

United States Government


Department of Energy

memorandum

Carlsbad Field Office
Carlsbad, New Mexico 88221

DATE: October 25, 2000

REPLY TO
ATTN OF: CBFO:SAV:00-1316 UFC 2300

SUBJECT: Report of Carlsbad Field Office Audit A-00-16 of Los Alamos National Laboratory for Compliance with the WIPP Hazardous Waste Permit

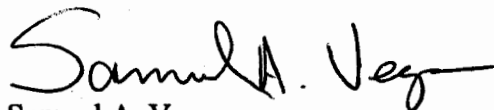
TO: James Nunz, LAAO

The Carlsbad Field Office conducted an initial certification audit of the Los Alamos National Laboratory (LANL) Transuranic Waste Characterization Program (TWCP) waste characterization activities for compliance with the WIPP Hazardous Waste Permit on September 25-28, 2000. The audit team concluded that assessed activities are adequate, effective, and satisfactorily implemented for debris waste streams.

Two corrective action reports (CAR 00-035 and 00-036) were identified and forwarded via separate correspondence. Eight isolated deficiencies were identified and were corrected during the audit (CDA). Five Observations and two Recommendations are presented for management action and consideration. The Carlsbad Field Office is preparing to submit the Final Audit Report to NMED, pending closure of CARs 00-035 and 00-036.

The remainder of the LANL TWCP waste characterization and certification activities (non-destructive assay, transportation, QA program and software quality assurance) were satisfactorily assessed during Audit A-00-13 conducted August 28-30, 2000.

If you have any questions or comments concerning this report, please contact me at (505) 234-7423.

Samuel A. Vega
Quality Assurance Manager

Attachment

001025



James Nunz, LAAO

-2-

October 25, 2000

cc w/attachment:
K. Watson, CBFO
R. Stroud, CBFO
L. Chism, CBFO
D. Winters, DNFSB
S. Zappe, NMED
S. Monroe, EPA
M. Eagle, EPA
B. Walker, EEG
P. Rogers, LANL
M. Gavett, LANL
M. Gerle, WID
R. Kehrman, WID
T. Bowden, CTAC

cc w/o attachments:
J. Bearzi, NMED
J. Kieling, NMED
R. Dinwiddie, NMED
L. Stevens, WID



**U.S. DEPARTMENT OF ENERGY
CARLSBAD FIELD OFFICE**

AUDIT REPORT

OF THE

LOS ALAMOS NATIONAL LABORATORY

LOS ALAMOS, NEW MEXICO

AUDIT NUMBER A-00-16

SEPTEMBER 25-28, 2000

TRU WASTE CHARACTERIZATION AND CERTIFICATION



Prepared By:

John W. Ptacek
John W. Ptacek
Audit Team Leader

Date:

10/16/00

Approved By:

Samuel A. Vega
Samuel A. Vega
Carlsbad Field Office QA Manager

Date:

10/25/00

1.0 EXECUTIVE SUMMARY

Carlsbad Field Office Audit A-00-16 was conducted to evaluate the adequacy, implementation, and effectiveness of Los Alamos National Laboratory (LANL) Transuranic (TRU) Waste Characterization and Certification activities for debris waste.

The audit was conducted at the LANL facility September 25 through 28, 2000. The audit team concluded that the LANL technical and quality assurance procedures are adequate relative to the flow down of requirements from the Waste Analysis Plan (WAP) of the WIPP Hazardous Waste Permit, and that the defined QA Program is satisfactorily implemented in accordance with the LANL Quality Assurance Project Plan (QAPjP) and implementing procedures. The LANL technical areas evaluated by the audit team were determined to be implemented and effective for debris waste streams. The audit team identified two Corrective Action Reports (CARs), one in the area of measuring and test equipment and one concerning the accuracy of Acceptable Knowledge summary reports. The team identified eight minor, isolated deficiencies requiring only remedial corrective actions that were Corrected During the Audit (CDA). Information concerning the details of the items corrected during the audit is contained in the audit checklist records. Five Observations and two Recommendations were offered for management action and consideration. The two CARs have been previously issued under separate cover and are summarized in Section 6.0, along with the details of the Observations and Recommendations.

