and potential anomalies in the sampling method.	NMED agreed that applicability of the filter vent hole sampling to containers other than pipe overpack was inappropriate, and NMED limited said sampling to filter vent holes associated with pipe overpacks.
11.11	Deborah Reade, CARD	Sampling Through Vent Holes	B	Permit Module a.5. Attachment B1-1a(3)(iii) states that the same airtight seal sampling apparatus may include a needle to penetrate the rigid liner. It appear possible that the needle might actually seal the hole that it creates.	NMED cannot comment on this concern.
11.12	Deborah Reade, CARD	Sampling Through Vent Holes	B	The commentor feels that descriptions of venting the poly-liner to the container are vague and confusing. NMED should deny the permit modification	NMED limited the approval to filter vent hole sampling associated with pipe overpacks, but does not agree that the entire modification need be denied based on the commentor's concern regarding poly-liner venting.
12.1	Matthew K. Silva, EEG	General	C	EEG believes that modification under Item 1 of the HWFP to allow compositing headspace gas samples would be useful and that they would not reduce the HWFP controls established for the safety, health and the environment of the WIPP. However, several comments should be considered prior to approving Item 1 (noted below).	NMED concurs with the commentor's assertion.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
12.2	Matthew K. Silva, EEG	Headspace Gas Compositing	C	Item 1, page A-3 states that this Permit Modification Request (PMR) item proposed to clarify the conditions under which headspace gas samples may be composited in the laboratory. The term "clarification" is also used in the "Basis" section under Item 1. The Item 1 PMR does not clarify the conditions for compositing headspace gas samples, but rather is a proposal to establish a new condition that did not previously exist in the HWFP.	NMED concurs with the commentor's assertion.
12.3	Matthew K. Silva, EEG	Headspace Gas Compositing	C	In the Basis section of Item 1, three analysis procedures that may be used for headspace gas analysis are listed, however, only modified SW-846 Method 8260 is discussed. No discussion on the possible effects on the analysis performed under Method 8240 or TO-14 is presented. While it is expected that the compositing sampling would have the same effect on analysis performed under the other two methods, NMED should either verify this assumption or limit the compositing to those headspace sample analyzed using Method 8260.	Although not specified in the modifications, NMED expects that all methods would be subject to the same compositing requirements as specified for Method 8260.
12.4	Matthew K. Silva, EEG	Headspace Gas Compositing	C	The Basis section of Item 1 references the paper "Technical Evaluation of Headspace Gas Compositing" (Appendix B). The commentor believes this paper provides good support for compositing of headspace gas samples.	NMED concurs.
12.5	Matthew K. Silva, EEG	Headspace Gas Compositing	C	The MICE email may have somewhat less utility than the prominence given it on pages A-4 and A-5. The author of the email does not appear to have been aware that the modified Method 8260 used by the WIPP is principally modified through the use of headspace gases in place of the liquid process specified in the Method.	NMED agrees that the author of the MICE email probably was not aware of the full scope and ramifications of the questions posed by the Permittees. NMED cautions against the use of acquiring third party concurrence without offering that party the full scope and ramifications of their analysis.
12.6	Matthew K. Silva, EEG	Headspace Gas Compositing	C	Comment related to the paragraph beginning "the accuracy and precision of the composited sample results..." in the Discussion section of Item 1. While this process described can provide data that could be used to establish the overall precision of the two methods, it does not provide any measure of accuracy. Accuracy is the comparison of a measurements to a "true" value. The "true" values for the analytes in the containers used in the Attachment B study are not known. Further, the comparison used in Attachment B study does provide a measure of the precision from the two methods, but the study does not express precision as specified in the WAP (Section B3-1). While the expression of precision in terms of equation Bs-1 of the WAP is not absolutely necessary, it would have enhanced the presentation of the data and demonstrated a familiarity with the HWFP.	NMED concurs with the commentor's analysis.
12.7	Matthew K. Silva, EEG	Headspace Gas Compositing	C	While the effort to establish clear criteria for TIC identification in the WAP (Discussion section of Item 1) is commendable, establishment of TIC criteria is a different issue than the compositing of headspace gas samples that Item 1 is meant to address. The bundling of multiple modification concepts into a single Item is not the most effective process.	NMED agrees that the inclusion of unrelated elements in permit modification requests is inappropriate, and the Permittees should limit the content of permit modification requests to modifications specific to the actual request.
12.8	Matthew K. Silva, EEG	Headspace Gas Compositing	C	The discussion of the modification request for the proposed criterion (that an attempt must be made to identify each chromatographic peak which is greater than 10% of the area of the nearest internal standard) would be better with the inclusion of the text of the Superfund document's (p. A-7) discussion of TICs.	NMED concurs that the proposed text modification is congruent with the EPA Superfund program, and is not specifically spelled out in RCRA guidance.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
12.9	Matthew K. Silva, EEG	Headspace Gas Compositing	C	In the proposed revision of the HWFP text, modification a.1 adds the following sentence to Section B-3a(1): If composite samples are used, containers used in the composite sample must be from the same waste stream with no more than 20 containers being included in a single composite sample. Headspace gas data collected to verify the establishment of the WSPF occasionally results in separation of a waste stream established by acceptable knowledge into two or more waste streams. NMED may want to consider whether headspace gas samples used to verify the establishment of waste streams should be allowed to be composited.	NMED understands the concerns expressed by the commentor in that compositing of headspace gas samples as part of the waste stream confirmation process may corrupt that process. This could occur by allowing single containers with organics not identified in the waste stream by AK to be "diluted" thereby inappropriately confirming container contents and the AK waste stream determination. NMED has examined the UCL90 calculations provided by the Permittees, and believes that UCL90 calculations for composited samples will generally be equivalent to or more conservative than calculations performed on individual sample containers. It is also possible that a single container with relatively high VOC concentrations could result in the assignment of VOCs to containers that normally would not be assigned the constituents via the compositing process. In this case, generator/storage sites could elect to resample the composite grouping to identify the suspect container rather than assign constituents to each container.
