

FINAL AGENDA

59th WIPP QUARTERLY REVIEW MEETING
July 31, 1997



WIPP Public Information Center
141 E. Palace Avenue
Santa Fe, NM
982-7129

8:30 a.m.	Introduction and Opening Remarks	10 min.	C. Wentz, Task Force
8:40 a.m.	Environmental Evaluation Group: Status/Activity Report	30 min.	R. Neill, EEG Director
9:10 a.m.	N.M. Environment Department: Status/Activity Report	20 min.	S. Zappe, NMED
9:30 a.m.	U.S. Department of Energy: Status/Activity Report	30 min.	G. Dials, CAO Manager
10:00 a.m.	N.M. Radioactive Waste Task Force: Status/Activity Report	20 min.	C. Wentz, Task Force
10:20 a.m.	BREAK	15 min.	
10:35 a.m.	SEIS-II Update	20 min.	H. Johnson, CAO
10:55 a.m.	EPA Verification Tests: Overview and Results	20 min.	M. Marietta, SNL
11:15 a.m.	Discussion: EPA Verification Tests	25 min.	All
11:40 a.m.	LUNCH		
1:00 p.m.	DOE Generator Site Audits: Findings and Recommendations	30 min.	D. Brown, CAO
1:30 p.m.	Transportation Privatization	30 min.	A. Clay, CAO
2:00 p.m.	Results of Expert Elicitation on Particle Size	20 min.	CAO/All
2:20 p.m.	BREAK	15 min.	
2:35 p.m.	Results of J. Bredehoeft Modeling on Fluid Injection	30 min.	J. Bredehoeft, Consultant
3:05 p.m.	Results of SNL Modeling on Fluid Injection	30 min.	P. Swift (SNL)
3:35 p.m.	Q&A/Discussion	25 min.	All
4:00 p.m.	"Action Item" Commitments/Closeout	10 min.	C. Wentz
4:10 p.m.	ADJOURN		

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July 31, 1997

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ATTENDANCE SHEET

Name/Affiliation	Address	Phone/Fax
LOKESH CHATURVEDI/EEG	7007 Wyoming NE, F-2	828-1003; 828-1062
ROBERT H NELL NM EEG	7007 Wyoming NE F-2 ^{ALB}	828-1003 828-1062
LINDSAY LOVEJOY	ATTY GEN OFF P.O. Drawer 1508, Santa Fe 87504-1508	(505) 827-669
MATTHEW SILVA	NM EEG 7007 WYOMING NE, F-2	828-1003; 828-1062
Michael H. McFadden	DOE/CAO	505-234-7486
Steve Zappe	NMED PO Box 26110 Santa Fe 87502	505/827-1561
George Dials	DOE/CAO 101W Greene St. Carlsbad 88220	505-234-7300
CHRIS WENTZ	State of NM R.R. Wash. Park Force 2040 Pacheco St. Santa Fe	505/827-1372/-11
JIM CHANDWELL	EEG 7007 WYOMING NE F 2	505/828-1003/
Peter Swift	SNL MS 1341 PO BOX 5800 Alb.	505 848 0699/0
MEL MARIETA	SNL MS 1345 PO Box 5800 Alb	505 234 0054
KURT LARSON	SNL MS 1395 PO BOX 5800 Alb.	505-234-0066
Tom Tatkin	NMED/DOE OB 2044 Galisteo St Santa Fe ⁸⁷⁵⁰²	(505) 827-1536
DON GRAY	EEG-CBD 505 N. MAIN ST CARLSBAD	(505) 885-9675
John Parker	NMED 2044 A Galisteo St. Santa Fe	827-1536
Dennis Brown	DOE/CAO 101 W. Greene St., Carlsbad 88220	234-7484
Amber Clay	DOE/CAO 101 W. GREENE ST., CARLSBAD	234-7432
Tom Peake	EPA 401 M St, Washington, DC 20460	202-233-9765
Chuck Byrum	EPA Dallas, TX	214 665 7555
SHANKAR N. GHOSE	EPA ⁶⁶⁰²⁴ 401 M ST. WASHINGTON, DC. 20460	202 233 9766
Tale Rucker	EEG 7007 Wyoming Blvd NE #F2	828/1003 828/1062
JOHN BREDEFLOEPT	NAAAG PO Box 357 (A15) FAY-044/744-C LA HONDA, CA	