The A-00-16 audit team also evaluated the LANL Gas Generation Testing Program (GGTP) for identification, testing, and transportation of high wattage drums. The program was evaluated as adequate relative to the flow down of requirements, however the audit team was unable to satisfactorily confirm the effectiveness and implementation of the program due to the constraints imposed on the demonstration, and a number of implementation concerns and issues that emerged during the audit demonstration. These concerns are addressed in Observation number 5. Further evaluation of the LANL GGTP is needed prior to implementation for TRU waste shipment.

A Carlsbad Field Office audit (A-00-13) conducted at LANL on August 28-31, 2000 determined that the LANL procedures were adequate relative to the flow down of requirements from the Carlsbad Field Office Quality Assurance Program Document (QAPD), Waste Acceptance Criteria (WAC), and TRUPACT-II Authorized Methods for Payload Control (TRAMPAC). Audit A-00-13 also concluded that the areas of QA program, software quality assurance, nondestructive assay, and transportation were implemented and effective for debris waste streams.

2.0 SCOPE

The audit team evaluated the adequacy, implementation, and effectiveness of technical and quality assurance processes related to the LANL TRU Waste Characterization and Certification activities for debris waste.

The following Quality Assurance (QA) elements were evaluated in accordance with the Carlsbad Field Office QAPD and the WAP:

- Personnel Qualification and Training Records**
- Control of Nonconforming Items**
- Sample Control**

The following characterization technical elements were evaluated in accordance with the Waste Analysis Plan of the WIPP Hazardous Waste Permit:

- Data Validation, Usability, and Reporting**
- Acceptable Knowledge (AK)**
- Headspace Gas Sampling and Analysis (HGAS)**
- Real Time Radiography (RTR)**
- Visual Examination (VE)**
- Performance Demonstration Program**
- WIPP Waste Information System (WWIS)**

The following transportation technical elements were also evaluated in accordance with the Carlsbad Field Office TRAMPAC:

- Gas Generation Testing**

Evaluation of LANL TRU Waste Characterization Program (TWCP) documents was based on current revisions of the following documents:

- LANL Transuranic Waste Quality Assurance Project Plan (QAPjP), TWCP-PLAN-0.2.3-001**

- LANL Transuranic Waste Certification Quality Program Plan (and TRAMPAC), TWCP PLAN-0.2.4-001**

- Related LANL technical and quality assurance implementing procedures**

3.0 AUDIT TEAM AND OBSERVERS

AUDITORS/TECHNICAL SPECIALISTS

Samuel Vega	Carlsbad Field Office QA Manager
John Ptacek	Audit Team Leader, CTAC
Steven Calvert	Auditor, CTAC
Pete Rodriguez	Auditor, CTAC
Norman Frank	Auditor, CTAC
Amy Arceo	Auditor, CTAC
Wayne Ledford	Auditor, CTAC
Alan Williams	Technical Specialist, CTAC
Trey Greenwood	Technical Specialist, CTAC
Ron Levis	Technical Specialist, CTAC
Bill Blanton	Technical Specialist, CTAC
Tom Bearden	Technical Specialist, CTAC
Patrick Moynihan	Technical Specialist (in training), CTAC
Anissa Orozco	Administrative Support, CTAC

INSPECTORS/OBSERVERS

Timothy Harms	DOE-EM Headquarters Observer
Steve Zappe	NMED Observer
Will Fetner	NMED Observer
Patricia Brown-Derocher	NMED/TechLaw Observer
Robert Thielke	NMED/TechLaw Observer
June Dreith	NMED/TechLaw Observer
William Fear	NMED/TechLaw Observer
Julie Shanahan	NMED/TechLaw Observer
Ben Walker	EEG
Marlene Hyde	Observer, CTAC

4.0 AUDIT PARTICIPANTS

LANL individuals involved in the audit process are identified in Attachment 1. Identification of the auditors, technical specialists, observers, and site personnel involved in each of the audit areas is provided in Attachment 2. A pre-audit meeting was held in Technical Area (TA) 3, Building 3-1698, Auditorium A-103 on September 25, 2000. A daily meeting was held with LANL management and staff to discuss issues and potential deficiencies. The audit was concluded with a post-audit meeting held in the TA-48, Building RC-29, Conference Room on September 28, 2000.

5.0 SUMMARY OF AUDIT RESULTS

5.1 Program Adequacy, Implementation, and Effectiveness

The audit team concluded that the adequacy of the LANL QA and Technical Programs is satisfactory in meeting the requirements of the current WIPP Hazardous Waste Permit - Waste Analysis Plan (WAP).

