

**Public Participation Information**  
**In Accordance With**  
**20 NMAC 4.1.901**  
**(Incorporating §124.31 *Pre-application public meeting and notice*)**

The applicant shall submit a summary of the meeting, along with the list of attendees and their addresses developed under paragraph (b) of this section, and copies of any written comments or materials submitted at the meeting, to the permitting agency as a part of the part B application, in accordance with 40 CFR 270.14(b)

**Summary of February 10, 2009, Meeting in Carlsbad, NM**

- Introductory comments were made by HL “Jody” Plum, DOE/CBFO
- A presentation (attached) was given on Draft 3 WIPP Hazardous Waste Facility Permit Renewal Application by HL “Jody” Plum, DOE/CBFO; William A. Most, Washington Regulatory & Environmental Services; Mike Gross, MG Enterprises
- Questions regarding the Renewal Application were solicited and answers provided
- The list of attendees is attached
- No written comments were provided to the Permittees (applicants) at the Pre-Application meeting. However, comments received subsequent to the meeting are attached

**Summary of February 12, 2009, Meeting in Santa Fe, NM**

- Introductory comments were made by HL “Jody” Plum, DOE/CBFO
- A presentation (attached) was given on Draft 3 WIPP Hazardous Waste Facility Permit Renewal Application by HL “Jody” Plum, DOE/CBFO; William A. Most, Washington Regulatory & Environmental Services; Mike Gross, MG Enterprises
- Questions regarding the Renewal Application were solicited and answers provided
- The list of attendees is attached
- No written comments were provided to the Permittees (applicants) at the Pre-Application meeting. However, comments received subsequent to the meeting are attached

**Summary of May 5, 2009, Meeting in Carlsbad, NM**

To Be Provided

**Summary of May 7, 2009, Meeting in Santa Fe, NM**

To Be Provided

**List of Attendees**  
**February 10, 2009, Pre- Application Meeting in Carlsbad, NM**

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Carlsbad, New Mexico

February 10, 2009

**U.S. Department of Energy  
Waste Isolation Pilot Plant Renewal Application  
for the Hazardous Waste Facility Permit**

\*Names appearing on this list will become part of the administrative record

<b>Name</b> <i>Please Print All Information Clearly</i>	<b>Mailing Address</b>
Jerry V. Fox PECOS MANAGEMENT SER.	P.O. BOX 13343 Albuquerque, NM 87192
Johnelle Koriata PECOS Management Services	PO BOX 13343 Albuquerque, NM 87192
FRED YARGER NM CENTER for ENERGY POLICY NM TECH	2632 N JADE AVE HOBBS, NM 88240

List of Attendees  
**February 12, 2009, Meeting in Santa Fe, NM**

Santa Fe, New Mexico

February 12, 2009

**U.S. Department of Energy  
Waste Isolation Pilot Plant Renewal Application  
for the Hazardous Waste Facility Permit**

\*Names appearing on this list will become part of the administrative record

<b>Name</b> <i>Please Print All Information Clearly</i>	<b>Mailing Address</b>
CHRISTOPHER TIMM	P.O. Box 13343 ALBUQUERQUE, NM 87192
PAUL PIERCE	P.O. Box 13343 ALBUQUERQUE, NM 87192
Kerry Rodgers	<del>9</del> 3570 39th St, NW, #D-664 Washington, DC 20016
Scott Kovac	NWNM
Don Hancock	JALC, P.O. Box 4524, A16 87196
JONI ARENTS	CCNS
Jerry Fox	P.O. Box 13343 ALBUQUERQUE, NM 87192

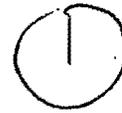
**May 5, 2009, Meeting in Carlsbad, NM**

**May 7, 2009, Meeting in Santa Fe, NM**

To Be Provided

**Written Comments from the February 10/12, 2009 Pre-Application Meetings**

Copy retained)



January 19, 2009  
135 Rincon Valverde  
Ponderosa, NM  
87044-9500

Mr. Bobby St. John  
c/o United States Department of Energy  
Carlsbad Field Office  
P.O. Box 3090  
Carlsbad, New Mexico  
88221-3090

Dear Mr. St. John,

Both February 10th and 12th, 2009 are days I deliver home-school instruction to my daughter. I regret that this renders me unable to attend either pre-application meetings that the U.S. Department of Energy Carlsbad Field Office and Washington TRU Solutions LLC are hosting.

I would very much like to be informed, nonetheless, of the proposed hazardous waste management activities and, after reasonable review of surface-mailed hardcopy of requested material, would like to compose questions to send to you.

(copy retained)

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However, while I am waiting for my requests to be honored, I will, for -the-record, submit this non-technical written public comment on a renewal application being considered by NMEID for defense-generated transuranic waste to be disposed of at the Waste Isolation Pilot Plant 30 miles east of Carlsbad, New Mexico before the expiration of the current permit on November 26, 2009, as follows:

-beginning-

"New Mexico Environment Department should not renew the Hazardous Waste Facility Permit for the Waste Isolation Pilot Plant 30 miles east of Carlsbad, New Mexico which would continue underground disposal of defense-generated transuranic waste in one more place in New Mexico. The disposal of byproducts of nuclear weapons research and production should be halted, forever, at the Carlsbad, New Mexico (actually, as already mentioned, 30 miles east of same)

(copy retained)

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Waste Isolation Pilot Plant after November 26, 2009, Los Alamos National Laboratory and Sandia Laboratory should be receiving huge amounts of legacy waste clean-up money. Secretary of State Clinton recently criticized the Bush Administration for having downgraded the role of arms control. Simultaneously, Energy Secretary-designate Chu wants to push these same labs to turn the focus of their missions to the energy problem and he endorses nuclear power. When November 26, 2009 comes around, whatever defense-generated transuranic waste has not been disposed of at the Waste Isolation Pilot Plant in New Mexico will have to be recycled in Eunice, sealed at Los Alamos to wait for Yucca Mountain to open, or sealed in the massive taxpayer boondoggle construction project up at Los Alamos, permanently, or if Mesa del Sol flops, out on the flats between the Sunport

(copy retained)

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and Isleta Pueblo. Most importantly, said Renewal Application should not be submitted to New Mexico Environment Department before May 30, 2009. This will give the incoming Obama Administration the time to close down this dangerous source of pollution in New Mexico. Until I receive requested evidence to the contrary, my unamended comment is as stated."

Please send all requested documentation to:

Rebecca G. Perry-Piper  
135 Rincon Valverde  
Ponderosa, New Mexico  
87044-9500

Respectfully,

*Rebecca G. Perry-Piper*  
Rebecca G. Perry-Piper

(copy retained)

Page 1 of 2



February 11, 2009  
135 Rincon Valverde  
Ponderosa, NM  
87044-9500

Mr. Steve Zappe  
New Mexico Environment Department  
2905 Rodeo Park Drive  
Building 1  
Santa Fe, NM  
87505

Dear Mr. Zappe,

I originally submitted my draft low-threshold non-technical written public comment on Draft 3 WIPP Hazardous Waste Facility Permit Renewal Application Volume I&II January 2009 United States Department Of Energy Washington TRU Solution LLC, with a January 19, 2009 date, to Mr. Bobby St. John c/o United States Department Of Energy, Carlsbad Field-Office P.O. Box 3090 Carlsbad, New Mexico 88221-3090. I commend Mr. St. John for surface-mailing me requested draft so that I might review it and submit an amendment to my January 19, 2009 comment, upgrading it to one of high-threshold status. My amended for-the-record comment is as follows:

-beginning-

"New Mexico Environment Department should not renew the Hazardous Waste Facility Permit for the Waste Isolation Pilot Plant 30 miles east of Carlsbad, New Mexico, which would continue underground disposal of defense-generated transuranic waste in one more place in New Mexico. The disposal of byproducts of nuclear weapons should be halted, forever, at the Carlsbad WIPP after November 26, 2009. Most importantly, said renewal application should not be resubmitted to NMED before May 30, 2009 in order to give the new Obama Administration the time to close down and seal up this dangerous site.

