



# MEETING AGENDA

**DECEMBER 5, 2001**

**9:30 a.m.**

## Attendees and Discussion Topics

Dale Bignell Overview

Steve Zappe Brief Status  
- DAC modification permit  
- Remaining Class 1 modifications

Dave Streng Modification submittal status (proposed January submittals)  
Status of re-certification audit working group

Stephanie Johansen Data Management  
- Issues regarding NMED access to eQA  
- Schedule and location of eQA training  
- Appropriate location in HWFP for electronic availability requirements  
- Results of data management meeting with stakeholders  
- Status of July, 2000 data management modification

Ron Burns Operational Efficiencies  
- DQO Process  
- Demonstration Program

Open Discussion

011201



## **PERMIT MODIFICATION FACT SHEET**

### **Data Management**

#### **DESCRIPTION OF THE PROPOSED MODIFICATION:**

This is a permit modification request for an update of the waste analysis plan with emphasis on data management requirements.

#### **DRIVER FOR THE PROPOSED MODIFICATION:**

The hazardous waste regulations require that the Permittee provide waste analysis information that, at a minimum, provides information needed to manage the waste in accordance with the requirements of 40 CFR 264. This includes the physical and chemical characterization for the waste. These activities produce data that must be reviewed, validated and managed per 40 CFR 264.13, the permit, and applicable guidance.

#### **JUSTIFICATION FOR THE PROPOSED MODIFICATION:**

Data Management is estimated to cost the generator/storage sites \$300 per drum. By automating the data management process, this cost can be reduced to less than 2/3 of the cost since much of the generation level and project level checking is automated. This accounts for about \$160,000,000 over the 35-year life of the WIPP, or about \$4,600,000 per year. In addition, the proposal eliminated the Technical Supervisor Position (\$100,000 per position) which equates to about \$1,000,000 per year for 5 sites @ 2 positions per site.

Waste analysis activities that are required by the Permit are conducted at the generator/storage sites in accordance with the specific requirements in the Permit. NMED established these requirements to assure that no prohibited waste is disposed at the WIPP. These requirements involve generating and maintaining a large amount of documentation, referred to collectively as "data". These data cover a wide variety of topics such as operator training, equipment calibration and operating procedures as well as data validation, review, and reporting. The permit assures the accuracy and completeness of the data through the audit and surveillance program. Since the data generated by the program constitute the evidence that the waste is acceptable to the WIPP, it is important that the data be clear, comprehensive, and consistent. In addition, data availability for review by the Permittees and the NMED between audits is important to assure sites continue to satisfy the Permit conditions.

Under the current Permit, sites are meeting the requirements for data generation and management as evidenced by the approval of the initial site audit reports. However, the Permittees believe that data management can be improved to assure faster access to data, to eliminate unnecessary reviews, and to eliminate opportunities for human error. The process of making data management more efficient can also result in significant cost deferral by the generator sites. The proposed modification targets key aspects of the data management system for streamlining and gives generator sites the opportunity to use electronic data management.

#### **CLASSIFICATION OF THE PROPOSED MODIFICATION:**

Class per 20.4.1.900 NMAC (incorporating 40 CFR 270.42)	2
Item Number from 20.4.1.900 NMAC (incorporating 40 CFR 270.42 Appendix I)	270.42(d)

**RATIONALE FOR CLASSIFICATION OF THE PROPOSED MODIFICATION:**

This Permit Modification Request (PMR) meets the criteria in 40 CFR 270.42 Appendix I for a Class 2 modification. However, it is extensive and affects many portions of the Waste Analysis Plan. Since this could be deemed a "complex" modification, WIPP plans to request an Agency determination that the PMR should be handled as a Class 2 request. Most of the proposed changes are considered changes to the analytical quality assurance/quality control plan or incorporate technological advancements, which the regulations categorize as Class 2 changes. The changes do not substantially alter the facility or its operations.

**WORKSHOP INFORMATION:**

Both an oral presentation and a "hands on" demonstration of the operating system will be given on December 4, 2001.