The audit team concluded that the QA program is being satisfactorily implemented. Except for Gas Generation Testing, the LANL technical processes evaluated by the audit team were determined to be implemented and effective.

An earlier Carlsbad Field Office audit (A-00-13) conducted at LANL on August 28-31, 2000 determined that the LANL procedures were adequate relative to the flow down of requirements from the Carlsbad Field Office Quality Assurance Program Document (QAPD), Waste Acceptance Criteria (WAC), and TRUPACT-II Authorized Methods for Payload Control (TRAMPAC). Audit A-00-13 also concluded that the areas of QA program, software quality assurance, nondestructive assay, and transportation were implemented and effective for debris waste streams.

5.2 QA Program Audit Activities

A summary table of audit results is provided as Attachment 3. Details of audit activities, including specific objective evidence reviewed and identification of deficiencies corrected during the audit (CDA), are contained within the audit checklists. Checklists are maintained as QA records.

5.3 Technical Activities

Evaluations of applicable LANL technical activities related to debris waste streams are summarized below. A list of procedures evaluated during the audit is provided as Attachment 4.

5.3.1 Acceptable Knowledge

Activities related to the Acceptable Knowledge process were reviewed. This review included the evaluation of the *Acceptable Knowledge Summary Report for TA-55-19.01*. The summary report was evaluated to ensure that an independent, technical review had been completed and for traceability of the roadmap and its supporting documentation. Reference documents were reviewed during the traceability portion of the evaluation. It was determined that traceability of the information utilized in the summary report is satisfactory. Documentation to justify the waste as being generated by atomic energy defense activities was included in the reference material reviewed.

It was noted that the documented AK data had a number of inaccuracies and inconsistencies in the data content that need to be resolved. Also, the AK documentation needs to be thoroughly reviewed to ensure that there are no additional inconsistencies of this type. CAR 00-036 was issued to address these deficiencies (refer to section 6.1). The audit team also noted a number of typographical and editorial errors that did not affect the accuracy of the AK data. This concern is identified in Recommendation 1 (refer to section 6.3).

With the exception of the issues identified in CAR 00-036, the LANL AK written program is adequate and satisfactorily implemented and the technical activities related to the AK process are effective.

5.3.2 Data Validation; Level 2, Project Level Data Review and Reporting

The data validation process was evaluated by review of batch data packages. The evaluation included examination of the data packages to assure that correct data reviews are occurring.

The audit team identified five minor and isolated deficiencies requiring only remedial actions in the level 1 and level 2 verification and validation (V&V) reviews of the various batch data reports. These were corrected during the audit and are documented in the audit checklists which are retained as QA records. The audit team also identified four items in the V & V process that may lead to deficient conditions in the future. These are presented as Observations 1 – 4 (refer to section 6.2).

The audit team determined that the written program is adequate and satisfactorily implemented and that the technical validation activities are effective.

5.3.3 Real-Time Radiography (RTR)

Radiography operations using the mobile system were reviewed. A scan of one drum was observed, data reports were reviewed, and batch reports were evaluated. The audit team identified two minor and isolated deficiencies requiring only remedial actions in the RTR process. These were corrected during the audit and are documented in the audit checklists which are retained as QA records.

The RTR written procedures are adequate and satisfactorily implemented and technical activities are effective.

5.3.4 Visual Examination

Visual examination activities were observed and batch reports were evaluated. The audit team determined that the overall visual examination process is in compliance with

requirements. The audit team concluded that visual examination written procedures are adequate and satisfactorily implemented and technical activities are effective.

5.3.5 Sample Handling and Chain-of-Custody

Activities relating to sample handling and chain-of-custody were evaluated at the LANL Waste Characterization, Reduction, and Repackaging Facility (WCRRF). The evaluation verified that handling of samples and chain-of-custody are being performed in accordance with procedural requirements. Headspace gas samples are stored and tracked automatically from the time of collection until the completion of the analysis processes. It was concluded that the sample handling and chain-of-custody procedures are adequate, and satisfactorily implemented and technical activities are effective.

5.3.6 Sampling Design

The random selection process for containers to be sampled and the calculation for determining the number of containers to be visual examined were evaluated. The miscertification rate has yet to be determined because visual examinations have not been completed. The written program is adequate and satisfactorily implemented and technical activities are effective.