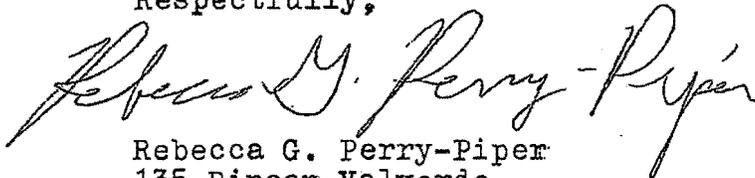
In reviewing Draft 3, I, firstly, found the lack of depiction of predominant wind direction in "Wind Speed Report (Meter/Second) January 1, 2006 to December 31, 2006, Elevation 10.0 Meters (Will be updated prior to submittal)" to be inadequate for the correlation of other data depicted on groundwater surface elevation monit-

February 11, 2009

oring locations, cattle density, crop location, and inhabited ranches. I, secondly, was disappointed that "(Will be updated prior to submittal)" was a part of the caption of the aforementioned depiction in a draft submission subject to public review and comment, rendering the draft incomplete/invalid. I, thirdly, felt that "Figure L-18 Groundwater Surface Elevation Monitoring Locations Permit Chapter L Page L-70 of 70" gave no indication of the depth or proximity that the monitoring system functioned at, rendering the draft flawed. I, fourthly, found inconsistent the practice of letting cattle graze in areas where farmers avoided planting. I observed this when overlapping "2207 CY-Active Mines And Inhabited Ranches Within A 10-Mile Radius Of The WIPP Facility" and "2007 CY-Acres Planted In Edible Agriculture And Commercial Crops Within A 50-Mile Radius Of The WIPP Facility". Cattle should not be allowed to graze SSE/SE of WIPP for 50 miles.

All in the paragraph above reinforces my view expressed in my comment's first paragraph."  
-ending-

Respectfully,



Rebecca G. Perry-Piper  
135 Rincon Valverde  
Ponderosa, New Mexico  
87044-9500

# PECOS MANAGEMENT SERVICES, INC.

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February 27, 2009

Mr. Vernon Daub, Deputy Manager  
U.S. Department of Energy  
Carlsbad Field Office  
4021 National Parks Highway  
Carlsbad, NM 88221

Subject: Contract No. DE-AC30-06EW03005 "Comments on Draft 3 of the Hazardous Waste Facility Permit Renewal Application"  
PECOS Document #2009-C-0026

Dear Mr. Daub:

PECOS Management Services, Inc. (PECOS) is pleased to submit the enclosed comments on the Draft 3 of the Hazardous Waste Facility Permit (HWFP) Renewal Application for the Waste Isolation Pilot Plant (WIPP), which was provided for our review in January 2009. PECOS' review was based upon our belief that the intent of the HWFP should be to enable DOE to facilitate disposal of transuranic (TRU) waste in WIPP as efficiently and safely as possible as directed by the authorizing federal legislation. From that perspective, PECOS believes that the proposed HWFP renewal should be written to ensure maximum flexibility of operations for WIPP. Further, we believe that the overall health and safety of all of the facets of characterizing, treating, transporting, and disposing TRU waste in WIPP should be evaluated and changes proposed that reduce the overall risk associated with TRU waste disposal. This evaluation should focus on decreasing the risks associated with the storage, characterization, and treatment of TRU waste at the generator sites without increasing the risks during transportation and disposal. PECOS also suggests that DOE pursue the elimination of any permit requirements that have been proven to be not necessary based upon the almost ten years of operating data. Such actions will improve the efficiency and facilitate the safe disposal of TRU waste in WIPP.

One of our major concerns is that the proposed new HWFP does not address two of the key issues with respect to the disposal of remote handled (RH) TRU waste. The first issue is to ensure that the HWFP gives DOE the ability to be able to dispose of the maximum amount possible in horizontal boreholes in Panels 5 through 8. That issue can be at least partially addressed by including in this Renewal Application a request to increase the permitted capacity for RH TRU waste disposal in Panels 5 and 6 to that permitted for Panel 7. In fact, PECOS recommends that DOE submit a Permit Modification Request (PMR) for the current permit to increase the permitted capacity for RH TRU waste disposal in Panel 5 to be the same as Panel 7 in order to improve operational flexibility.

## PECOS MANAGEMENT SERVICES, INC.

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Mr. Vernon Daub, Deputy Manager  
U.S. Department of Energy  
February 27, 2009  
Page 2

The second issue is the ability to be able to continue to place RH TRU waste in rooms even after emplacement of contact handled (CH) TRU waste has started. The text in the current HWFP and in the Renewal Application basically state that once CH TRU waste begins to be emplaced in a room, the emplacement of RH TRU waste in boreholes in that room ceases, even if a substantial number of boreholes are unfilled. Rather than including that self-limiting requirement, we believe that it would add flexibility to WIPP operations if the text were changed in the new HWFP to indicate that DOE has the option to emplace RH TRU waste in the same room where CH TRU waste is being emplaced as long as all DOE health and safety requirements are met.

Another concern is with respect to the expected duration of the disposal phase. In several parts of the Renewal Application, the statement is made that the disposal phase is expected to last 25 years. Since only about 1/3 of the CH TRU waste and less than 3 percent of the RH TRU waste capacities will have been used in the first 10 years of operation, it is more likely that the disposal phase will more than 35 years. This is corroborated by the disposal phase timetable presented in Table I-1 on page I-25 of Chapter I, which indicates a disposal phase duration of over 31 years. Therefore, we suggest that DOE correct the Renewal Application and provide the best current estimate of the duration of the disposal phase throughout.

PECOS is also concerned about the inconsistency in the discussions regarding Panels 9 and 10 between various sections of the Renewal Application. Since the Part B Necessary Information Section and the changes to Appendix M2 that Panels 9 and 20 indicate that the approach to increasing the capacity of WIPP beyond the eight panels may or may not be Panels 9 and 10, it appears that this Renewal Application could be simplified by simply indicating that should there be a need to dispose of more TRU waste than authorized by the renewed permit, DOE would submit the appropriate PMR for more capacity – either by increasing the allowed capacity in the one or more of the panels as authorized by Section IV.A.1.b.ii of the current permit or by using the four access drifts or through mining more panels. Making this change would ensure maximum flexibility for DOE for future capacity expansions.

Since DOE is in the process of gaining approval to use shielded containers for disposal of TRU waste in WIPP and is also in the process of designing the Standard Waste Box 2 and the TRUPACT III to more safely accommodate disposal of larger TRU waste items, we believe that those containers should be included in the renewal application as planned future permit modification requests – a practice that is commonly called out in other sections of the current permit.

Another major concern is the number of errors and inconsistencies both within and between sections of the Renewal Application. While most of them do not impact the actual proposed operations of the WIPP, they give the impression to the readers that the quality assurance program for WIPP is not particularly effective. In addition, the formatting of the Appendices is inconsistent. Some have Tables of Contents and some don't (examples Appendices I2 and M2), some contain a

## PECOS MANAGEMENT SERVICES, INC.

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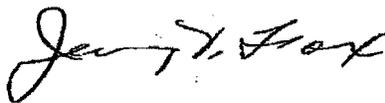
Mr. Vernon Daub, Deputy Manager  
U.S. Department of Energy  
February 27, 2009  
Page 3

list of acronyms and abbreviations and some don't (example Appendix I3). Also, there are numerous instances of references in the text not being included in the Reference list at the end of Chapters or Appendices and the converse, namely that references on the reference list are not referenced in the text.