**PERMIT MODIFICATION FACT SHEET**  
**Radiography in Lieu of Visual Verification for Newly Generated Waste**

**DESCRIPTION OF THE PROPOSED MODIFICATION:**

The Permit establishes different waste characterization requirements for newly generated waste and retrievably stored waste. When sites initially package waste or when retrievably stored waste must be repackaged, sites are required by the Permit to use the Visual Examination Technique (VE Technique). This technique is also referred to in the Permit as Visual Verification of Acceptable Knowledge (AK). Generator sites have identified circumstances when post-packaging confirmation of AK using radiography instead of verifying AK at the time of packaging is more appropriate. However, the language in the permit does not clearly allow this option. This modification will allow generator sites to perform either Visual Verification or radiography to confirm AK.

**DRIVER FOR THE PROPOSED MODIFICATION:**

The hazardous waste regulations require that the Permittee provide waste analysis information that, at a minimum, provides information needed to manage the waste in accordance with the requirements of 40 CFR 264. Such information includes the physical form of the waste. This is determined either by visual examination of the waste or by radiography of the packaged waste.

**JUSTIFICATION FOR THE PROPOSED MODIFICATION:**

This modification makes the permit more efficient by allowing generator/storage sites to apply the retrievably stored radiography requirements to newly generated waste streams, providing these sites flexibility in managing their waste characterization and confirmation programs.

**CLASSIFICATION OF THE PROPOSED MODIFICATION:**

Class per 20.4.1.900 NMAC (incorporating 40 CFR 270.42)	2
Item Number from 20.4.1.900 NMAC (incorporating 40 CFR 270.42 Appendix I)	B.1.d

**RATIONALE FOR CLASSIFICATION OF THE PROPOSED MODIFICATION:**

This modification is a Class 2 because it is an "other" change to the waste analysis plan and is relatively uncomplicated. In addition, this modification adds an option to the Waste Analysis Plan instead of changing an existing requirement.

**WORKSHOP INFORMATION:**

An oral presentation regarding this modification request will be made on December 5, 2001.

## **PERMIT MODIFICATION FACT SHEET**

### **Use of DR/CT Scans For Radiography QC**

#### **DESCRIPTION OF THE PROPOSED MODIFICATION:**

Allow generator/storage sites that use digital radiography and computed tomography the option of using additional independent reviews of the radiography scan in lieu of performing visual examination as a quality control check on radiography.

#### **DRIVER FOR THE PROPOSED MODIFICATION:**

The hazardous waste regulations require in 40 CFR 264.13 that the Permittee provide waste analysis information that, at a minimum, provides information needed to manage the waste in accordance with the requirements of 40 CFR 264. Radiography is specified in the permit as a technique to confirm the information collected through the acceptable knowledge process. The Permit currently requires quality control checks of radiography results. The only option for these QC actions is visual examination which involves opening containers that were radiographed and inspecting the waste.

#### **JUSTIFICATION FOR THE PROPOSED MODIFICATION:**

Newer digital radiography and computed tomography techniques have improved radiographic resolution to the extent that visual examination of the waste is no longer needed to perform quality control checks on radiography operations. By taking advantage of this technology, sites can reduce radiological exposure and risk significantly. The reduced exposures and risks have not been quantified.

#### **CLASSIFICATION OF THE PROPOSED MODIFICATION:**

Class per 20.4.1.900 NMAC (incorporating 40 CFR 270.42) 3  
Item Number from 20.4.1.900 NMAC (incorporating 40 CFR 270.42 Appendix I) 270.42(b)(6)(i)(C)

#### **RATIONALE FOR CLASSIFICATION OF THE PROPOSED MODIFICATION:**

The NMED has informed the DOE that the complexity of this modification qualifies it for review as a Class 3 modification.

#### **WORKSHOP INFORMATION:**

A video presentation and a demonstration of the computed tomography system will be given on December 5, 2001.