12.10	Matthew K. Silva, EEG	Headspace Gas Compositing	C	The proposed text modification c.2 would add a sentence to Section B3-5: Laboratory completeness shall be expressed as the number of samples analyzed with valid results as a percent of the total number of samples submitted for analysis. A composited sample is treated as one sample for the purposes of completeness, because only one sample is run through the analytical instrument. The addition of the second sentence introduced confusion. The substance of this modification could be better met by altering the initial sentence rather than creating the potential for confusion the proposed addition supplies. Perhaps remove "submitted for" and replace with "that undergo". This is also repeated in Section B3-1.	NMED agrees that the passage is poorly written, but it does adequately convey the intent of the Permittees.
12.11	Matthew K. Silva, EEG	Headspace Gas Compositing	C	Proposed text modification c.3 adds a sentence to Section B3-10 (page A-13).The sense of the sentence may be more clear if stated as: Headspace gas samples analyzed as a composite are to be considered a single sample in Analytical Batch data Reports.	NMED believes that while the commentor's suggested revision is true, it does not convey the intent of the revision as presented by the Permittees.
12.12	Matthew K. Silva, EEG	Headspace Gas Compositing	C	Headspace gas sampling and analysis is also used to meet transportation requirements for flammable VOCs as well as RCRA storage and disposal requirements. The 500 ppm limits is on a container-by-container basis, and composites of multiple container samples would not supply the needed data for individual containers unless the average flammable gas concentration for the 20 drums is less than 25 ppm. It seems that the Permittees needs to establish a non-HWFP requirements and process for ensuring that it has been implemented should this modification be approved.	The comment is non-permit related.
12.13	Matthew K. Silva, EEG	Safety Conditions for VE	C	The CBFO needs to demonstrate that it is statistically defensible to withdraw a container from consideration and substitute another container selected from the general population. The hypergeometric distribution that established the number of visual examinations necessary may need to be adjusted if the selection is not truly random. Also, if the subsequent random selection is from the large population defined as the Summary Category Group rather than from the same Waste Stream of the disqualified container, the results may be biased against the waste stream. The CBFO proposal should provide statistical details and references to clarify and support its requested methodology for selecting the replacement waste containers.	See response to Comment 2.0.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/Affiliation	Topic Area	Commentor Number	Comment Summary	Response
12.14	Matthew K. Silva, EEG	Safety Conditions for VE	C	The Discussion section of Item 2 states that "each site operates within specific conditions that are related to the VE facility operational limitation, site-specific regulatory compliance requirements and waste analysis". However, Item 2 does not describe any VE operation that has led to a violation of these specific conditions, not does it document any concern by a waste generator/storage site related to these conditions. "VE facility operation limitations" would seem to need to meet the HWFP requirements for VE rather than the HWFP be altered to meet the VE facility limitations, as the function of the VE facilities is to meet requirements of the HWFP.	See response to Comment 2.0.
12.15	Matthew K. Silva, EEG	Safety Conditions for VE	C	The commentor has two comments related to ALARA. Item 2 offers only the examples of broken glass and high radiation in containers as specific examples of the types of conditioned that would lead to container rejection under the proposed modification. Broken glass in containers could penetrate normal radiation gloves, however, use of leather gloves over radiation protection gloves is an established practice and should be considered. The highest transuranic radiation levels from WIPP waste is likely the residues from RFETS. Nearly all residue waste streams were processed using 100% VE, yet the Permittees have provided no evidence that non-compliance with ALARA was a concern during the VE for these waste streams.	See response to Comment 2.0.
12.16	Matthew K. Silva, EEG	Safety Conditions for VE	C	The proposal lacks specificity with respect to which containers will be removed from consideration because they pose an unacceptable hazard. Without a complete list, the concern is that a site has the discretion to establish a safety condition that could result in rejecting entire Waste Streams within a Summary Category Group. This could skew sampling towards Waste Streams less likely to have misclassified containers. Facilities should be in compliance with ALARA and should already possess a list of safety conditions that disqualify a container from further consideration. NMED should consider requiring those lists along with supporting references to the existing Generator/Storage site documentation.	See response to Comment 2.0.
12.17a	Matthew K. Silva, EEG	Safety Conditions for VE	C	The relevance of the NRC/EPA document cited and quoted in the Basis and Discussion section of Item 2 to support using AK as the sole waste characterization methodology is questionable. The guidance appear to limit its scope to NRC licensees and also appears to be for facilities being regulated by the NRC and EPA (not the NMED). The guidance also specifically addressed low-level radioactive mixed wastes as separated from transuranic or high-level mixed wastes.	NMED appreciates the commentor's analysis of this guidance document, since the Permittees commonly reference it as a basis for requesting reduced characterization requirements. Also, see response to Comment 2.0.