Finally, we understand that additional permit changes are being drafted including changes related to the prohibition of liquids in TRU waste containers and the waste characterization process. We recommend that DOE consider the information presented in our reports entitled: "*An Evaluation of the Health and Safety Risks resulting from Repackaging TRU Waste for Disposal at WIPP*", which was provided to DOE in September 2008, and "*Potential Health and Safety Impacts of Removal of Containers from the Waste Isolation Pilot Plant*", which was provided to DOE in November 2008 during the formulation of those changes. We also recommend that DOE consider modifying the volatile organic compound (VOC) monitoring program. Since the monitoring results basically have shown very low levels of VOCs for the past ten years, it appears that a reduction in the sampling and analysis requirements is justified. This type of modification would essentially be comparable to the reduction in the headspace gas sampling requirements approved by NMED in 2006 that was justified by the low concentrations of VOCs found in over 70,000 payload containers up to that point in time.

We appreciate the opportunity to review the draft and look forward to the opportunity to review the fourth draft of the renewal application including all of the proposed changes to the HWFP text and attachments. Please call me or Christopher Timm at (505) 323-8355 should you have any questions.

Sincerely,



Jerry V. Fox, PhD  
Project Director

cc: M. Long, EMCBC  
L. Dumont, EMCBC  
R. Nelson, DOE  
B. St. John, Washington TRU Solutions  
S. Keeney, PECOS  
C. Timm, PECOS

Enc: As Stated

# PECOS MANAGEMENT SERVICES, INC.

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## Comments on Draft 3 Hazardous Waste Facility Permit Application – February 2009

### General Comments

DOE should take this opportunity to request the increase of the allowed disposal capacity for RH TRU waste in Panels 5 and 6 to 650 m<sup>3</sup> in order to give DOE the maximum operational flexibility.

Is the Renewal Application intended to be a 'stand alone' document or is it intended to be reviewed along with a copy of the existing permit? If it is 'stand alone' then all the references to Modules and Attachments should be changed to the appropriate Chapter or Appendix in the Application. (Ex. Chapter D, page D-5, line 3 refers to Module III of the permit. However the same description is provided in Appendix M1 of the Renewal Application.

If the Renewal Application is referring to the existing HWFP when specifying modules, then the text should read something like "Module XX of the current HWFP or Module XX of the 1999 Permit". For example, the sentence on page D-5, lines 2-3 should read "These containers are described in Module III of the current Permit".

There is extensive inconsistency in the definition and use of acronyms for the units at WIPP. For example, the hazardous waste management unit (HWMU) that consists of the Waste Handling Building is called either the Waste Handling Building (WHB) or the Waste Handling Building (WHB) Container Storage Area (WHB unit) depending on the Chapter and Appendix. Similarly, the acronyms for the other HWMU, the Parking Area Container Storage Unit, are the Parking Area Unit or PAU depending upon the Chapter and Appendix.

The Renewal Application should be reviewed to ensure that the acronyms NMED and WIPP versus the phrases "the NMED" and "the WIPP" are used properly.

The formatting of the Appendices is inconsistent. Some have Tables of Contents and some don't (examples Appendices I2 and M2), some contain a list of acronyms and abbreviations and some don't (example Appendix I3).

Unless the text refers to several different forms of each, words such as "waste" and "sludge" should always be singular.

### Specific Comments

**Table of Contents** – 1) Page numbers missing on even-numbered pages. 2) Chapter M erroneously called Appendix M

**Abbreviations and Acronyms** – 1) Many of the acronyms and abbreviations contained in the chapters and appendices to this application are not included in this list. It should either be all inclusive for the whole application or labeled to indicate what part of the application it covers. 2) There are two different acronyms given for radiation control – pick one or the other. 3) Rather than using the same term (AC) for acre and alternating current, suggest using Ac for acre and AC for alternating current. Also, the acronym HWDU, which is used in Part A of the application, is not on the acronym list.

# PECOS MANAGEMENT SERVICES, INC.

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**Introduction** – 1) The Introduction should clearly state that the mission of WIPP is for permanent disposal of radioactive waste as regulated by the EPA under 40CFR191 and 194 and that the permit is only required since some of the radioactive waste contains other waste forms regulated by RCRA. 2) On page 2, line 23, the wording after “TDSF” should be ‘*are incorporated*’ instead of ‘and incorporate’. Page 2, line 30, the last word should be singular.

**Part A Certification** – This section is still poorly organized and difficult to follow. 1) The RCRA Subtitle C Site Identification Form and Hazardous Waste Permit Information Form should be identified in the Table of Contents for the renewal application. 2) The Table of Contents for this section (Page A-i) is in the wrong location – it should be at the start of the section rather than after the Hazardous Waste Permit Information Form. Part 8 of the Hazardous Waste Permit Information Form should include a statement that the information for that part is continued on page A-1 of the section. Similarly, a statement should be inserted at the top of page A-1 such as “*The following information is a continuation of Part 8 of the Hazardous Waste Permit Information Form*”. Also Part 14 of the Hazardous Waste Permit Information form and several other places in this section refer to Section XII, but there is no attachment identified as Section XII. Further, there are six figures or maps at the end of the section that are not page numbered for Part A. It appears they should be part of Appendix 2. Finally, there is an un-numbered table at the end of this section that appears should either be in the Regulatory Crosswalk section or in the Part B section.

Other comments on Part A:

1. **Necessary Information.** Page 5: For RH TRU mixed waste, the amount emplaced through Panel 7 should be “no more than 1,804 m<sup>3</sup>” instead of 1,985 m<sup>3</sup> and the amount with Panel 8 should be changed from “2,635 m<sup>3</sup>” to “2,454 m<sup>3</sup>”.
2. Page 5: In the paragraph beginning “During the ten year period...”, change ‘received’ to ‘receive’ in the second line.
3. Page 5: Insert a space after 148,500 and change m3 to m<sup>3</sup> after 2,635.
4. Page A-1, line 18: The text indicates the acronym for hazardous waste management units is HWDU. However, the balance of the text on this page uses the acronym HWMU. It appears that the intent is to use the acronym HWMU for the above ground hazardous waste management units and the acronym HWDU (hazardous waste disposal units for the underground hazardous waste management (disposal) units. Revise the text accordingly. Also, in line 33 change ‘bill’ to ‘will’ after the acronym HWMU. Further, suggest deletion of the term S01 before HWMU on line 35 and changing S01 to HWMU after the second ‘this’ in that line. Also, in line 39, change the beginning of the sentence to read “The second HWMU in S01 is the parking area....”.
5. Page A-2: It is suggested that the capacities cited for Panels 1 through 8 be changed to reflect the actual volumes disposed as discussed in the above comment. Basically, change “148,500” to “139,340” and “2,635” to “2,454”.