**PERMIT MODIFICATION FACT SHEET**  
**Use of Control Charting For Repackaged Waste**

**DESCRIPTION OF THE PROPOSED MODIFICATION:**

Generally, the permit requires that repackaged or treated waste be characterized as newly generated. The Permit currently establishes different waste characterization requirements for newly generated waste and retrievably stored waste that must be implemented by the generator/storage sites. However, in the response to comments on the revised draft permit, the NMED indicated that there would be times when a generator could elect to conduct some characterization activities for repackaged waste in the same manner they would for retrievably stored waste. Ambiguity in the permit wording has created confusion with regard to this matter, particularly with regard to the use of control charts and the appropriate sample size. This modification removes the ambiguity and clearly allows the generator the option to characterize repackaged homogeneous solids as retrievably stored waste, using the sample size determination in Attachment B2-2a of the permit. This sample size is the maximum sample size required to assure that a waste stream or waste stream lot is sampled representatively.

**DRIVER FOR THE PROPOSED MODIFICATION:**

The hazardous waste regulations require that the Permittee provide waste analysis information that, at a minimum, provides information needed to manage the waste in accordance with the requirements of 40 CFR 264. Such information includes the determination of hazardous waste codes for the waste. This is determined by acceptable knowledge and currently confirmed by solids sampling of a representative portion for the waste.

**JUSTIFICATION FOR THE PROPOSED MODIFICATION:**

The modification improves the permit by making it clearer. The language in the Permit is ambiguous with regard to the sample size required for retrievably stored homogeneous solids that are repackaged. In order to resolve this ambiguity, two changes are needed. These are proposed in the modification request. If a generator/storage site can control chart a repackaged waste stream, then the benefits of reduced sampling that accompany control charting are available. Otherwise, the generator/storage site can opt for the requirements for representative sampling as found in Attachment B2-2a.

**CLASSIFICATION OF THE PROPOSED MODIFICATION:**

Class per 20.4.1.900 NMAC (incorporating 40 CFR 270.42)	2
Item Number from 20.4.1.900 NMAC (incorporating 40 CFR 270.42 Appendix I)	B.1.d

**RATIONALE FOR CLASSIFICATION OF THE PROPOSED MODIFICATION:**

This modification is a Class 2 because it is an "other" change to the waste analysis plan and is relatively uncomplicated.

**WORKSHOP INFORMATION:**

An oral presentation regarding this modification request will be made on Wednesday, December 5, 2001.

**PERMIT MODIFICATION FACT SHEET**  
**Correct an Error Regarding an Analyte**

**DESCRIPTION OF THE PROPOSED MODIFICATION:**

Delete the (cis)-1, 2,-Dichloroethylene from the target analyte list in the permit. This analyte is in the permit as the result of a typographical error in the permit application.

**DRIVER FOR THE PROPOSED MODIFICATION:**

The hazardous waste regulations require that the Permittee provide waste analysis information that, at a minimum, provides information needed to manage the waste in accordance with the requirements of 40 CFR 264. The permit requires the quantification of the type and concentration of gases in the headspace gas of containers to satisfy 40 CFR 264.601. The analyte (cis)-1, 2,-Dichloroethylene was inappropriately listed as a target analyte and its quantification does not provide information to satisfy the requirements.

**JUSTIFICATION FOR THE PROPOSED MODIFICATION:**

The deletion of incorrect information from the permit improves the permit and the waste management process in general. This particular compound does not have an associated method in Appendix IX of 40 CFR 264, nor is it listed in Appendix VIII of 40 CFR 261. The correct isomer is (trans)-1, 2,-Dichloroethylene. The CAS number listed with the (trans) isomer is the CAS number in the Permit Application, Appendix VIII of 40 CFR 261 and Appendix IX of 40 CFR 264. The (trans)-1, 2,-Dichloroethylene analyte was added to the permit analyte list by the NMED in August, 2001. There are no cost, disposal rate or safety impacts associated with this modification.

**CLASSIFICATION OF THE PROPOSED MODIFICATION:**

Class per 20.4.1.900 NMAC (incorporating 40 CFR 270.42)	1
Item Number from 20.4.1.900 NMAC (incorporating 40 CFR 270.42 Appendix I)	A.2

**RATIONALE FOR CLASSIFICATION OF THE PROPOSED MODIFICATION:**

This is a class 1 permit modification since it is correcting a typographical error in the permit based on a similar error in the permit application.