12.17b	Matthew K. Silva, EEG	Safety Conditions for VE	C	Use of AK as the sole analysis tool would seem to be in conformance with the NRC/EPA guidance only where AK tests performed to the methods specified in Sections 261.22(a)(1) and (2) and Section 261.24(a). As the Permittees do not intend to show waste has undergone the tests of these two sections, the use of AK as the sole analysis tool for the WIPP wastes appears to be inconsistent with the guidance. In addition, the modification request provides no indication that the appropriate EPA regional offices have been contacted to determine whether or not sites possess adequate waste knowledge to characterize debris TRU wastes. It appear that the NRC/EPA guidance was not meant to apply to the WIPP or any other DOE waste characterization process.	See response to Comments 12.17a and 2.0.
12.18	Matthew K. Silva, EEG	Sampling Through Vent Holes	C	Item 3 provides supporting evidence to show that removal of filters for headspace gas sampling in pipe overpack containers (POCs) is justified, but does not provide any studies related to drums or standard waste boxes. While the 4 mm-sized openings under the filters in the POCs are unlikely to produce much mixing, the much larger opening that would be exposed by removal of drum and SWB filters would be much more likely to dilute headspace gases prior to sampling. The PMR recognizes this in Section B1-1a(3)iii, which requires generator/storage site documentation.	NMED agrees with the commentor's concern that removal of filter vents for headspace gas sampling on containers other than pipe overpacks is of question. NMED included the proposed revision only for pipe overpacks.
12.19	Matthew K. Silva, EEG	Sampling Through Vent Holes	C	The use of the sampling screw proposed in Item 3 appears to be a good idea.	NMED concurs.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/Affiliation	Topic Area	Commentor Number	Comment Summary	Response
13.1	Bonnie Bonneau, Citizen	Headspace Gas Compositing	D	The headspace gas compositing proposal is about as vague as the word "compositing".	Sample compositing, as a general practice, is well established and used for a wide variety of sample activities. NMED believes that the sample compositing activities as presented in the permit modification request and as adopted by NMED are appropriate.
13.2	Bonnie Bonneau, Citizen	Headspace Gas Compositing	D	The commentor is concerned that sample compositing may impact characterization of individual drums with elevated VOCs when composited with low level VOC waste containers. The commentor is also concerned what actions will be taken by the generator/storage sites if elevated or unexpected levels of VOCs are found in the composite headspace sample.	NMED understands the commentor's concern that compositing would dilute samples with high VOC contents. However, NMED expects all sites to establish adjusted MDLs that are less than or equal to the associated PRQL when composited samples are collected and analyzed. They will need to establish appropriate MDLs in order to demonstrate that they are capable of detecting and reporting TICs as well as potentially diluted target analytes.
13.3	Bonnie Bonneau, Citizen	Headspace Gas Compositing	D	The commentor asks: will the 20 drums become a unit and be shipped together? Rather than just not shipping the one with the highest content, will all the drums be refused?	If a group of drums assigned headspace gas values from compositing does not belong in a specific waste stream based on AK confirmation, then all drums assigned the headspace gas value would be segregated and assigned to a new waste stream. The Permittees may choose to re-sample suspect composites, but all headspace gas requirements would have to be met (i.e., DAC, etc.).
13.4	Bonnie Bonneau, Citizen	Headspace Gas Compositing	D	The commentor believes it would be valuable to see the variation in the results of each drum sampled even when waste streams are said to be homogeneous. There is always some degree of variability.	NMED points out that HSG values will still be used to confirm AK, and AK/HSG variability will still be assessed.
13.5	Bonnie Bonneau, Citizen	Headspace Gas Compositing	D	The commentor asks: what happens if several of the batch of 20 drums have incompatible headgases? Would any red flag go up?	Incompatibility analysis through TRUCON code comparison is still required. Any incompatible gases identified in the composited sample will still be assigned to all containers contributing to the composite sample.
13.6	Bonnie Bonneau, Citizen	General	D	The commentor believes that DOE's timetable is not the concern of NMED and should not be regarded as an issue. It is more important to see sound and safe procedures in place.	NMED concurs with the comment.
13.7	Bonnie Bonneau, Citizen	General	D	The commentor believes that the ceiling of room 1 at the WIPP will collapse while waste is being put into rooms 2 and 3. The commentor is concerned about potential releases from collapsed drums in Room 1.	The concern expressed by the commentor is not relevant to the specific permit modifications being considered, but was addressed during the original permit hearing prior to permit issuance in 1999.
13.8	Bonnie Bonneau, Citizen	General	D	The commentor seeks clarification if NMED can impose permit modifications or are permit modifications prompted by action from DOE alone.	The NMED may accept proposed permit modifications "as is" or with modifications based upon public comment. NMED could also initiate a permit modification of its own accord independent from the Permittees. The permit modification requests included in this submittal were initiated by the Permittees.
13.9	Bonnie Bonneau, Citizen	Safety Conditions for VE	D	The commentor is concerned that VE would not be done on drums of questionable integrity. VE would seem important in ensuring safety. The commentor is also concerned about the randomness of VE selection if drums could be eliminated.	See response to Comment 2.0.
13.10	Bonnie Bonneau, Citizen	Safety Conditions for VE	D	The commentor asks if it would it not be wiser to determine the source of high radiation levels to see if it is equally compatible with the criteria rather than giving it a free ride to the WIPP?	See response to Comment 2.0.
13.11	Bonnie Bonneau, Citizen	Safety Conditions for VE	D	The commentor asks: how many drum can fail the "random inspection" before alarms go off?	See response to Comment 2.0.