## Part B

# PECOS MANAGEMENT SERVICES, INC.

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## Necessary Information

- i. General: The possibility of using the 4 “disposal area access drifts” if waste cannot be accommodated in Panels 1 – 8 is mentioned in the Necessary Information. Additional information should be presented to account for this as a real possibility in light of the current disposal rate of approximately 2 years per panel and the fact that Table I-1 (Chapter I, Page I-25) shows an expected Operations start date of January 2017 for Panel 9.
- ii. Pages 1 and 2: If filled to permitted capacity, Panels 1 through 8 would only hold approximately 151,135 m<sup>3</sup> of TRU waste. Therefore, the last sentence on page 1 should be changed to read: “Since wastes disposal volumes permitted to be disposed in the eight panels will be less than the stated design capacity, DOE may choose to either request a permit modification to increase the allowed CH TRU waste disposal capacity in panels as authorized by Section IV.A.1.b.ii of the Permit or use the four disposal access drifts for disposal or mine additional HDWUs or a combination of these alternatives. The permit modification request would describe the design of proposed capacity increases and the controls to be exercised for personnel safety and environmental protection while disposing of wastes in the new disposal areas.
- iii. Page 2 lines 6-8:
  1. 148,500 m<sup>3</sup> does not equal 4,605,700 ft<sup>3</sup>, please correct. Also, insert a space between the “5” and the “m” in (2,635m<sup>3</sup>).
  2. The numbers presented for CH TRU waste volume should be revised to represent the amount actually emplaced in Panels 1 through 3, which is 1,609,019 ft<sup>3</sup> according to Table IV.A.1 in the current Permit. Since no more than 3,310,750 ft<sup>3</sup> is/will be permitted for Panels 4 thorough 8, no more than 4,919,769 ft<sup>3</sup> can be emplaced in Panels 1-8.
  3. The numbers presented for RH TRU waste should also be revised to represent the actual amount emplaced in Panel 4. Our estimate is that no more than 175 m<sup>3</sup> will be emplaced in it. Therefore, since Panels 5 through 8 do/will have a permitted capacity of 2,279 m<sup>3</sup>, the number presented in the application should be changed to 2,454 m<sup>3</sup>).
  4. RH TRU waste was never emplaced in Panels 1, 2 or 3. The text on line 8 should be revised to indicate that RH TRU waste will only be emplaced in Panels 4 through 8. Also the acronym for CH was identified, but RH was not. Please insert this acronym here *and* use it on page 18.
  5. The text for lines 6-8 should be revised as follows: For the ten year term of this permit, DOE plans to dispose of up to 2,648,600 ft<sup>3</sup> (75,000 m<sup>3</sup>) of contact-handled (CH) waste and 80,480 ft<sup>3</sup> (2,279 m<sup>3</sup>) of remote-handled (RH) TRU mixed waste, in Panels 5 to 8. Therefore, the volume of CH TRU waste disposed in Panels 1 through 8 will be no more than 4,920,526 ft<sup>3</sup> (139,340 m<sup>3</sup>) of CH waste, and Panels 4 through 8 will contain no more than 86,660 ft<sup>3</sup> (2,454 m<sup>3</sup>) of RH TRU mixed waste.
- iv. Page 5 line 9: Preparedness and Prevention should be italicized.

## PECOS MANAGEMENT SERVICES, INC.

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- v. Page 5 line 28: A comma is needed between “County” and “New” in Eddy County New Mexico. The same error is on page 6, lines 9-10 and 27-28.
- vi. Page 10 line 16: A period is needed at the end of the statement. Periods are also needed on lines 18, 20, 25, and 27.
- vii. Pages 12-13: The term “ground water” is spelled three different ways (depending on its use as an adjective or noun) on these two pages: ground-water, groundwater and ground water. Select one way. Page 15 mentions that “A Class 3 permit modification request for No Further Action is pending before the NMED.” Why can’t the Class 2 PMR for training have the same wording on page 8? Also, this Class 3 permit modification request was formally approved by NMED on October 23, 2008. The wording needs to be changed to reflect this.
- viii. Page 16 lines 34-35: all of the following text should be blue *and* have a period placed at the end: “and as described in Renewal Application Chapter F-4b, *Identification of Hazardous Materials*, and Renewal Application Appendix M1, *Container Storage*”.
- ix. Page 17 lines 7 & 15: Waste Analysis Plan should be italicized.
- x. Page 17 line 34: A period is needed at the end of the sentence.
- xi. Page 17 line 36: Change the verb “does not” to “do not”.
- xii. Page 18 lines 14-21: The text should be blue, not black.
- xiii. Page 18 lines 7-10: Change the phrase “There is no change” in the first sentence to “There are no changes”.
- xiv. Page 18 line 9: Delete the phrase “TRU mixed waste for disposal”.
- xv. Page 18 line 10: Change contact-handled to “CH”
- xvi. Page 18 lines 28-29: Change the period to a comma after “264.602” and change the comma to a period at the end of the sentence.
- xvii. Page 19 lines 4-8: Change “There is no change to.....” to “There are no changes”. Also add a hyphen for the second occurrence of “land use”. Further, the first sentence is not clear and should be re-written.
- xviii. Page 19 line 18: Change “has” to “have”.
- xix. Page 19 lines 28-33: Change text color from black to blue.
- xx. Page 19 line 4: Insert a space between “1” and “w” in “§264.601will”.

### Chapter A

- 1. Page A-1 line 32: New Mexico is spelled out on this line, but abbreviated on lines 16, 20, 29.
- 2. Page A-1 line 38: The phrase “32o 22' 30" N” should be “32° 22' 30" N”.
- 3. Page A-2 line 9: Define DOE before using the acronym throughout the document.

## PECOS MANAGEMENT SERVICES, INC.

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4. Page A-2 lines 19-20: Suggest changing the designation of the Waste Handling Building (WHB) Container Storage Unit to just the Waste Handling Building unit (WHB unit) since there are more activities than just container storage conducted in that unit.
5. Page A-2 line 35: Define RCRA before using the acronym throughout the document.
6. Page A-3 line 24: Define NMAC.
7. Page A-4 line 10: Define NMED before using the acronym throughout the document.
8. Page A-4 line 28: Indent NMED so that it matches up with the rest of the text.
9. Page A-6 line 7: Remove the extra period after "Inc..".

### Chapter B

- i. General. Review document for failure to define or other inconsistent use of acronyms. For example, the acronym "AK" is defined on page B-2 but is re-defined on page B-5 and B-15. Additionally, the term "acceptable knowledge" is used instead of the acronym AK numerous times in the chapter starting on page B-9. Also, the acronyms VOC, SVOC, TCLP, are not defined when first used (page B-14).
- ii. Page B-1 line 18: Replace "DOE" with "U.S. Department of Energy (DOE)".
- iii. Page B-4 line 21: Since this is the first use of "toxic characteristics" add the acronym (TC) after it and then change "toxic characteristic" to TC on the following pages.
- iv. Page B-9 line 37: Add the acronym "SWB" after the term "standard waste box". Then delete the term "standard waste boxes" on page B-33.
- v. Page B-14 line 14: The word "Attachment" is misspelled.
- vi. Page B-20 line 31: Use "UCL<sub>90</sub>" instead of "UCL90".
- vii. Page B-21 line 11: The acronym DQO's should be DQOs (no apostrophe) as stated in line 8.
- viii. Page B-25, line 7: Replace "U.S. Department of Energy" with "DOE".
- ix. Page B-28 line 31: Change "a authorized" to "an authorized".
- x. Page B-28 line 42: "Waste Stream Profile Form" was previously identified by its acronym "WSPF". Please continue to use WSPF here and in the rest of this section.
- xi. Page B-30 line 6: The acronym SOPs was not previously defined.
- xii. Page B-32 line 30: Add a period after the word "container(s)".
- xiii. Page B-33 line 40: The acronym TDOPs was previously defined in this document. There is no need to do it again here.

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- xiv. Page B-47 and B-48 Table B-5: The phrase “statistical samplinga” needs to be changed to “statistical sampling” in two places.