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<u>Name/Affiliation</u>	<u>Address</u>	<u>Phone/Fax</u>
Ross Kirkles / WESTINGHOUSE	WIPP Project P.O. BOX 2078, CARLSBAD, NM	234-8854 fax 234-8145
Steve Wagner / WESTINGHOUSE	S. S.	234/8854 234-8794
Robert S. (Sgt) Dimmittie NHEP		920-251-1111

7/31/97

59th Quarterly Meeting

Bob Neill
EEG

Summarized Kd meeting held 7/30, audit attendance
radioisotope analysis program (meeting between EEG, WLD, AGRA/pe
SNL). Lokesh reported on an underground tour,
discussed brine inflow, WLD will publish additional
reports on it. EEG wants demonstration of MgO
emplacement (still sounds like old method).

Gnome - showed EPA where hot spots located. DOE
intends to clean up, contracted to SNL, estimate \$12-13B.

George Diels

Only 3 to go! Decision from EPA no later than May.
note - new DDT^(rev 4) denotes "RCRA Permit issued 4/98"
as both "all associated compliance LWAA requirements" and
"NMEC controlled action." "Hopeful" about meeting schedule,
recognized they don't control process.

DOE EM budgets under stress. EEG "will close
down" if budget cut of 28% goes through, complained
about inequitable treatment. Congress doesn't trust
EM projections of accomplishing all they say they will.
DOE asks what is the new role of EEG after WIPP opens.
(focus on 2006)

Chris Wentz

Added State Fire Marshall to WIPP Working Group.
Aug 29 Red Hot Materials committee^{mtg} in Carlisle -
focus on WIPP.

George Diels

SEIS-II update - final is in review, briefing week
of April, expect ROD in place end of Sept. Reviewed
proposed action + various alternatives + no action proposals.
Third NEPA document on WIPP. Hope to avoid litigation,
but prepared for it.



(2)

Mel Marzetta EPA verification tests - 3 replicates, 1 complete, 2+3 currently being performed. Using EPA parameter ranges (no rationale provided): PAV = Perform. Assess. Verification. Cuttings, cavings, & spillings contribute most to CCDF (direct releases to surface). Minor contribution from releases to Celebra in PAV, versus offscale in QA, due to EPA parameter changes in K_d values, perhaps also amount of brine entering Celebra. Undisturbed performance not affected.

Denny Brown Recent Audits - QA program drivers (40CFR 261, but rather vague)

Program Documents - QAPD, QAPP, WAC, SARP TRAMPAC

Criteria: (both technical + QA perspective)

Adequacy - flow down of upper-tier requirements into implem. proced.

Implementation - compliance with procedures (must have procedure 30 days prior to audit)

Effectiveness - procedures written to ensure correct results/data are produced.

Reviewed QA & Technical Program elements

Site documents - QAP, P, Certification plan (both require CTO approval), sampling plan, ^{primary} QA plan, implementing procedures/documents

Types of findings - CARs, CDAs, observations, recommendations, ^{sampling practice}
~95% of CARs must be closed before a site certified.

Work with sites during preliminary visits & involvement

INEEL - QA plan adequacy indeterm., implementation satisf.

Technical - all audited areas effective.

Followup audit in October

LANL - adequacy indeterm., implem. marginally implem.