5.3.7 Headspace Gas Sampling And Analysis

LANL has implemented a new automated headspace gas sampling system. The audit team observed a run of the new system and reviewed the only batch data report completed. The audit team determined that the batch data report is technically satisfactory and in accordance with procedural requirements. The audit team made one recommendation concerning drum age criteria. Refer to Recommendation 2 in section 6.3.

The audit team determined the procedures to be adequate and satisfactorily implemented. The new automated system appears to be effective, but the audit team identified a deficiency in the use of a calibration gas standard (used for internal calibration of the headspace gas analysis system) that had expired in 7/99. CAR 00-035 was issued to address this deficiency (refer to section 6.1). When this CAR is satisfactorily resolved, the analytical process will be effective.

5.3.8 WIPP Waste Information System (WWIS)

The WWIS was evaluated using actual waste container data to verify LANL's capability to implement the process in accordance with the procedure. The evaluation included data entry, forwarding of information to the WIPP Site, and acknowledgment of the transferred information. An electronic data entry system was used for the certification

module of the WWIS. Based on the evaluation, the audit team determined that the written procedure is adequate and satisfactorily implemented and the WWIS process is effective.

5.3.9 Performance Demonstration Program (PDP)

PDP documentation was reviewed to verify program implementation. LANL has participated in the program and has documented results as required by the procedure. The written procedure for documenting PDP results is adequate, satisfactorily implemented and effective.

5.3.10 Gas Generation Testing Program (GGTP)

The audit team also evaluated the LANL Gas Generation Testing Program (GGTP) for identification, testing, and transportation of high wattage drums. The program was evaluated as adequate relative to the flow down of requirements, however the audit team was unable to satisfactorily confirm the effectiveness and implementation of the program due to the constraints imposed on the demonstration, and a number of implementation concerns and issues that emerged during the audit demonstration. These concerns are addressed in Observation number 5 (refer to section 6.2). Further evaluation of the LANL GGTP is needed prior to implementation for TRU waste shipment.

6.0 Corrective Action Reports (CARs), OBSERVATIONS, RECOMMENDATIONS

6.1 Corrective Action Reports (CARs)

The following two Corrective Action Reports were identified during the audit:

6.1.1 CAR 00-035 This CAR documents a deficiency that was identified in the implementation of the LANL measuring and test equipment procedure (TWCP-QP-1.1-018, Revision 6). The deficiency relates to the expiration of a cylinder of gas used as an internal standard for calibration of the headspace gas analysis equipment.

6.1.2 CAR 00-036 This CAR documents deficiencies that were identified in the implementation of the LANL procedure for documentation of Acceptable Knowledge (TWCP-QP-1.1-021, Revision 4). The deficiency relates to errors and missing information in the AK data reviewed during the audit.

6.2 Observations

The following five Observations were identified by the audit team as areas of concern that were not yet actual deficient conditions, but which raise the probability of future

deficiencies if not corrected. As indicated below, four of these Observations were immediately addressed by the LANL TWCP team and were resolved during the audit.