14.1	Penelope McMullen, Sisters of Loretto	Sampling Through Vent Holes	E	The commentor does not believe it is acceptable to sample after the headspace gas is filtered, rather the headspace gas should be sampled before it is filtered.	Headspace gas is sampled unfiltered; filter vents are included to mitigate potential gas build-up.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
14.2	Penelope McMullen, Sisters of Loretto	Sampling Through Vent Holes	E	The description of sampling through existing filter vent hole procedure in the modification is vague and unclear and appear to result in an incomplete modification request. The problem seems to lie with POCs, yet the request is to apply to all containers.	NMED agrees with the commentor in that the permit modification request should be limited to POCs; NMED has included sampling from an existing filter vent hole only with respect to POCs.
14.3	Penelope McMullen, Sisters of Loretto	Sampling Through Vent Holes	E	There appear to be problems with the potential of residues and gases to escape during sampling. DOE may need to design a container that is not so difficult to sample.	NMED agrees that applicability of the permit modification request should be limited to POCs.
14.4	Penelope McMullen, Sisters of Loretto	Safety Conditions for VE	E	This request seems to take randomness out of the selection process. If the radiography shows problems, the container needs to be carefully checked (currently through VE), not ignored by checking a substitute container.	See response to Comment 2.0.
14.5	Penelope McMullen, Sisters of Loretto	Safety Conditions for VE	E	If a waste container is randomly selected for visual examination and it does not meet the safety criteria, and the VE personnel cannot take sufficient precautions in opening the drum, then that container and others from the same waste stream should not be sent.	See response to Comment 2.0.
14.6	Penelope McMullen, Sisters of Loretto	Headspace Gas Compositing	E	The request does not appear to make mathematical sense. In compositing, the total percentage should come out "safe" while there could be one container with concentrations too high to be "safe". MICE agrees that "as volumes get smaller, the associated error gets higher". The DOE studies reported accuracy problems. Further, the DOE studies do not seem to support whether a TIC was not detected because it was not there or because the method could not detect it.	NMED believes that the permit modification request to include more specific TIC criteria should mitigate concerns regarding detection of TICs in composite samples. NMED points out that there are no compound specific headspace gas VOC drum limitations; headspace gas values are used to confirm AK and are used to determine whether room limitations are being met.
14.7	Penelope McMullen, Sisters of Loretto	General	E	Request the NMED deny all three of the permit modification requests. Each of the proposed modification would increase the possibility that some drums would arrive at WIPP with inadequate characterization and could lead to larger amounts of VOCs than are allowed by the permit.	NMED accepts the Permittees HSG related permit modification request (with revisions), denies the safety conditions-related permit modification request, and accepts the sampling through vent holes-related permit modification request only as it pertains to pipe overpacks (use of the sampling screw is also included.)
14.8	Penelope McMullen, Sisters of Loretto	General	E	Request that NMED not allow DOE to submit any more incomplete requests that waste the citizens' time, energy and taxpayer money. NMED should either deny incomplete requests outright or review them and then not allow DOE to submit the same basic request again.	NMED cannot limit the Permittees' requests for modifications in the manner suggested by the commentor.
15.1	Lindsay A. Lovejoy, NMAGO	General	F	NM Attorney General's Office has reviewed the proposals and requests that NMED deny the permit modifications. If DOE plans on submitting Class 3 proposals, it seems these would become moot.	See response to Comment 14.7.
15.2	Lindsay A. Lovejoy, NMAGO	Headspace Gas Compositing	F	Commentor has concerns about the WAP and the purpose of headspace gas sampling. It should be noted that waste is characterized by waste stream (Att. B, B-26 and B-29) and the presence of a given hazardous constituent is determined and reported as pertaining to all containers in a given waste stream.	NMED recognizes the point made by the commentor in that compounds identified via HSG compositing would be applied to each container in the composite group, regardless of whether each container the group actually included all compounds detected.
15.3	Lindsay A. Lovejoy, NMAGO	Headspace Gas Compositing	F	The commentor has concerns about comparing the UCL90 for the mean concentrations to the PRQL. The relevant data for determination in characterization are mean values as to individual hazardous constituents, determined on a waste stream basis.	NMED understands the commentor's concerns, but also points out that the Permittees have demonstrated that the UCL90 determination will generally be equal to or more conservative than if calculated using individual container analyses.
15.4	Lindsay A. Lovejoy, NMAGO	Headspace Gas Compositing	F	The commentor is concerned that the definition of a waste stream is not rigorously constrained in the permit and may be done on a fairly arbitrary basis. In addition, if one or more hazardous constituents, not previously identified, are found in certain containers, those containers could be reclassified as a separate waste stream.	NMED agrees that compositing and subsequent AK confirmation could result in the rejection of a number of containers from a waste stream when only a single container of the grouping is actually problematic. Also, NMED is also very aware of waste stream definition variations, and always highly scrutinizes the Permittees' examination of waste stream determinations during site audits.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
15.5	Lindsay A. Lovejoy, NMAGO	Headspace Gas Compositing	F	The proposed procedures specify that all containers assessed in a composite sample be from the same waste stream. However, is it possible that, under the existing system of analyzing separately the headspace gas of each container, different characterization results might be reached? It seems that a single large value can still lead to a UCL90 value that might in some cases exceed the PRQL, thus requiring the hazardous constituent be assigned to the waste stream or that a new waste stream be identified for that and similar containers. Under the composite sampling, the value for the individual container would be submerged in the average value. Composite sampling would not achieve the same substantive results as the current system.	See response to Comment 15.4.