Tech - all areas effective

WIPP Quarterly Review July 31, 1997

Activities Update for NMED's RCRA Permits Program

1. Meetings, trips, training, etc.

- Completed "Defusing Theirate Citizen" seminar, 5/6.
- Attended DOE/CAO audit of TRU waste characterization activities at LANL, 5/12 - 16.
- Met with DOE/WID to discuss NMED's 4/29 request for modeling and parameter selection information, 5/16.
- Met with DOE/WID to discuss management of brine in the WIPP underground, 6/20.
- Attended DOE/CAO audit of TRU waste characterization activities at RFETS, 7/14 - 18.
- Attended a portion of the public hearing for proposed changes to NMED department-wide permit procedures (20 NMAC 1.4), 7/22.

2. Correspondence related to the WIPP RCRA Permit Application

- Received supplemental information on WIPP Solid Waste Management Units (SWMUs), 5/2 (requested 4/11).
- Received preliminary response to HRMB request for modeling and parameter selection information, 5/9 & 13.
- Received financial responsibility information related to WID to comply with Hazardous Waste Act, 5/16.
- Received changes to Part B permit application (Rev 6.3), 5/16 (first attempt).
- Received DOE's transmittal of seven volumes of modeling and parameter selection information into the administrative record, 5/27.
- Received changes to Part B permit application (Rev 6.3), 6/16 (second attempt).

- Requested additional information on revised WIPP Groundwater Monitoring Plan, 6/18.
- Rejected previous submittals of Rev 6.3, established conditions for accepting future revisions, 6/30.
- Received environmental compliance and additional disclosure information to comply with Hazardous Waste Act, 5/16.
- Received changes to Part B permit application (Rev 6.3), 7/21 (final attempt).
- Received revised Groundwater Monitoring Plan (Rev 6.4) and withdrawal of groundwater monitoring waiver request, 7/21.

3. RCRA Part B Permit - Development

- Currently no outstanding information requests directed towards DOE/WID.
- Draft Permit still under development:
 - Consulting with legal counsel on issues in the first four modules.
 - Incorporating supplemental SWMU information into the HSWA module and Technical Support Document.
 - Formatting and preparing chapters and appendices from the permit application for attachment to the draft permit.
 - Continuing discussions with EPA ORIA and Region 6 to ensure consistency on overlapping issues.

4. Other items

- Assessed additional RCRA permit fees (\$427,588) to cover costs of legal and technical preparation for the anticipated hearing, 7/8 (payment made 7/11).
- Westinghouse summer intern catalogued the HRMB WIPP correspondence files between 1/92 and 6/97.

3

RFETS - adequacy indeterminate, implement - marginal, bordering on unsatisfactory.
Technical effectiveness satisfactory, bordering on marginal

General common categories of CARs - QA records meeting NDA-1 requirements, Software QA, NDA activities, training records, procurement, AK - procedures either old, or too new (buggy), or working to plan, not a procedure.

LANL followup Aug 18, expect certified end of Sept. Have weekly conference calls with each side to status

INEL ^{follow-up audit} 3rd week of October after they retool for production, expect cert Nov 30

RFETS scheduled cert by Nov 30, but maybe not.

Agmt procedure - unanimous approval by QA, transp, ~~regulatory~~ ^{operations} compliance, + NTP, brief Dirals, issue certification with conditions based on scope of audits

Amber Clay

Transportation Privatization - related to her effort in Nat'l TRU waste mgmt plan.

Private transp contractor will transport between generators + WIPP or between sites (ie, INEL + RFETS), also support transp training exercises.

10 yr contract to be awarded 12/87

Contractors to provide shipping containers, tractor trailers, drivers maintenance + other required services

Benefits - 30% savings over life cycle, ^{about 12% over 10 yrs} fixed price/unit contract

DOE maintains responsibility to certify waste to WMC, load/unload, provide annual shipping ~~forecast~~ ^{schedule} + monthly shipping schedule, as well as oversight/audit of contractor

Kurt Larson Particle Diameter Expert Elicitation

Two models impacted - spillings + cavings

John Bredehoeft The Hartman scenario - Implications for WIPP

What happens if Murphy's law - leaking well into MB 138 or 139 - what would happen? No assumptions of probability - SNL distributes it thru many beds vs worst case of one bed. Two models are not the same.