### Appendix B1 – Waste Characterization Sampling Methods

- i. Page B1-1 lines 8-9: Define the acronyms TRU and WIPP. Then delete the definition of TRU on page B1-15.
- ii. Page B1-1 line 15: Add the acronym HSG after “headspace gas” and substitute the acronym for that phrase throughout the Appendix. Or, if the acronym is not used, use either “headspace gas” or “headspace-gas” (see line 19) in the document.
- iii. Page B1-2 line 5: Add a space after the period in the phrase “in Table B1-9. The DAC”.
- iv. Page B1-2 line 7: Use the same type of quotes for all footnotes.
- v. Page B1-2 line 8: Adding the word “required” before the acronym DAC will make this sentence more understandable.
- vi. Page B1-2 line 19: Use DAC instead of spelling it out.
- vii. Page B1-2 line 36: Define WWIS before using it the first time.
- viii. Page B1-3 line 22: Define BWXT before using it the first time.
- ix. Page B1-3 lines 24 & 28: Remove the extra period at the end of each sentence.
- x. Page B1-4 line 11: Define VOC before using it the first time.
- xi. Page B1-6 line 1: Define PRQL before using it the first time and remove the extra space before the period at the end of the sentence.
- xii. Page B1-6 line 11: Define ppm.
- xiii. Page B1-6 line 24: Insert a comma after FTIRS.
- xiv. Page B1-8 line 14: The degree symbol in ”125 degrees C” does not show up correctly (it looks like a rectangle, instead). Please use the same “degree” symbol seen earlier in this document. Make the same correction on Page B1-14 line 32.
- xv. Page B1-8 line 16: When then symbol ® is used it should be a superscript (here and elsewhere in the document).
- xvi. Page B1-14 line 2: Define psig.
- xvii. Page B1-15: The reference TO-14 (EPA 1988) is not included in the list of References on Page 29.
- xviii. Page B1-16 lines 6-7: The phrase “may require no more sample than is required” might be better expressed as “may require no more samples than are required”.
- xix. Page B1-16 line 27: The phrase “light weight auger” should be “lightweight auger” (see also Figure B1-5 on page B1-51).

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- xx. Page B1-16 line 35: The word “teflon” should be “Teflon<sup>®</sup>”.
- xxi. Page B1-17 line 25: The word “coring tools leading edge” should be “coring tool’s leading edge”.
- xxii. Page B1-17 line 30: The word “tools” should be “tool”.
- xxiii. Page 18 makes reference to “SW-846 Manual (1996)”. Because this document is very large, it might be beneficial to reference a specific part of SW-846 (many parts have been revised since Update III in December 1996). Also change “(1996)” to “(EPA 1996)”.
- xxiv. Page B1-18 line 34: VOA stands for “volatile organic analysis”, not “volatile organics analysis”.
- xxv. Page B1-24 line 39: Insert a comma after “In this way”.
- xxvi. Page B1-25 line 1: The phrase “with internal container of various sizes” should be “with internal containers of various sizes”.
- xxvii. Page B1-27 line 28: “Sample Coring equipment” should be “Sample coring equipment”.
- xxviii. Page B1-39: Table B1-7 has unequal row spacing which makes the middle rows difficult to read.
- xxix. Page B1-42: Table B1-9 has a different font/font size for the entry at the bottom of the page. This entry’s row height is also larger than the rest.

### Appendix B2 – Statistical Methods Used In Sampling and Analysis

- i. Page B2-1 lines 8-9: Define the acronyms TRU and WIPP.
- ii. Page B2-1 line 19: AK was previously defined in line 11, so use it here and everywhere else in the document.
- iii. Page B2-1 line 35: D-numbers are defined, but F-numbers are not.
- iv. Page B2-1 line 41: Change “these wastes streams” to “these waste streams”.
- v. Page B2-2 line 40: Equation variable  $t_{a,n0-1}$  is not listed in the definition of variables. Instead,  $t_{a,n-1}$  is defined on line 6 of page B2-3.
- vi. Page B2-3 lines 7-8: Define TC and PRQL before using them for the first time.
- vii. Page B2-3 line 37: Shouldn’t the phrase “the validated samples results” be “the validated samples’ results”?
- viii. Page B2-4 line 4: Define WSPF.
- ix. Page B2-4 line 23: Define  $UCL_{90}$ .
- x. Page B2-4 line 42: define VOC.
- xi. Page B2-7 line 36: Starting here,  $UCL_{90}$  is italicized in the remaining text of the document. This change in text format is seen with other variables, such as  $n^*$ . Also, “the number of samples (n)” is mentioned in several places in

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- the text. It was defined on page B2-2 and doesn't need to be redefined elsewhere.
- xii. Page B2-8 line 15: Remove the box from around the variable  $x$ .
  - xiii. Page B2-8 line 16: The term  $t_{(\alpha,n-1)}$  shows up in equations as  $t_{\alpha,n-1}$ . Consistency is warranted.
  - xiv. Page B2-9: Six references are listed, but only the last two are specifically called out in the text. Also, the reference to the DOE TRU Quality Assurance Program Plan (QAPP) is out of date. According to the current QA Program Document (QAPD rev 9), the QAPP was to become "inactive" with rev 3 of the QAPD.
  - xv. Page B2-13: Define the acronyms HSG and HWN in the text before using them in Figure B2-1.

### **Appendix B3 – Quality Assurance Objectives and Data Validation Techniques for Waste Characterization Sampling and Analytical Methods**

- i. General: Some citations are listed as (DOE, 2005), while others are listed as (EPA 1996). Choose one format (with or without a comma), not both.
- ii. Page B3-3: The word "usability" is also spelled "useability" on this page. Use one form, not both.
- iii. Page B3-4 line 11: Replace the period after the word "address" with a comma.
- iv. Page B3-5: Several references are made to SW-846 without citing the source (EPA 1996). Note that eventually the source is cited on page B3-14.
- v. Page B3-5, lines 21 and 24: The word "coeluting" should be changed to "co-eluting"
- vi. Page B3-5: line 28: Add the acronym HSG after "headspace gas" and substitute the acronym for that phrase in the rest of the document.
- vii. Page B3-7: Headspace gas is not consistently hyphenated when used as an adjective on this page.
- viii. Pages B3-8 and B3-31: Some bulleted items end with periods but others do not. Be consistent.
- ix. Page B3-8 lines 21-22: Should the phrase "according to manufacturers specifications" be "according to manufacturers' specifications"?
- x. Page B3-23 line 5: The word "involves" should be "involve".
- xi. Page B3-29 line 31: Delete the extra space after "B6".
- xii. References to the two Project Demonstration Plans are outdated. The PDP for headspace gas analysis was revised in 2007 (not 2003). The PDP for solids was revised in 2006 (not 2005).

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- xiii. Reference for the WIPP Waste Information System is also outdated. The current version was updated in 2008 and goes by a different title.
- xiv. Page B3-35 line 36: Replace the comma after DOE with a period.
- xv. Table B3-4: The term MDL<sup>b</sup> should be MDL<sup>b</sup>.
- xvi. Table B3-5 and Table B3-7: The acronym QAO's should be QAOs.
- xvii. The following acronyms were not defined prior to first use:

Acronym	First Appears on Page	First Defined/Spelled Out on Page
TCLP	B3-5 line 11	B3-29 line 8
GC/MS	B3-5 line 12	
QC	B3-6 line 37	
PRQL	B3-7 line 7	B3-12 line 40
NIST	B3-8 line 20	
OVA	B3-8 line 21	
PRDLs	B3-9 line 41	B3-18 line 36
TSDF-WAC	B3-11 line 28	
WAP	B3-12 line 39	B3-18 line 41
ICP MS	B3-18 line 30	B3-50 line 7
TRU	B3-21 line 34	
WSPF	B3-23 line 28	B3-27 line 8
WWIS	B3-27 line 12	B3-32 line 4
UCL <sub>90</sub>	B3-28 line 4	
RCRA	B3-29 line 5	
EPA	B3-30 line 26	
NMED	B3-30 line 27	
TRUCON	B3-30 line 37	
AK	B3-31 line 15	
TWIBR	B3-31 line 17	
GC/FID	B3-40 line 15	
RT	B3-46 (Tables B3-5 & B3-7)	
CCC	B3-46 (Tables B3-5 & B3-7)	
ICP AES	B3-50 line 7	
AA	B3-50 line 8	
CVAA	B3-51 (Table B3-9)	
GFAA	B3-51 (Table B3-9)	
HAA	B3-51 (Table B3-9)	
FLAA	B3-51 (Table B3-9)	
NCRs	B3-55 (Table B3-11)	B3-33
HSG	B3-56 (Table B3-12)	