15.6	Lindsay A. Lovejoy, NMAGO	Headspace Gas Compositing	F	Headspace gas sampling is to be used to confirm the results of characterization using AK, with the assumption that AK is basically reliable but can be confirmed. The effectiveness of the confirmation methods should not be compromised, as would the suggested compositing procedure. The proposal should be rejected.	See response to Comment 15.4.
15.7	Lindsay A. Lovejoy, NMAGO	Headspace Gas Compositing	F	DOE has stated that the detection standards proposed for identification of TICs in composite samples is achievable. However, these assertions are not supported by data. The permit requires that TICs present in any one container and identified (based on the test of 10% of the nearest internal standard or a similar test) be reported, even if it actually is not present in 25% of containers. The compositing of samples has not been proven to permit such reporting. NMED cannot authorize modification of the permit to impose a lesser standard based upon unsupported assertions as to complex scientific and engineering issues. The use of composite samples cannot be allowed until its compatibility with procedures for reporting TICs is established.	NMED believes that the TIC reporting criteria included in the permit modification request mitigate concerns regarding detection and subsequent reporting of TICs in composite samples.
15.8	Lindsay A. Lovejoy, NMAGO	Safety Conditions for VE	F	The proposal does not specify the safety criteria for establishing conditions upon which waste containers will be selected for VE. The statements that they must be based on "characteristics of the waste and the site-specific operational safety requirements for VE" is not adequate.	See response to Comment 2.0.
15.9	Lindsay A. Lovejoy, NMAGO	Safety Conditions for VE	F	The proposal should be rejected. Once new conditions are placed upon the selection of containers, containers subject to VE are no longer "randomly selected", which in turn negates the verification system.	See response to Comment 2.0.
15.10	Lindsay A. Lovejoy, NMAGO	Safety Conditions for VE	F	The proposal does not state what new grounds of selection will be employed nor does it place any real restriction upon sites' decisions to adopt new selection criteria. This could result in biasing and could affect the validity of the confirmation process. Because of this, the application should be denied.	See response to Comment 2.0.
15.11	Lindsay A. Lovejoy, NMAGO	Sampling Through Vent Holes	F	The proposed modification would permit the filter body to be removed and "replaced as quickly as is practical with the airtight sampling apparatus." This would allow the container to stand unsealed without a filter for the length of time needed to install the sampling apparatus. The length of time should be quantified in the proposal.	NMED agrees that this process allows the potential for headspace gas to escape before the sampling apparatus is installed. Hence, NMED limited the approval of the process to pipe overpacks.
15.12	Lindsay A. Lovejoy, NMAGO	Sampling Through Vent Holes	F	Since the sampling problem essentially involves only the pipe overpack containers (drum can be tapped using the self tapping screw), it is proposed that the allowed modifications be limited to the use of a self tapping screw to penetrate 55 gallon drums and the use of a gas tap affixed to the filter vent fixture in the case of pipe overpacks.	NMED agrees with the commentor.
16.1	Joni Arends, CCNS	General	G	CCNS requests that NMED deny the requests for the permit modifications because they are incomplete, the changes are not protective of human health and the environment and the requests are inconsistent with the regulations. DOE's requested modification fail to meet the standards outlined in 20.4.1.900 NMAC, incorporating 40 CFR 270.42 (b)(7).	NMED has accepted the headspace gas compositing permit modification request, with revisions; NMED denied the safety conditions for VE-related permit modification request; and NMED accepted the self-tapping screw modification, but only accepted the filter hole sampling as it related to POCs.
16.2	Joni Arends, CCNS	General	G	The continuing practice of DOE submitting incomplete and inaccurate modification requests wastes the time, money and resources of DOE, NMED and the public. NMED should take decisive action to stop this process. Suggest reviewing Class 3 modifications on a once a year, consolidated basis and increasing fees for multiple modification requests.	NMED cannot limit the Permittees' requests for modifications in the manner suggested by the commentor.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/Affiliation	Topic Area	Commentor Number	Comment Summary	Response
16.3	Joni Arends, CCNS	General	G	NMED should impose strict penalties on violation of the permit, including practices allowing use of inappropriately classified permit modifications request that were erroneously put into effect by the Permittees months ago.	Enforcement actions and the fate of inappropriately classified Class 1 permit modification requests is not within the scope of permit modification request.
16.4	Joni Arends, CCNS	Headspace Gas Compositing	G	The modification request for compositing up to 20 samples should be denied because it is incomplete, does not comply with operating standard regulations and fails to protect public health and the environment.	NMED does not agree that the HSG sampling request is incomplete. NMED believes that the proposed permit modification regarding TIC identification and modification of identification criteria to reflect various composite sample sizes will ensure adequate identification and reporting of TICs in composite samples.
16.5	Joni Arends, CCNS	Headspace Gas Compositing	G	The modification request is based upon the assumption the efficiency and safety at the generator/storage sites would be improved. However, any modification should be directed toward the WIPP, the disposal site. Modifications based upon improvements at generator/storage site is not adequate. No benefits to New Mexicans or the environment has been demonstrated nor does the request document what improvements at other sites would be.	NMED believes the basis for the modification is to improve the headspace gas process without compromising data acquisition necessary to ensure adequate waste characterization. While NMED recognizes the added bonus of ensuring public health and safety outside of the state when permit modifications are requested, the basis of NMED's decision is whether the proposed modification is technically sufficient and still meets the intent of the permit in terms of acquiring headspace gas data for waste characterization and room-based limit compliance.