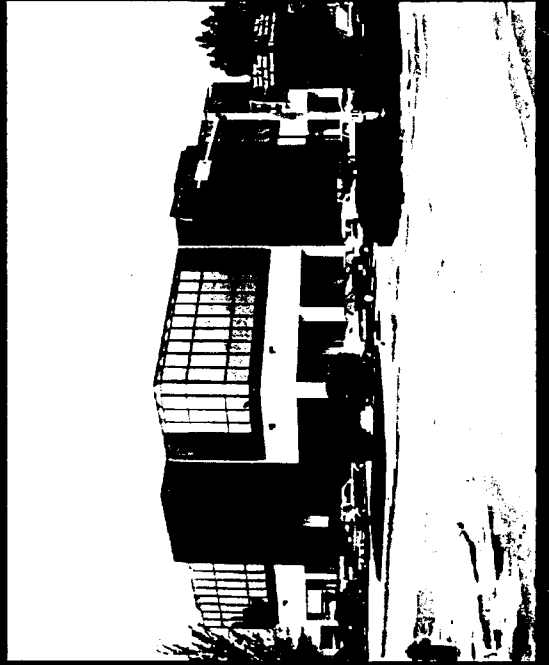
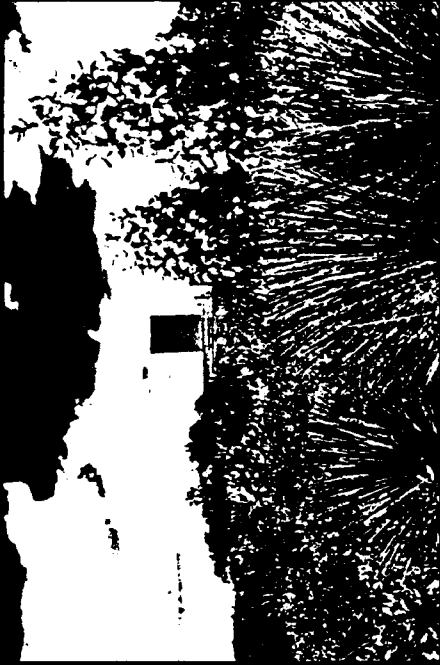
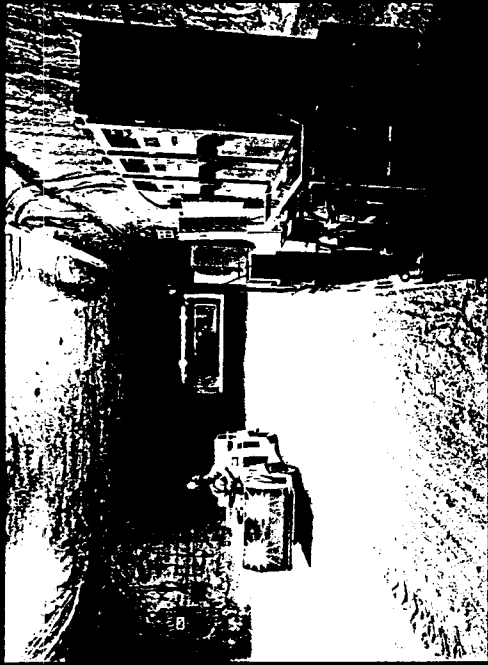
Peter Swift SNL Modeling of Fluid Injection on WIPP

- see handout

59th WIP.P QUARTERLY REVIEW



George E. Dials, Manager
Carlsbad Area Office
United States Department of Energy



Santa Fe, New Mexico
July 31, 1997

CARLSBAD AREA OFFICE

- **Compliance is the challenge**
 - **Within schedule**
 - **Within budget**
- **Disposal/cleanup - the goal**