- 6.2.1 Observation 1** The Technical Supervisor Checklist for VE batch data report LA00-VE-005, item 4 was marked "Yes" for the checklist item concerning initiation of NCRs/PWRs, when in fact no NCRs/PWRs were issued. The cause of this was a misunderstanding of the checklist language that said "NCRs and PWRs initiated as required." The "No" response was interpreted as meaning that required NCRs/PWRs had not been issued. This concern was resolved during the audit by revision of subject batch data report, and the issuance of an interim change notice for modification of the review checklist format in the LANL procedure for visual examination (TWCP-DTP-1.2-001, Revision 10) providing an option for "Not Applicable".
- 6.2.2 Observation 2** The SPQAO Summary for LAAO-RPK-011, page 4, reported the correct number of significant digits (00.0) for the weights and balance being used, but this was different from the number of significant digits indicated in the procedure (00.00). The procedure did not recognize that different scales and balances being used have different numbers of significant digits. This concern was resolved during the audit by revision of the LANL procedure to allow the actual number of significant digits (00.0 or 00.00) to be recorded depending on the specific type of balance/scale being used. TWCP-QP-1.1-010, revision 9, now specifies the correct number of digits for each type of balance/scale.
- 6.2.3 Observation 3** Section X of Attachment 6 of the AK summary TA55-19.01 did not provide a "conclusions" section for the SPM to document potential conclusions that might be made during implementation of LANL data reconciliation procedure TWCP-DTP-1.2-064, Section 6.2.7. The concern was that, without a specific "conclusions" section that could be completed with an actual conclusion or a "none", it would be unclear whether there were in fact no significant conclusions or whether a conclusion had been needed but forgotten. This concern was resolved during the audit by revision Attachment 6 of the procedure to include a "conclusions" section.
- 6.2.4 Observation 4** Some of the NDA and HGAS requirements in the LANL PDP procedure were addressed in a manner that presented the potential for confusion or misunderstanding during implementation. The concern was that sections 6.1.2.2, 6.3.2.8, 6.3.2.9, 6.3.2.12, and 6.3.2.13 had language that placed additional requirements on the PDP process that were not needed and could cause confusion in reporting in accordance with current PDP requirements. The requirements pertained to details in the reporting TICs, compounds intentionally not analyzed, and the use of qualifying data flags. This concern was resolved during the audit by revision of the LANL PDP procedure (TWCP-QP-1.1-022, Revision 3) to appropriately revise the language in these sections.

6.2.5 Observation 5 The LANL Gas Generation Test Program (GGTP) batch data report evaluated during the audit contained multiple errors in both data content and the performance of review activities in accordance with the LANL GGTP procedures. These issues were evaluated as an observation because the GGTP process was demonstrated using a simulated waste drum, and the overall result for the GGTP process was "Indeterminate." A reevaluation of the process will be required prior to approval for use in qualifying TRU waste drums for transportation.

6.3 Recommendations

The following two recommendations are provided for management consideration.

6.3.1 Recommendation 1 A number of typographical and editorial errors were identified in the Acceptable Knowledge summary and supporting data. It is recommended that these documents receive a thorough editorial review prior to finalization and use of the documents.

6.3.2 Recommendation 2 It is recommended that the Headspace Gas Batch Data Reports include information on drum aging criteria as well as in the WWIS entry summary data where it is currently documented.

7.0 LIST OF ATTACHMENTS

- Attachment 1: Personnel Contacted During the Audit
- Attachment 2: Audit Participants by Characterization Area
- Attachment 3: Summary Table of Audit Results
- Attachment 4: List of Procedures Audited (A-00-16)

PERSONNEL CONTACTED DURING THE AUDIT

PERSONNEL CONTACTED DURING AUDIT A-00-16				
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Adams, Andrew	LANL/EET VE Ops Leader	X	X	X
Allen, Garry	LANL/EET Project Manager			X
Bailey, Jim	LANL/EET QA Staff			X
Baker, Michael	LANL/EET NDA Specialist	X		
Baros, Ricky	LANL/EET VE Expert		X	
Bayhurst, Greg	LANL/EET QA Staff	X	X	X
Betts, Stephen	LANL/EET NDE Ops Leader		X	X
Canfield, Tom	LANL/EET SQA			X
Chandler, Karen	Benchmark Inc. Subject Matter Expert		X	
Chavez, Mario	LANL/EET Software QA Engineer	X	X	X
Cossey, Stephen	LANL/EET VE Ops Leader	X	X	X
Drypolcher, Tony	LANL/NMT-7 Technical Staff Member		X	X
Estill, Wesley	LANL/EET Waste Certification Support	X	X	X
Fabryka-Martin, June	LANL/EET TWCP Deputy SPM	X	X	X
Fernandez, Ruby Ann	LANL/EET Training Specialist	X	X	X
Foxx, Charles	LANL/NMT-7	X	X	X
Garcia, Mel	LANL/EET Test & Measuring Tech		X	
Gavett, Marji	LANL/EET QA Officer	X	X	X