16.6	Joni Arends, CCNS	Headspace Gas Compositing	G	CCNS is concerned about the "noise" issues in reporting and identifying TICs. From experience, "noise" can be a serious problem, CCNS requests that NMED carefully review DOE's reasoning to answer Issue 1.	NMED believes that the proposed permit modification regarding TIC identification and modification of identification criteria to reflect various composite sample sizes will ensure adequate identification and reporting of TICs in composite samples.
16.7	Joni Arends, CCNS	Headspace Gas Compositing	G	What is the status of the WWIS (page A-6) and had NMED had problems in accessing the system over the last two months?	NMED believes the WWIS has been functioning as required under the Permit. In the preceding two months, NMED routinely accessed the WWIS approximately every two weeks.
16.8	Joni Arends, CCNS	Headspace Gas Compositing	G	What are the unintended consequences to public health and the environment if the Permittees are allowed to reduce the TIC library (p. A-7)?	Limiting the TIC library for headspace gas analysis to a subset of Appendix VIII that includes VOCs ensures that false positives (SVOCs) will not be reported. NMED is unaware of any unintended consequence to human health or the environment from implementing this change. Also, see response to comment 1.5.
16.9	Joni Arends, CCNS	Headspace Gas Compositing	G	It is unclear which generator/storage sites use the automated software (p. A-8). Please clarify this.	Automated software is used by most of the large quantity generator sites, including RFETS and INEEL.
16.10	Joni Arends, CCNS	Headspace Gas Compositing	G	Section d.1, Table B6-1, 51a should be rewritten as either two sentences, two questions, or one sentence and one question.	NMED has modified the permit to state "Are procedures in place to ensure that if a container was part of a composite headspace gas sample, the analytical results from the composite sample are assigned as the container headspace gas data results, including associated TICs, for every waste container associated with the composite sample in the WWIS". While this could be separated into two sentences, the intent of the revision is still clear as presented.
16.11	Joni Arends, CCNS	Headspace Gas Compositing	G	The Permittees have not demonstrated that the changed methods of composite sampling are protective of human health and the environment, the modification request does not meet the requirements of 40 CFR 264.13 related to waste analysis and 40 CFR 264.31 to ensure unplanned releases do not occur; and does not demonstrate that all TICs will be identified and reported and that the required headspace gas sampling will be carried out in accordance with the operating permit.	NMED believes that the proposed permit modification regarding TIC identification and modification of identification criteria to reflect various composite sample sizes will ensure adequate identification and reporting of TICs in composite samples.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
16.12	Joni Arends, CCNS	Safety Conditions for VE	G	There has been no basis provided for the proposed change in VE procedures for waste containers. What has been provided is incomplete, does not comply with regulations and does not protect human health or the environment.	See response to Comment 2.0.
16.13	Joni Arends, CCNS	Safety Conditions for VE	G	The request would change the selection process so that the procedure would no longer be random and could exclude certain drums from VE. This would fundamentally change the WAP requirements for verification of radiography.	See response to Comment 2.0.
16.14	Joni Arends, CCNS	Safety Conditions for VE	G	Commentor proposes several text modifications. Page A-22, a.1. Section B-3d(2) last sentence: delete "may" and insert "shall". Page A-22, a.1. Section B-3d(2) first bullet: DOE should define "high" radioactivity. Page A-22, a.1. Section B-3d(2) fourth bullet: delete "may" and insert "shall". Page A-23, b.1. Table B6-1, last bullet: delete "may" and insert "shall".	See response to Comment 2.0.
16.15	Joni Arends, CCNS	Sampling Through Vent Holes	G	CCNS requests that NMED deny the request for the permit modification related to procedures for taking samples of headspace gas through existing filter vent holes as the request is incomplete, the changes are not protective of human health and the environment and the request is inconsistent with the regulations.	NMED agrees that this process allows the potential for headspace gas to escape before the sampling apparatus is installed. Hence, NMED limited the approval of the process to self-tapping screws and pipe overpacks.
16.16	Joni Arends, CCNS	Sampling Through Vent Holes	G	It is unclear whether taking a sample through an existing filter vent hole will ensure an airtight seal (as required by Permit Section B1-1a(3)(ii)). Also, having the filter missing for 33 seconds will not provide an airtight seal and will skew the sampling results.	See response to Comment 16.15.
16.17	Joni Arends, CCNS	Sampling Through Vent Holes	G	Should a gasket or sealant be used while inserting the set screw into the drum lid to ensure a tight seal?	The self-tapping screw includes a small gasket as part of its design to ensure a tight seal.
16.18	Joni Arends, CCNS	Sampling Through Vent Holes	G	Does NMED have the metallurgical and engineering expertise to determine the impacts of inserting a set screw into the drum lid?	The commentaries must clarify the specific concerns she has regarding engineering and metallurgy with respect to set screw installation.
16.19	Joni Arends, CCNS	Sampling Through Vent Holes	G	The result of inadequate headspace gas sampling would allow drums that are inadequately characterized to go to the WIPP. This would violate the permit. Also, such drums could allow large amounts of VOCs, larger than permit conditions.	The permit does not limit headspace gas concentrations on a drum basis, instead setting room limitations.
17.1	Don Hancock, SRIC	General	H	SRIC requests that NMED deny the request for the permit modification as the request is incomplete, the changes are not protective of human health and the environment and the request is inconsistent with the regulations, including 40 CFR 264.31 and 264.601.	See response to Comment 16.1.
17.3	Don Hancock, SRIC	General	H	The continuing practice of DOE submitting incomplete and inaccurate modification requests wastes the time, money and resources of DOE, NMED and the public. NMED should take decisive action to stop this process. Suggest reviewing Class 3 modifications on a once a year, consolidated basis and increasing fees for multiple modification requests.	See response to Comment 16.2.