ACTION ITEMS
58th WIPP QUARTERLY REVIEW
May 1, 1997

7/14/97

Action Items	Action By
Schedule meeting to discuss actinide concerns.	<p>Mike McFadden, CAO</p> <p>Meeting was scheduled and actinide concerns were discussed with NAS on 5/16/97.</p>
Provide L. Lovejoy a copy of CAO response to Jennifer Salisbury re Kds.	<p>Mike McFadden, CAO</p> <p>Copy provided to L. Lovejoy 5/19/97.</p>
Provide EEG with a list of NRC certified waste containers.	<p>Kent Hunter, CAO</p> <p>Provided in letter of 5/16/97.</p>
Provide EEG with a copy of the SNL fluid injection response to EPA comment (when response is submitted to the EPA). Would like to have before 5/14/97.	<p>Mike McFadden, CAO</p> <p>Copy provided to EEG 5/19/97.</p>
Provide CAO e-mail addresses to EEG, NMED, EMNRD, and NMAG.	<p>Pat Kilgore, CAO</p> <p>Faxed 6/13/97</p>
Schedule 59th Quarterly.	<p>Chris Wentz, EMNRD</p> <p>Scheduled for July 31, 1997 in Santa Fe at the CAOWIPP Information Office.</p>

NEW MEXICO ORGANIZATIONS RECEIVING FUNDS FROM DOE FOR OVERSIGHT, TECHNICAL REVIEWS, AND ANALYSES OF THE WIPP PROGRAM

Organization	Scope	Funds
Environmental Evaluation Group	Technical Review	\$1,748,000 budgeted FY97 \$1,301,000 budgeted FY98
New Mexico Energy, Minerals and Natural Resources Department	Emergency Response	\$1,407,000 budgeted FY97 \$1,133,000 budgeted FY98
New Mexico Environment Department Agreement In Principle (AIP)	Environmental Monitoring and Technical Review	Approximately \$3,000,000 each FY
Western Governors' Association (New Mexico's share) *	Transportation, Safety, and Emergency Preparedness	*\$15,000 budgeted FY97 *\$15,000 budgeted FY98
Carlsbad Environment Monitoring and Research Center (CEMRC)	Environmental Monitoring and Technical Review	\$3,900,000 budgeted FY97 \$3,809,000 budgeted FY98
Department of Development Training Center	Provides TRU-related training to DOE	\$500,000 budgeted FY97 \$500,000 budgeted FY98
New Mexico Impact Assistance	Land Withdrawal Amendment Act for Roads	\$20,000,000 budgeted FY97 \$20,000,000 budgeted FY98

