



Department of Energy
Field Office, Albuquerque
Los Alamos Area Office
Los Alamos, New Mexico 87544

(1)

NOV 16 1992

1/10/100

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. William Honker
Chief, RCRA Permits Branch
U. S. Environmental Protection Agency
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Mr. Honker:

The Department of Energy has reviewed the Notice of Deficiency on the Resource Conservation and Recovery Act Facility Investigation Work Plan for Operable Unit 1071. Enclosed is our response to the comments.

If you have any questions on the response, please contact Steve Slaten, ES&H Branch, at (505) 665-5050.

Sincerely,

Joseph C. Vozella, Acting Chief
Environment, Safety and Health
Branch

LESH:4SS-024

Enclosure:

- cc w/o enclosure:
- K. Bitner, ERPO, AL
- R. Vocke, EM-13, LANL,
MS M992
- J. Shipley, EE-AETO, LANL,
MS F641
- J. Aldrich, EES-1/EM-13, LANL,
MS D462
- RPF, LANL, MS M707
- M. Duran, MMES, LAEO

105

TV



6722

Received By
NOV 17 1992

ENVIRONMENTAL RESTORATION PROGRAM

REMEDIAL INVESTIGATION/FEASIBILITY STUDY

OPERABLE UNIT 1071

RESPONSE TO NOTICE OF DEFICIENCY

LOS ALAMOS NATIONAL LABORATORY

LOS ALAMOS, NEW MEXICO

November 1992

ENVIRONMENTAL RESTORATION PROGRAM

LOS ALAMOS NATIONAL LABORATORY

**FINAL
(Revision 0)**

TABLE OF CONTENTS

1.0	Introduction	1
2.0	HSWA Permit Modifications	1
3.0	Response to Comments	1
3.1	Comment and Response on OU 1071 RFI Sampling Plans	2
3.2	Comment and Response on No Further Action SWMUs	2

ATTACHMENTS

- ATTACHMENT A Notice of Deficiency for RFI Work Plan for OU 1071
- ATTACHMENT B Revised Sample Table (figure 5-70, OU 1071 Work Plan) for SWMU Group 19-1
- ATTACHMENT C Personal Communication Record:
Interview with W. Clarence Courtright, July 1991
- ATTACHMENT D Los Alamos Airport Underground Storage Tank Removal Documentation

1.0 Introduction

This Response to Notice of Deficiency for Operable Unit (OU) 1071 (LANL 1992) has been prepared by the Los Alamos National Laboratory (LANL) to address the October 1992 Notice of Deficiency received from the U.S. Environmental Protection Agency, Region 6, (EPA 1992, Attachment A).

2.0 HSWA Permit Modifications

No Further Action Status was approved by the EPA in the Notice of Deficiency for SWMU 0-008 (North Mesa Surface Disposal), SWMU 0-010(a) (Surface Disposal), SWMU 0-015 (Active Firing Range), SWMU 0-025 (Tank Mesa "Landfill"), SWMU 0-026 (Gun Mount "Landfill"), and SWMU 0-035(a) (Surface Disposal). These SWMUs will not be added to the HSWA permit.

A Class III modification to remove SWMU 0-005 (Mortandad Canyon "Landfill") from the HSWA permit was also recommended in the Notice of Deficiency. A Class III modification to the HSWA permit will be initiated for SWMU 0-005.

3.0 Response to Comments in Notice of Deficiency

The EPA Notice of Deficiency addressed four items of concern in the list of deficiencies for the RFI Work Plan for OU 1071. The specific comments from the Notice of Deficiency and the responses are listed below. Section, page, and figure references are to the RFI Work Plan for OU 1071.

3.1 Comment and Response on OU 1071 RFI Sampling Plans

Comment: Figure 5-70. Screening and analysis of initial investigations at SWMU Group 19-1. - SWMU Group 19-1 (East Gate Laboratory) pp. 5-143 through 5-155 - All samples should be analyzed for semivolatile and TAL metals for sample locations 19-002, 19-001, and 19-003 rather than only analyzing 50% of the samples for these hazardous constituents.