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## **Appendix B4 – TRU Mixed Waste Characterization Using Acceptable Knowledge**

- i. Page B4-1: Define the acronyms EPA and TRU. EPA is not defined until page B4-4, and transuranic is spelled out on page B4-6. Also, because AK is defined on this page, continue to use the acronym throughout the document.
- ii. Page B4-1: There is no need to keep saying “Permit Attachment B” after WAP. It is already defined near the top of the first page.
- iii. Page B4-1: An EPA document is called out as a reference (EPA, 1994), but there are no “References” listed at the end of the document.
- iv. Page B4-2: Define WIPP.
- v. Page B4-6: Define LANL, VOC, and NMMSS.
- vi. Page B4-7: Define WSPF. Page B4-11 defines the acronym.
- vii. Page B4-11: Define DQOs before using it the first time. It is spelled out on page B4-14.
- viii. Page B4-12: Define TCLP.
- ix. Page B4-13 line 39: The verb “can not” should be “cannot”.
- x. Page B4-16: Define CARs.

## **Appendix B5 – Quality Assurance Project Plan Requirements**

- i. Page B5-1 lines 7-8: Define the acronyms TRU and WIPP. (On Page B5-1, Waste Isolation Pilot Plant is actually spelled out in line 12, while transuranic is on line 31.)
- ii. Page B5-1 line 22. Add the acronym QA after the phrase “quality assurance” and substitute accordingly throughout the rest of the document.
- iii. Page B5-1 line 39 and Page B5-2 line 35: Delete (Permit Attachment B) from both lines.
- iv. Page B5-2 line 22: Define NMED.
- v. Page B5-2 line 32: Define DOE.
- vi. Page B5-2 line 35: Define QC.

## **Appendix B6 – Waste Isolation Pilot Plant Permittees’ Audit and Surveillance Program**

- i. Page B6-1 line 16: Define NMED.
- ii. Page B6-1 line 18: Add the acronym DOE after “Energy”.
- iii. Page B6-3 line 12: The acronym for Quality Assurance Objectives should be QAOs not QAO.

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- iv. Page B6-4 line 13: Define QAPjP.
- v. Page B6-4 line 20: The word “laboratory” should be “laboratories”.
- vi. Page B6-6 line 10: Remove the carriage return at the end of this line.

### **Appendix B7 – Permittee Level TRU Waste Confirmation Processes**

- i. Page B7-1 line 17: Define TRU.
- ii. Page B7-1 line 27: Define CH and RH.
- iii. Page B7-1 line 33: Define TSDF-WAC.
- iv. Page B7-3 line 12: define WSPF.
- v. Page B7-7 lines 20-29: The font size is 11, but should be 12.
- vi. Page B7-8 line 16: Either refer to WIPP as “WIPP” or “the WIPP”, but not both.
- vii. Page B7-8 line 26: Define QC.
- viii. Page B7-9 line 2: Define CAR.
- ix. Page B7-9 line 3: Define NMED.
- x. Page B7-9 line 15: The spacing between words should be corrected on this line.
- xi. Page B7-13: Define WWIS and HWFP before using them in the figure.

### **Chapter D.**

- i. General: Add a discussion indicating that a shielded container is being proposed for approval for use by WIPP and that DOE is developing the SWB-2 for use on WIPP.
- ii. Page D-3, line 3: Where is the Operational Record maintained? Wouldn't the equipment logbook be better kept with the equipment?
- iii. Page D-3, line 3: Define the acronym CH. In line 6, define the acronym RH.
- iv. Page D-3, lines 19 and 20: Update the references to the DSA for WIPP to reflect the Combined CH-RH DSA issued in 2008.
- v. Page D-4, line 5: Substitute the phrase “inspection procedures” for the word “inspection”.
- vi. Page D-6, lines 2, 15, 17, 19, and 20: Substitute CH for contact-handled and RH for remote-handled.
- vii. Page D-7: Update reference to the most current DSA and TSR.
- viii. Page D-19 & 20: The notes on page D-20 should be moved to page D-19 for convenience to the reader.

### **Chapter E.**

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- i. General: Other than the first usage on page E5-1, line 6, change the phrases “the WIPP facility” and “WIPP facility” to “WIPP”. Also, the use of hyphens is inconsistent – see page E-5, lines 5 and 6 for an example.
- ii. Page E-2, line 24: Change “plantwide” to “plant-wide”.
- iii. Page E-2, line 30: Change “TRU mixed wastes are” to “TRU mixed waste is”.
- iv. Page E-2, line 32: Define the acronym “WHB”.
- v. Page E-4, line 2: Add a “The” at the beginning of the sentence. Also, remove the extra space after the first parenthesis.
- vi. Page E-4, line 30: Delete the comma after the word “system”.
- vii. Pages E-4 and E-11: One page refers to domestic water and the other to potable water. They should be consistent.
- viii. Page E-5, line 23: Change “contact-handled” to CH
- ix. Page E-5, line 28: Change “10” to “ten”.
- x. Page E-6, line 17: Change “effected” to “affected”.
- xi. Page E-8, line 14: Change “allow” to “allows”.
- xii. Page E-9, line 9: Delete “DBE” since it is not used again in this chapter.
- xiii. Page E-10, line 5: Hyphenate the word “nonliquid”.
- xiv. Page E-10, line 9: Change the word “discusses” to “discuss”.
- xv. Page E-10, line 39: Hyphenate the word “nonflood”.
- xvi. Page E-11, line 32: Change the word “provide” to “provides”.
- xvii. Page E-14, line 1: Transpose the words “are” and “criteria”.
- xviii. Page E-15, line 12: Change the word “are” to “is” at the end of the line.
- xix.

### Chapter F.

- i. General: This section uses the terms ‘shipping containers’ (Page F-4, line 2), CH or RH Package shipping containers (Page F-5, line 21), Contact-Handled Package (Pages F-6, F-8, and F-9), and Remote-Handled Package (Pages F-7, F-8, and F-9). It is recommended that only the terms CH shipping containers and RH shipping containers be used.
- ii. Page F-1, line 35: Are there still ten major TRU waste generator and/or storage sites now that Rocky Flats is closed?
- iii. Page F-4, Section F1-a: A discussion about the receipt and disposal of RH TRU waste needs to be added to this section.
- iv. Page F-6, Section F-1d: Add discussion of proposed addition of shielded containers and the development of the SWB-2 to the waste container list.

### Chapter G.

- i. General: There are a number of acronyms on Pages G-2 and G-3 that are not on the Abbreviations and Acronym List at the beginning of the Renewal Application package.
- ii. Page G-2, lines 12 and 14: Change “Contact-Handled or Remote-Handled Packages” to “CH or RH shipping containers”.
- iii. Paragraph G-3, page G-3: This paragraph is inconsistent in that it includes the term Contact Handled (no hyphen) Packages and does not clearly indicate

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that the shipping containers for CH TRU waste are either the TRUPACT II or the HalfPACT. Similarly, the description of how RH TRU waste gets to WIPP should include mention of the RH-72B and the CNS 10-160B shipping containers.

**Chapter H.** This chapter should be revised to read the same as what has been submitted in the most recent Class 2 Permit Modification request for the current permit.