28%

* State of New Mexico portion of approximately \$1.2 million budgeted for WGA

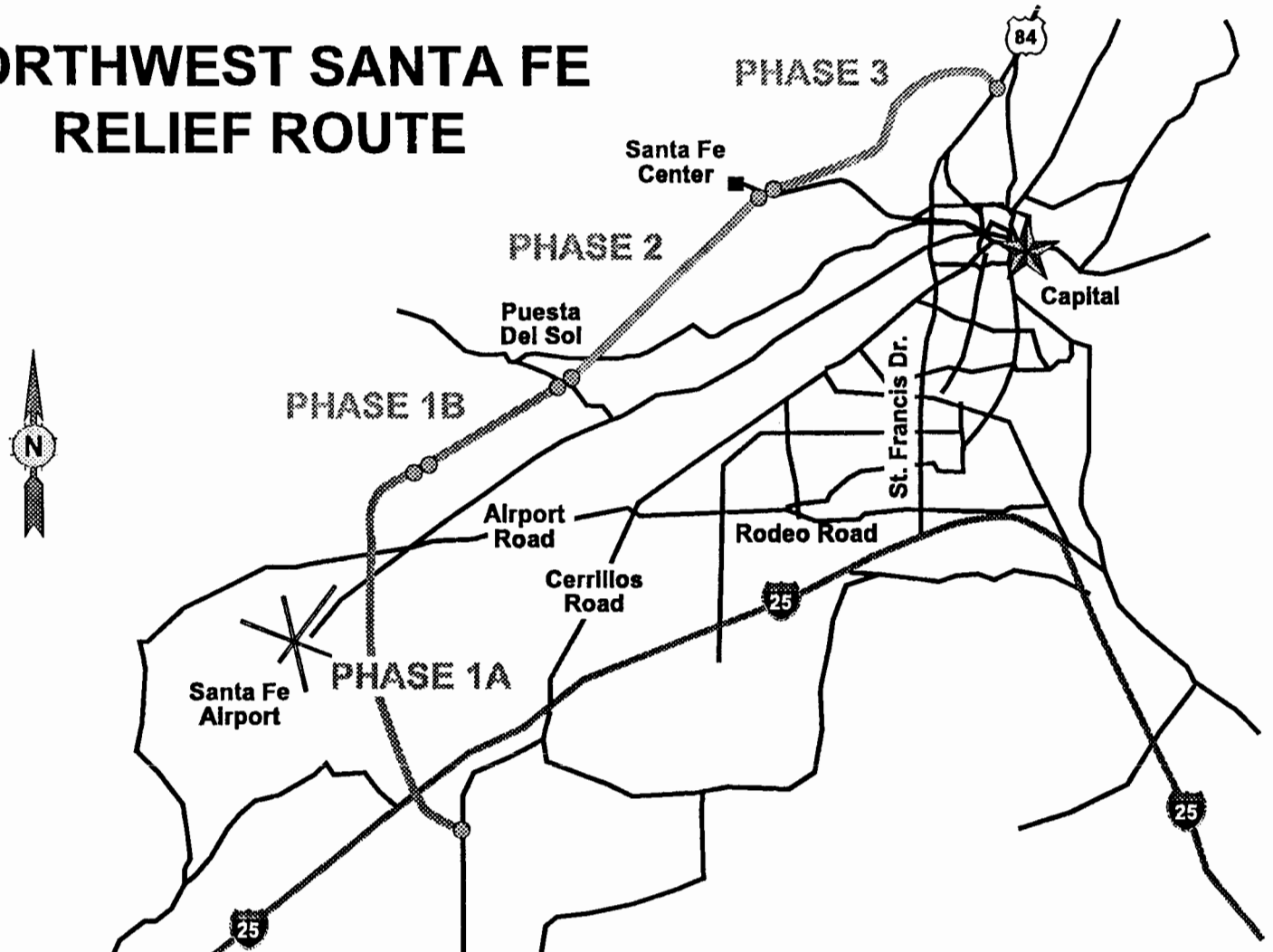
Total Funding -- FY97 \$30,570,000
FY98 \$29,758,000

As of July 1997



297R:c7073-2

NORTHWEST SANTA FE RELIEF ROUTE



Phase 1

- Complete

Phase 2

- Santa Fe Estates issues settled
 - Currently drawing up contracts
- Las Campañas rights-of-way being negotiated

Phase 3

- Negotiations completed - contracts underway



ACCELERATING CLEANUP: FOCUS ON 2006

A cornerstone to the 2006 Plan cleanup strategy is the nation's first deep geologic radioactive waste disposal facility, the Waste Isolation Pilot Plant, located near Carlsbad, New Mexico. The Waste Isolation Pilot Plant is designed and engineered to permanently dispose of transuranic waste and transuranic mixed waste left from the nation's nuclear defense programs. Its sole mission is to protect humans and the environment from long-lived radioactivity for thousands of years. The Department of Energy plans to open the Waste Isolation Pilot Plant in May of 1998.