17.4	Don Hancock, SRIC	General	H	NMED should impose strict penalties on violation of the permit, including practices included in the proposed modifications that were inappropriately put into effect by the Permittees months ago.	See response to Comment 16.3.
17.5	Don Hancock, SRIC	Headspace Gas Compositing	H	The modification request for compositing up to 20 samples should be denied because it is incomplete, does not comply with operating standard regulations and fails to protect public health and the environment.	See response to Comment 16.4.
17.6	Don Hancock, SRIC	Headspace Gas Compositing	H	The modification request is based upon the assumption the efficiency and safety at the generator/storage sites would be improved. However, any modification should be directed toward the WIPP, the disposal site. Modifications based upon improvements at generator/storage site is not adequate. No benefits to New Mexicans or the environment has been demonstrated nor does the request document what improvements at other sites would be.	See response to Comment 16.5.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/Affiliation	Topic Area	Commentor Number	Comment Summary	Response
17.7	Don Hancock, SRIC	Headspace Gas Compositing	H	Attachment B is provided to show that headspace gas compositing of 20 samples is equivalent to compositing of five samples and to results on individual containers. Results were provided from INEEL and RFETS. However, the limited survey of wastes at INEEL and RFETS is not sufficient to demonstrate that it is comprehensive for wastes at those two sites, let alone all other sites. The study only looked at a very small percentage of wastes at INEEL and none of the RFETS mixed waste streams.	NMED believes that the Permittees demonstrated the adequacy of the composite process with respect to identification of the UCL 90, and the permit modification as implemented regarding TIC identification criteria will ensure adequate TIC reporting. NMED expects all sites to establish adjusted MDLs that are less than or equal to the associated PRQL when composited samples are collected and analyzed. The adjusted MDL would be defined as the statistically derived MDL/n, where n is the number of waste containers included in the sample composite.
17.8	Don Hancock, SRIC	Headspace Gas Compositing	H	The request to composite headspace gas impacts the ability of sites to identify and report TICs. The permit must comply with Findings of Fact #241-253 and Conclusions of Law #32-40 and modifications must be based on similarly factual records and determinations than the provisions of the permit are no longer valid.	NMED believes that the permit modification as implemented regarding TIC identification and modification of identification criteria to reflect various composite sample sizes will ensure adequate identification and reporting of TICs in composite samples.
17.9	Don Hancock, SRIC	Safety Conditions for VE	H	Section B1-3b(2) of the permit provides that results of radiography can be made available to VE personnel prior to VE taking place. With that information, VE personnel can take any precaution in opening the drum to examine the contents. The request provides no information on the inadequacy of the permit. Examining drum after radiography has identified unusual conditions and provides an important check on radiography and should not be eliminated.	NMED denied the proposed modification because it was sufficiently vague as to require additional clarification before modifying the permit to incorporate the change.
17.10	Don Hancock, SRIC	Safety Conditions for VE	H	No basis has been provided which justifies the example of one drum out of 11,000 to incite the change of the permit. The VE report does not provide information to suggest a change is needed.	See response to Comment 2.0.
17.11	Don Hancock, SRIC	Safety Conditions for VE	H	The modification request would allow sites to develop safety conditions that apparently would allow drums that otherwise would be subject to VE to not undergo that procedure. Those conditions are not well defined and should be in the request.	See response to Comment 2.0.
17.12	Don Hancock, SRIC	Safety Conditions for VE	H	The permit requires random selection, however, the modification would change the procedures so that it would no longer be random. This would change the WAP requirements for verification of radiography.	See response to Comment 2.0.
17.13	Don Hancock, SRIC	Safety Conditions for VE	H	Because the Permittees have not demonstrated that the changed methods of composite sampling are protective of human health and the environment, the modification request does not meet the requirements of 40 CFR 264.13 related to waste analysis, the request should be denied. Also the request is not consistent with Finding of Fact #212.	See response to Comment 2.0.
17.14	Don Hancock, SRIC	Sampling Through Vent Holes	H	SRIC requests that NMED deny the request for the permit modification related to procedures for taking samples of headspace gas through existing filter vent holes as the request is incomplete, the changes are not protective of human health and the environment and the request is inconsistent with the regulations.	See response to Comment 16.15.
17.15	Don Hancock, SRIC	Sampling Through Vent Holes	H	The basis for the request is to provide an additional headspace gas sampling method to allow POCs to be sampled through the filter vent hole. This is a self-imposed problem by the DOE, since DOE created POCs in order to ship highly radioactive residues to the WIPP from RFETS. The public has not had the opportunity for full analysis of the POCs. It appears though that DOE is using a piecemeal approach to change the permit, which results in an incomplete request. The request does not discuss the wide-ranging implications for POCs.	NMED has observed the pipe overpack process/equipment and potential headspace gas sampling through the filter vent hole during site audits, and believes that the proposed modification, if implemented to support pipe overpacking only, is technically adequate. NMED cannot speculate on equipment uses by the Permittees. Although NMED clearly understands the comment regarding the "piecemeal approach," NMED can not dictate the Permittees' approach to modifying their permit. The modification does not need to "discuss the wide-ranging implications for POCs."