### **Chapter I.**

- i. General: See Comment 18 from our review of Draft 2- it still applies.
- ii. Page I-1, line 25: Insert the word “and” after WHB
- iii. Page I-2, lines 12-13a: Use the same terminology for the WHB and PAU that are stated on Page I-1, line 15.
- iv. Page I-3, Section I-1a(1): Suggest changing the title of the section to “WHB and Parking Area HWMUs” so as to be in conformance with the introductory discussion on Page I-1.
- v. Page I-4, Section I-1a(2): This title is misleading since WIPP as a whole is defined under RCRA as a miscellaneous unit. Suggest changing the title of this section to “Waste Handling Disposal Units”.
- vi. Page I-4, lines 15-16a: The statement that post closure migration ‘will not occur’ is presumptuous. Suggest changing it to say that the Performance Assessment indicates that post closure migration will not occur.
- vii. Page I-5, Section I-1a(3): This section needs to be edited to make it clear that the 30 year post-closure period is a RCRA requirement particularly when Section I-1(g) discusses the 100 year EPA requirement.
- viii. Page I-6, Section I-1c: Add the following sentence to the end of the first paragraph: “The closure plan developed for the maximum waste inventory will be used for each of Panels 1 through 8 even if less than the maximum allowable volumes of TRU waste is disposed in any of the panels”.
- ix. Page I-6, Section I-1d and Page I-6, Section I-1d(2): The expected operational period should be changed to be more realistic given the fill-rate of WIPP. Also, the text in both these sections should be the same.
- x. Page I-7, first paragraph: Revise to reflect that Panel 2 has been closed and the explosion-isolation wall installed. Second paragraph, revise to indicate that Panel 3 has been closed per the Appendix M2.
- xi. Page I-7, line 25: Add the word ‘The’ at the start of this line. Also, disposal of TRU mixed waste did not start until November 1999. Thus, the end of the disposal phase should be 2024 or later and should match the times shown in Table I-1.
- xii. Page I-8, line 8: The reference to the 1997 DSA has been deleted from the text, but the reference is still listed on page I-21
- xiii. Page I-11, lines 7-8: The performance standard for air emissions is not provided in Renewal Application Appendix M2. Where is it?
- xiv. Page I-16, line 25: Correct the reference to read (EPA, 1996) or correct the date on the reference on page I-21 to be 1986, whichever is correct.
- xv. Page I-21: Should the reference be to the Final Supplemental EIS issued in 1997 rather than the 1980 EIS?

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- xvi. Page I-26 & I-33: The dates in Figure I-3 don't agree with the dates in Table I-2.
- xvii. Appendix I-3, Page I3-3: First, update the SAR reference to the 2008 combined CH-RH DSA on lines 25 and 28. Second, on line 35-36, WIPP procedure WP-12-HP1100 is not included in the current Permit but rather is only available in the WIPP Operating Record. Also, the date for that procedure should be changed to 2008 – the date of the last revision.

### Chapter J.

- i. Page J-2, line 10: The acronym VOCMP is not on the master abbreviation and acronym list for the renewal application.
- ii. Page J-2, line 22: Add EPA Compendium Method TO-15 to the reference list at the end of the chapter.
- iii. Page J1-3, line 33: Correct the disposal phase time period to match the period shown in Table I-2.
- iv. Page J1-4, top of page: Update this part of the text to reflect current status – 5 panels mined, 3 filled, one being filled.
- v. Pages J1-6 and J1-7: Two different fonts used on those pages.

### Chapter K – Missing?

### Chapter L.

- i. General: The title for Chapter L has ground water spelled two different ways (one at the top of the page, and the other at the bottom).
- ii. General: Should all the WIPP procedures (WP 02-EMXXXX) discussed in the text be listed as references? Also, should the text indicate where they can be accessed?
- iii. Many of the acronyms for this chapter are not on the master abbreviation and acronym list for the renewal application.
- iv. Page L-2: Restrictions on drilling activities are described for the 16 sections of the Land Withdrawal Act with an exception for Section 31. Suggest describing the location and significance of Section 31.
- v. Page L-15, line 29: The title of WP 13-1 should be added to the text and a footnote explaining the scope/purpose of the document added.
- vi. Page L-15, footnotes. Where is footnote 1? Does not appear on any of the previous pages of this chapter.
- vii. Page L-16, line 3: The FEIS is not referenced on the reference list at the end of the chapter nor is that acronym included on the master list. Also, shouldn't the reference be to the Final Supplemental EIS?
- viii. Page L-17, line 21: The formula is typed incorrectly. Substitute the symbol for rho ( $\rho$ ) for the second p in the formula.
- ix. Page L-18, footnote 4: That procedure is already referenced by footnote 2 on page L-15, line 31.

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## Chapter M.

- i. General: Replace the term “first ten-year term of the HWFP” with the term “current Permit” or “Initial Permit”
- ii. Page M-1, line 14: Suggest using the acronym “PAU”, which is used in Chapter I, instead of “Parking Area Unit”. Make the same change in the Appendices to Chapter M - see Page M1-1, M1-5,
- iii. Page M-2, Line 43: The ventilation rate for active rooms is given as 35,000 ft<sup>3</sup> per minute. It should be shown as “35,000 scfm”.
- iv. Page M-9 of 47, Line 25: The sentence needs to be completed following the word “described”.
- v. Appendix M1: Add a discussion of the proposed shielded containers in anticipation of their approval for use. Also include the proposed SWB-2.
- vi. Appendix M1: Replace **contact-handled** with CH and **remote-handled** with RH throughout this Appendix.
- vii. Page M1-18, line 15: Update the reference to the 1997 SAR to the 2008 combined CH-RH DSA. Also update reference list on page M1-30 accordingly.
- viii. Page M1-19, Section M1-1d(3): A discussion about contamination surveys and cleanup to be used for RH TRU waste shipments, comparable to the discussion for CH TRU waste shipments on pages M1-16-18 needs to be added to this section. Or alternately, a separate section should be created addressing receipt, inspection, survey, and decontamination of both CH and RH shipping containers.
- ix. Page M1-35, Table M1-3: Since the weights are given in pounds, the capacities should also be given in pounds not tons (see Table M1-2).
- x. Page M2-1, lines 31 and 32. The meaning of the phrase “and any currently active panel” is unclear. Suggest replacing it with “and Panel 4 should it still be active”.
- xi. Page M2-2, line 6: Change the phrase “in the first 10 year term of the HWFP” to “in the Initial Permit”.
- xii. Page M-2, line 15: Is the Salt Handling Shaft still the principal personnel transport shaft?
- xiii. Page M-2, line 21: Change the cubic feet to be 5,244,000.
- xiv. Page M-2, line 25: Change 2,635 to 2,460 to reflect the actual amount of RH TRU waste disposed in Panel 4. Also, this amount could be changed to 2,775 m<sup>3</sup> if DOE would request the RH TRU waste disposal capacity increase for Panels 5 and 6 discussed in the current HWFP.
- xv. Page M2-6, line 43: Change this sentence to show there are 8 HWDUs (Panels 1-8) covered by this permit with active disposal expected to be in Panels 5 through 8.
- xvi. Page M2-8, lines 42-43: Are the minimum ventilation rate units SCFM or ACFM?
- xvii. Page M2-9, lines 25-31: Rearrange the text on those lines as shown below since it is more logical to discuss how the panel is closed after the discussion of how the rooms are “closed”.  
“Once a disposal room is filled and ~~is no longer needed for emplacement activities, it will be~~ barricaded against entry and isolated from the mine

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ventilation system by removing the air regulator bulkhead and constructing chain link/brattice cloth barricades at each end. There is no requirement for air for these rooms since personnel and/or equipment will not be in these areas. *After all rooms within a panel are filled, the panel will be closed using a closure system described Renewal Application Chapter I and Renewal Application Appendix II*".