**WORKSHOP INFORMATION:**

An oral presentation regarding this notification will be given on Wednesday 5, 2001.

## **PERMIT MODIFICATION FACT SHEET**

### **Remote Handled TRU Waste**

#### **DESCRIPTION OF THE PROPOSED MODIFICATION:**

The HWFP currently prohibits storage and disposal of Remote Handled TRU mixed waste. In this Class 3 PMR, DOE seeks to remove the prohibition on receipt of RH TRU waste and continue with its mission of disposing defense-generated TRU waste.

#### **DRIVER FOR THE PROPOSED MODIFICATION:**

WIPP was authorized by the WIPP Land Withdrawal Act to dispose of defense-generated Remote-Handled TRU waste. Disposal of this waste has been fully evaluated through the National Environmental Policy Act decision-making process for WIPP and is documented as a planned part of the WIPP's mission in the Agreement for Consultation and Cooperation between the DOE and the State of New Mexico. Within the context of the Land Withdrawal Act and this Agreement, defense-generated RH TRU waste should be allowed for disposal at WIPP within the following volume, dose rate, and activity limitations:

"The total volume of RH TRU waste emplaced in the WIPP repository may not exceed 7,080 m<sup>3</sup>

"No more than 5 percent by volume of the remote-handled transuranic waste received at WIPP may have a surface dose rate in excess of 100 rem per hour

"No transuranic waste received at WIPP may have a surface dose rate in excess of 1,000 rem per hour.

"Remote-handled transuranic waste received at WIPP shall not exceed 23 curies per liter maximum activity level (averaged over the volume of the canister); and

"The total curies of the remote-handled transuranic waste received at WIPP cannot exceed 5,100,000 curies.

In addition to being a part of the WIPP mission, there are a number of sites that are currently facing the possibility of violating state consent orders or other agreements relative to making RH TRU shipments.

#### **JUSTIFICATION FOR THE PROPOSED MODIFICATION:**

Regulations require the HWFP to include a Waste Analysis Plan meeting the requirements of 40 CFR 264.13. RH TRU WAP is being developed to address specific needs of the RH program and adheres to a performance-driven approach endorsed by the EPA and NRC.

Regulations including 40 CFR Subpart B, General Facility Standards; Subpart C, Preparedness and Prevention; Subpart D, Contingency Plan and Emergency Procedures; Subpart G, Closure and Post-Closure; Subpart I, Use and Management of Containers; and Subpart X, Miscellaneous Units require HWFP to prescribe the facility operations necessary to safely manage the its wastes. Information needed includes drawings, process descriptions, and quality assurance/quality control requirements necessary to manage and store RH TRU mixed waste in the Parking Area Container Storage Unit and RH Complex of the Waste Handling Building Container Storage Unit, and to dispose of the RH TRU mixed waste in the underground hazardous waste disposal unit.



**CLASSIFICATION OF THE PROPOSED MODIFICATION:**

Class per 20.4.1.900 NMAC (incorporating 40 CFR 270.42)	3
Item Number from 20.4.1.900 NMAC (incorporating 40 CFR 270.42 Appendix I)	270-42(d)

**RATIONALE FOR CLASSIFICATION OF THE PROPOSED MODIFICATION:**

The proposed modification will be submitted as a Class 3 permit modification pursuant to 20.4.1.900 NMAC incorporating 40 CFR 270.42(d)(1) (Other modifications). The rationale for submitting the modification as "other" include the NMED's verbal statements made to the Permittees that they view the modification as being a significant change (e.g., there is significant public concern regarding receipt of RH TRU waste and that the "complex nature of the change" should require the more extensive procedures of a Class 3 modification.

Modifications to the WIPP facility are being proposed in this modification pursuant to the note at 40 CFR 270.42 Appendix I: B, General Facility Standards, that directs changes in facility plans and other general facility standards be reviewed under the same procedures as the permit modification (i.e., the RH Waste Analysis Plan).

**WORKSHOP INFORMATION:**

Both visual and oral presentations will be made on this modification request on December 6, 2001.