Alvin L. Alm

Assistant Secretary for Environmental Management

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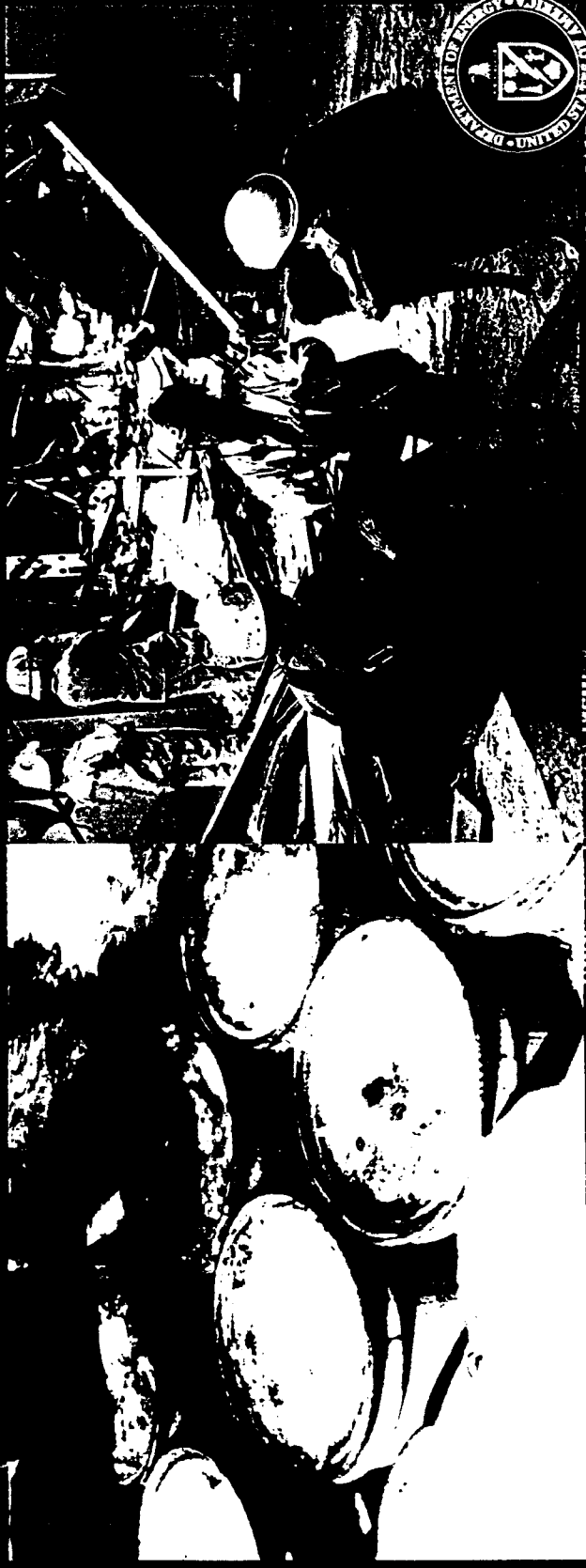
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LANL studies its quake potential

Scientists worry about damage to lab's nuclear waste storage



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Under the President's Liberty

59th WIPP Quarterly Review Meeting

DOE TRU Waste Site Audits: Findings and Recommendations

R. Dennis Brown
DOE/CAO QA Manager
July 31, 1997



CAO QA Program Drivers

- 40 CFR Part 194
- ASME NQA-1-1989
- ASME NQA-2a-1990
addenda, Part 2.7
- 10 CFR Part 830.120
- 10 CFR Part 71,
Subpart H
- 40 CFR Part 261
- DOE Order 5700.6C
- ANSI/NCSS Z540-1



Program Documents

- CAO Quality Assurance Program Document (QAPD)
- CAO Quality Assurance Program Plan (QAPP)
- Waste Acceptance Criteria (WAC)
- SARP TRAMPAC



Audit Criteria

- Adequacy
- Implementation
- Effectiveness



Adequacy

Flow-down of upper-tier requirements into implementing procedures.



Implementation

Compliance with procedures.



Effectiveness

Procedures written to ensure that correct results and data are produced.