- xviii. Page M2-13, lines 15 and 20: Substitute CH for contact-handled. Also change Packaging to Package on line 20.
- xix. Page M2-13, line 16: Substitute WHB for 'waste handling building'.
- xx. Page M2-17, line 10: Delete the first sentence. Revise the second sentence to read: "*Based upon the geomechanical instrumentation experience gained in the repository to date, conditions are assessed....*".
- xxi. Page M2, lines 14-15: Suggest this discussion be updated to reflect the collection and analysis of the geomechanical monitoring data since 1999. If the reference to the Panel of Experts is still to be included, provide a reference to that presentation.

### Chapter N.

- i. Page N-1, line 21: The acronym RH is not included in the Acronym and Abbreviation list at the beginning of this chapter.
- ii. Appendix N1: Should this appendix be updated to include Panel 8? Also, on the first page, the title of the Appendix should be changed to "Hydrogen and Methane Monitoring Plan".

**Chapter P.** Add the titles of each technical procedure to the appropriate summary sheet.

### Chapter Q.

- i. Page Q – 1 of 9 is mislabeled as Page Q – 9 of 9.
- ii. Page Q – 1 of 9: The freezing point of water is listed as 460 °R. The freezing point of water is 492 °R or 32 °F. The Imperial standard state temperature is 0 °C equivalent to 32 °F rather than the listed 460 °R which is 0 °F. Also the summertime temperature is listed as 528 °R (100 °F). Five hundred twenty eight °R is 68 °F equivalent to 20 °C, which is also often taken as the standard state.
- iii. This chapter should state what standard state temperature corresponds to the 35,000 scfm flow rate requirement and the temperature in question (summertime temperature in this case).

### 300 Year Performance Demonstration Re-Evaluation.

- i. An introductory section should be added to this part of the renewal application package to explain the purpose for the performance demonstration – namely to respond to the requirement of 40CFR270.23 (see page 19 of the Necessary Information Section for Part). The introduction should also explain why the term of 300 years was selected since RCRA only

## PECOS MANAGEMENT SERVICES, INC.

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requires 30 years and the federal regulations for WIPP only require 100 years of active post-closure control for WIPP.

- ii. This section should also be referenced in the Closure Plan and Post-Closure Plan as further substantiation that those plans are more than adequate.

**Materials Submitted at the Pre-Application Meetings**

**February 10<sup>th</sup> and 12<sup>th</sup>, 2009**

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# WIPP Hazardous Waste Facility Permit Pre-Application Meetings

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Carlsbad, NM, Feb 10, 2009

Santa Fe, NM, Feb 12, 2009

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# Purpose of Today's Meeting

- The Pre-Application meetings are required whenever the application proposes a significant change in facility operations in accordance with NMAC 20.4.1.901, *Permitting Procedures*
  
- At the Pre-Application meeting, the Permittees will
  - Notify the public of the hazardous waste management activities contained in the Renewal Application
  - Receive written comments from the public

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# Written Comments

- Comments received prior to May 15, 2009, will be included in the administrative record and be included in the Renewal Application
- Send Comments to:
  - Bobby St. John
  - Public Affairs
  - P.O. Box 2078
  - Carlsbad, New Mexico 88221

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# Purpose of Today's Meeting

- Introduce WIPP's Hazardous Waste Facility Permit (**Permit**) Renewal Application
  - Background
  - Proposed Changes in Facility Operations and Waste Characterization
  - Format
  - Public Participation
  - Required Renewal Application Submittal Date
- Presentation of the Re-Evaluation of the 300-Year Performance Demonstration

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## Second Pre-Application Meetings In April 2009

- Recently, additional scope has been identified that will be included in the Renewal Application
- Responding to NMED and stakeholder input
- Clarifying text

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# Background

- The WIPP Permit expires November 26, 2009
- Permittees must submit a new application at least 180 days before the expiration date of the effective permit
- The WIPP Renewal Application must be submitted on or before May 30, 2009
- So long as the Renewal Application is “timely and complete” the current Permit remains in effect until the new Permit is issued or denied

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# Proposed Changes in Facility Operations and Waste Characterization

- Authorization to dispose of TRU-mixed waste in Panel 8
  - Currently Permittees are authorized to construct and certify Panel 8
  - Authorization to dispose of TRU waste was not requested in 2005 modification to the Permit as the planning basis did not project the need for the disposal capacity during the Permit term

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# Proposed Changes in Facility Operations and Waste Characterization

- Inclusion of Attachment Q: *Mine Ventilation Rate Monitoring Plan*
  - Submittal of Plan required by Permit Condition IV.J.
  - Permittees submitted the Plan to NMED in 2000
  - Plan has not been formally incorporated into the Permit by NMED
  - Permittees work to all requirements of the Plan including reporting data

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# Changes Not Reflected in Draft 3

- Clarification of Visual Examination Requirements
- Clarification of the Liquid Prohibition
- Administrative change for notification of non-administrative non-conformances
- Distinguish between “generator” and “certified program” requirements to clearly identify who can perform characterization required by the Permit

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# Format

- Table of Contents
  - List of Tables
  - List of Figures
- Abbreviations/Acronyms
- Introduction
  - Narrative
  - Regulatory Crosswalk
- Part A Application
  - Necessary Information for Part A
  - Summary of Proposed Changes
  - Part A Application Form
  - Part A Application Certification
  - Other Environmental Permits
  - Facilities
  - Photographs
  - Maps

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# Format

- Part B Application
  - Required Regulatory Information
  
- Public Process Pre-Submittal Meeting Information
  - Name/address of participants (if offered)
  - Written Comments
  - Presentation
  
- Chapters and Appendices
  - Although not specifically required, the Permittees are choosing to provide proposed changed text in Redline/Strikeout text as a reviewer's aid.
  
- Supplement
  - Re-Evaluation of the 300-Year Performance Demonstration

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# Format

- **Necessary Information**
  - General and Specific Information Required by the Regulations
    - Part A § 40 CFR 270.13 Part A Information
    - Part B § 40 CFR 270.14 General
    - Part B § 40 CFR 270.15 Containers
    - Part B § 40 CFR 270.23 Miscellaneous Units
- Response to each information requirement in summary form
- Readers then directed to Renewal Application chapters and appendices for full information

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# Format

## Changes are being requested

- Language authorizing disposal in Panel 8
- Formalization of Mine Ventilation Rate Monitoring Plan
- Clarification of
  - VE requirements
  - Liquid Prohibition
  - Definition of generator site/certified program
  - Reporting Non-administrative non-conformances
- Proposed verbiage for changes in Renewal Application Attachments A, B thru B7 (Waste Analysis Plan ) I, M1, M2, N, N1, and Q

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# Public Participation

- **Early Informational Meetings**
    - Carlsbad 8/26/08
    - Santa Fe 8/28/08
    - Draft provided to stakeholders ahead of meetings
  - **Pre-Application Meetings**
    - Carlsbad 2/10/09
    - Santa Fe 2/12/09
  - **Next Pre-Application Meetings (Plan Dates)**
    - Carlsbad 4/28/09
    - Santa Fe 4/30/09
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# Upcoming Dates

- **Next Pre-Application Meetings (Plan Dates)**
  - Public Notice of Pre-Application Meeting: March 28, 2009
  - Copy of Draft 4 Changes to Stakeholders: April 15, 2009
  - April 28, 2009: Carlsbad
  - April 30, 2009: Santa Fe
  
- **May 30, 2009: Renewal Application Due Date**

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**Send Comments to:**

**Bobby St. John  
Public Affairs  
P.O. Box 2078  
Carlsbad, New Mexico  
88221**

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Presentation of Supplement A

# Re-Evaluation of the 300-Year Performance Demonstration

Mike Gross

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**Materials Submitted at the Pre-Application Meetings**

**May 5<sup>th</sup> and 7<sup>th</sup>, 2009**

To Be Provided