PERSONNEL CONTACTED DURING AUDIT A-00-16				
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Glenn, Rosemary	John Hart & Assoc. Subject Matter Expert		X	
Harper, Johnny	LANL/EET Deputy Group Leader			X
Hawkinson, David R.	LANL/EET TWCP Support (Team-21)	X		
Herrera, Jennifer	LANL/EET RMDC Staff			X
Hollis, Kirk	LANL/C-12 Analyst		X	
Janecky, David	LANL/EET Software QA Specialist		X	
Lacy, Keith	LANL/EET Transportation Official	X		
Liebman, Chris	LANL/EET C-12 HGAS Ops lead	X	X	X
Lin, Mavis	LANL/EET TWCP Assistant SPM	X	X	X
Lopez, Joshua	LANL/EET VE Expert		X	
Makarule, Hanna	LANL/EET TSM	X		X
Martin, Beverly	LANL/E-WMOSR Project Leader			X
Martinez, David	LANL/C-12 Chemical Technician	X	X	X
Martinez, Manuel	LANL/EET RMDC Team Leader	X	X	X
Martinez, Paul	LANL/EET Test & Measurement Technician		X	X
Montoya, Andrew	LANL/NMT-3 Team Leader		X	
Mroz, Gene	LANL/EET TSM		X	X
Musgrave, John	LANL/C-11 AK Lead	X	X	X

PERSONNEL CONTACTED DURING AUDIT A-00-16				
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Nunz, James	DOE-LAAO WM Program Manager	X	X	X
Ortega, Laura	LANL/EET QA Staff	X	X	X
Ortiz, Patrick	LANL/NMT-7 Observer		X	
Owczarek, Robert	LANL/EET TSM	X		X
Palomares, Jose	LANL/EET Material Handler		X	
Pickrell, Mark	LANL/EET Group Leader	X	X	
Quintana, Doris	LANL/EET QA Staff	X	X	
Riggs, Matt J.	LANL/EET WCO	X	X	X
Rios, Robert	LANL/EET (Butler Inc) VE Expert		X	
Robbins, Scott	LANL/EET Training Coordinator		X	
Rogers, Pamela	LANL/EET SPM	X	X	X
Romero, Myrna	LANL/EET Ops Manager		X	
Saunders, Lori	LANL/EET Senior QA Engineer	X	X	X
Souza, Larry	LANL/EET Senior QA Engineer	X	X	X
Spitzmiller, Ted	LANL/CIC-18 Analyst	X		
Strietelmeier, Betty	LANL/EET Deputy SPM	X	X	
Tallarico, Antonia	LANL/EET SPQAO	X	X	X
Trujillo, Barbara	LANL/EET Waste Certification Support	X	X	
Valdez, Joseph	LANL/EET (Butler Inc) VE Expert		X	

PERSONNEL CONTACTED DURING AUDIT A-00-16				
NAME	ORG/TITLE	PREAUDIT MEETING	CONTACTED DURING AUDIT	POST AUDIT MEETING
Vigil, Jack	LANL/EET NDE Ops Leader	X	X	X
Weyerman, C. Wade	LANL/EET Transportation Certification Official	X		X
Willette, Mark	LANL/C-12 Chemical Technician	X	X	X
Zoltai, John	LANL/CIC-15 Information Systems			X

AUDIT CHARACTERIZATION AREA	CAO AUDITORS AND TECHNICAL SPECIALISTS	INSPECTORS AND OBSERVERS	SITE PARTICIPANTS
Acceptable Knowledge	Al Williams Norman Frank	Steve Zappe (NMED) Julie Shanahan (NMED/TechLaw) Ben Walker (EEG)	Charles Foxx Tony Drypolcher John Musgrave Pam Rogers Karen Chandler Rosemary Glenn Patrick Ortiz Andrew Montoya Lori Saunders
Radiography	Trey Greenwood Pete Rodriguez	Will Fetner (NMED) Bill Fear (NMED/TechLaw)	Ruby Ann Fernandez Marji Gavett Jack Vigil Stephen Cossey Mel Garcia Jose Palomares Paul Martinez Lori Saunders
Visual Examination	Trey Greenwood Pete Rodriguez	Will Fetner (NMED) Bill Fear (NMED/TechLaw) Ben Walker (EEG)	Ricky Baros Joshua Lopez Joseph Valdez Robert Rios Lori Saunders Larry Souza Andrew Adams
Headspace Gas Sampling & Analysis	Steve Calvert Bill Blanton	Steve Zappe (NMED) Bob Thielke (NMED/TechLaw) Tim Harms (DOE-HQ)	Larry Souza Laura Ortega Chris Leibman Mark Willette David Martinez Betty Strietelmeier Mavis Lin Doris Quintana Myrna Romero Matt Riggs Wesley Estill