Areas Audited

- Waste Characterization
- Waste Certification
- Waste Transportation



QA Program Elements (QAPD)

- Organization
- Personnel Qualification and Training
- Nonconformance Control/Corrective Action
- Documents and Records
- Work Processes
- Procurement
- Inspection and Testing
- Measuring and Test Equipment
- Assessments
- Sample Control
- Software Requirements



Waste Characterization Technical Elements (QAPP)

- Acceptable Knowledge
- Sampling Process Design
- Sampling - Headspace Gas and Solids
- Analysis - Headspace Gas and Solids
- Testing - Non-Destructive Assay (NDA)
- Testing - Real Time Radiography (RTR)
- Visual Examination
- Data Validation, Usability, and Reporting
- Performance Demonstration Program (PDP)



Transportation Technical Elements

- Inspection of Packaging
- Preparation and Loading
- Shipping
- Packaging Maintenance
- Documentation and Records



Site Documents

- Quality Assurance Project Plan (QAPjP)
- Site Waste Certification Plan
- Sampling Plan
- Packaging QA Program
- Implementing Procedures and Documents



Types of Audit Findings

- Corrective Action Reports (CARs)
- Deficiencies Corrected During the Audit (CDAs)
- Observations
- Recommendations
- Exemplary Practices



Idaho National Environmental & Engineering Laboratory Audit A-97-02

4/21/97 to 4/25/97



INEEL Audit Participants

- 9 CAO QA Auditors
- 8 CAO Technical Specialists
- 12 Inspectors/Observers
 - 3 EPA
 - 2 NMED
 - 2 State of Idaho
 - 2 RFETS
 - 1 EEG
 - 1 LANL
 - 1 Hanford



INEEL Audit Results

- QA Program
 - Adequacy: indeterminate, will be addressed prior to next audit
 - Implementation: satisfactory
- Technical
 - All audited areas effective



INEEL Audit Findings

- Corrective actions for previously identified CARs continue to be effective
- 10 Corrective Action Reports (CARs)
- 27 Deficiencies Corrected During the Audit (CDA) (remedial action only)
- 5 Observations
- 11 Recommendations
- 6 Exemplary Practices



Los Alamos National Laboratory

Audit A-97-01

5/12/97 to 5/16/97



7/31/97

DOE TRU Waste Site Audits

20

LANL Audit Participants

- 7 CAO QA Auditors
- 4 CAO Technical Specialists
- 16 Inspectors/Observers
 - 8 EPA
 - 3 NMED
 - 2 EEG
 - 2 DNFSB
 - 1 CAO



LANL Audit Results

- QA Program
 - Adequacy: indeterminate, will be addressed prior to next audit
 - Implementation: marginally implemented
- Technical
 - All areas effective



LANL Audit Findings

- Corrective action for 2 previously identified CARs addressing records management and procedure adequacy were effective
- 10 CARs
- 13 Deficiencies Corrected During the Audit (remedial action only)
- 9 Observations
- 14 Recommendations
- 3 Exemplary Practices



Rocky Flats Environmental Technology Site Audit A-97-03

7/14/97 to 7/18/97



RFETS Audit Participants

- 8 CAO QA Auditors
- 7 CAO Technical Specialists
- 15 Inspectors/Observers
 - 6 EPA
 - 2 NMED
 - 1 EEG
 - 2 DNFSB
 - 2 CAO
 - 1 SRS
 - 1 LLNL



RFETS Audit Results

- QA Program
 - Adequacy: indeterminate, will be addressed prior to next audit
 - Implementation: marginally implemented, bordering on unsatisfactory
- Technical
 - Satisfactory, bordering on marginal



RFETS Audit Findings

- Corrective action for 4 previously identified CARs not complete
- 18 CARs
- 27 Deficiencies Corrected During the Audit (remedial action only)
- 13 Observations
- 5 Recommendations
- 6 Exemplary Practices