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/Affiliation	Topic Area	Commentor Number	Comment Summary	Response
17.16	Don Hancock, SRIC	Sampling Through Vent Holes	H	Of the 450 POCs, how many have been certified as of October 25 by sampling through the filter vent hole and how many containers and which containers were sampled through the procedures specified in the permit? What problems have occurred with the new methods should have been provided in the request.	NMED currently does not know the proportion of containers sampled via the two procedures (i.e., filter vent hole vs. using approved procedures). The Permittees described the difficulties inherent in sampling with a side-port needle through the sintered metal filter in a POC during public meetings and in the modification request.
17.17	Don Hancock, SRIC	Sampling Through Vent Holes	H	The request as written would apply to all containers, not just POCs, but justification has only been provided for POCs. The request should provide information on whether the technique is applicable and would provide a representative sample for all other containers.	See response to Comment 16.15.
17.18	Don Hancock, SRIC	Sampling Through Vent Holes	H	The request includes no data to support the proposition that other containers left unsealed for an unspecified time would produce adequate headspace gas sampling of the container. This information should be provided in the request.	See response to Comment 16.15.
18.1	Geoffrey Petrie, NWNM	General	I	NWNM strongly opposes the this modification request and urges NMED to deny it. The commentor indicated that the request is incomplete, shows little concern for the safety of human health and the environment, and does not comply with the requirements of 20 NMAC 4.1.900 (incorporating 40 CFR 270.42(b)(7)), and that NMED cannot approve this modification for these reasons.	See response to Comment 16.1.
18.2	Geoffrey Petrie, NWNM	Headspace Gas Compositing	I	The commentor indicates that the proposed change in headspace gas compositing is lacking in logic and is dangerous. The commentor indicated that headspace gas sample compositing would compromise the characterization process. The compositing could allow high concentrations of VOCs and TICs in one drum to go undetected and does not address safety concerns associated with drums with high VOC content.	NMED believes that the permit modification as implemented regarding TIC identification and modification of identification criteria to reflect various composite sample sizes will ensure adequate identification and reporting of TICs in composite samples.
18.3	Geoffrey Petrie, NWNM	Headspace Gas Compositing	I	The commentor indicated that this permit modifications does not ensure that safety at the WIPP is enhanced or that it would show any benefits to New Mexicans or the environment.	See response to Comment 16.5.
18.4	Geoffrey Petrie, NWNM	Headspace Gas Compositing	I	The commentor indicated that because the compositing study used to justify the equivalence of compositing was based on small studies at RFETS and INEEL and not over a wider range of wastes and generator/storage sites, that it is inadequate. The limited survey of wastes at INEEL and RFETS is not sufficient to demonstrate that it is comprehensive for wastes at those two sites.	See response to Comment 17.7.
18.5	Geoffrey Petrie, NWNM	Headspace Gas Compositing	I	The commentor indicated that the modification request does not protect the environment or human health since they do not demonstrate that all TICs will be identified and reported and that headspace gas sampling will be performed according to the permit.	See response to Comment 17.7.
18.6	Geoffrey Petrie, NWNM	Safety Conditions for VE	I	There has been no basis provided for the proposed change in VE procedures for waste containers. What has been provided is incomplete, does not comply with regulations and does not protect human health or the environment.	See response to Comment 2.0.
18.7	Geoffrey Petrie, NWNM	Safety Conditions for VE	I	The commentor is concerned that if the request is approved, the permit would be modified so that containers would no longer be subjected to VE on a random basis and could exclude drums that have been randomly selected for VE. This change goes against the verification procedures (verification of radiography) of the WAP and would weaken QA practices.	See response to Comment 2.0.
18.8	Geoffrey Petrie, NWNM	Sampling Through Vent Holes	I	The commentor indicated that the headspace gas sampling through the vent hole is relevant only to POC containers at RFETS. The commentor is concerned about the use of POC containers because the public was not provided with an opportunity to comment on their use.	NMED agrees that the sampling through filter vent holes should be limited to pipe overpacks. NMED believes that use of the pipe overpacks cannot be disallowed if all relevant permit conditions and requirements are met.
18.9	Geoffrey Petrie, NWNM	Sampling Through Vent Holes	I	The commentor indicated that the modification would be applied to all containers. DOE should provide a discussion on the implications this change would have on all containers. Without these justifications, there is no way to assess what the impacts on characterization might be.	See response to Comment 17.14.

Headspace Gas Compositing, Sampling, and VE

Comment Number	Commentor/ Affiliation	Topic Area	Commentor Number	Comment Summary	Response
18.10	Geoffrey Petrie, NWNM	General	I	These commentor is concerned that the proposed permit modification requests are just a way for DOE to get waste to the WIPP faster without concern for environmental and health risks, and that NMED cannot approve this modification because of this reason.	NMED has discussed the permit modification process at length with the Permittees. NMED also believes it has fairly considered all modification requests to date. Past experience with modifications is not sufficient justification for denying the current modifications.
19.1	Barbara and Ray Stevens, Citizens	Safety Conditions for VE	J	The commentor expressed concern that selection of alternate samples is not sufficiently random and; therefore, it cannot be accurate. Allowing DOE and its contractors the leeway to select the most convenient samples takes away a safeguard to the public and the environment.	NMED denied the permit modification request that would have allowed different containers to be selected for visual examination of those initially selected posed unspecified hazards.
19.2	Barbara and Ray Stevens, Citizens	Safety Conditions for VE	J	The commentor indicated that worker safety should not be used as an excuse to take away public safeguards. Worker equipment, tools and procedures can be upgraded. If worker safety is truly DOE's concern, DOE or the contractor has the responsibility to improve procedures, etc., for the workers, but not to tamper with public safety issues.	See response to Comment 2.0.