Response: All samples from SWMU 19-001 (Septic System), SWMU 19-002 (Surface Disposal), and SWMU 19-003 (Drain line and Outfall) will be analyzed for TAL Metals and Semivolatile Organics (SW 8270). The revised sample table for SWMU Group 19-1 (East Gate Laboratory) (Figure 5-70) is found in Attachment B.

3.2 Comment and Response on No Further Action SWMUs

Comment: SWMU 0-024 (Cistern on Barranca Mesa) p. 6-3 - Provide documentation for Aldrich 1991 as to removal of contents of cistern.

Response: A personal communication record from the July 1991 interview with W. Clarence Courtright documents that expended munitions and gun components were removed from SWMU 0-024 (Cistern on Barranca Mesa) in 1965. A copy of the personal communication record is included as Attachment C.

Comment: Areas of Concern C-74-001 and C-73-004 - provide some documentation of removal of tanks and any testing for contamination.

Response: Areas of Concern C-73-001, C-73-002, C-73-003, and C-73-004 are the former locations of four aviation fuel underground storage tanks at the Los Alamos Airport (TA-73). The four tanks, owned and operated by Los Alamos Av-Gas, Inc.,

were removed in the summer of 1992. No evidence was found that the tanks leaked. The ground was free of contamination. Previously, in April and May 1992, an 8 feet diameter area contaminated by about 5 gallons of Av-gas from an above-ground leaking valve was remediated. See Attachment D.

Comment: Annex I - Table I-2 p I-7 through I-9 - Several RFI Phase reports are listed as being completed in 1995, it would be preferable if some of these reports were combined into one submittal rather than numerous submittals.

Response: Ten separate OU 1071 RFI Phase reports were scheduled for completion and submittal from January through December of calendar year 1995. The ten RFI Phase reports will be combined into no more than four documents to be submitted during that year. A revised schedule for OU 1071 RFI Phase reports showing the submittal dates (month/year), will be included in an addendum to the work plan that will be sent to the EPA by 1 March 1993.

ATTACHMENT A

Notice of Deficiency for RFI Work Plan for OU 1071



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

RECEIVED
OCT 16 1992
ES&H DIVISION - LAM

OCT 16 1992

Mr. Jerry L. Bellows
Area Manager
Department of Energy
Los Alamos Area Office
Los Alamos, New Mexico 87544

Re: RFI Work Plan for OU 1071
Los Alamos National Laboratory
NM0890010515

Dear Mr. Bellows:

The Environmental Protection Agency has completed a review of the RCRA Facility Investigation (RFI) Work Plan for the Operable Unit 1071 (OU 1071), and has found the work plan to be deficient. You have thirty (30) days from receipt of this letter to address the enclosed list of deficiencies.

Stylistically, the RFI Work Plan for OU 1071 has been more clearly written than the previous work plans reviewed.

As part of the ongoing RCRA Facility Assessment (RFA) conducted by LANL, the following Solid Waste Management Units (SWMUs) do not appear to require an RFI; therefore, the permit does not need to be modified to include them:

- SWMU 0-008 (North Mesa Disposal Area)
- SWMU 0-010 (Surface Disposal Area)
- SWMU 0-015 (Active Sportsmen's Club Firing Range)
- SWMU 0-025 (Tank Mesa "Landfill")
- SWMU 0-026 (Gun Mount "Landfill")
- SWMU 0-035(a) (Surface Disposal)



20002659

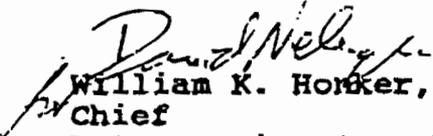
US D.C.E./LAAO



In addition, a Class III modification may be pursued to remove SWMU 0-005 (Mortandad Canyon "Landfill") from the permit.

Should you have any questions or require additional information, please contact Barbara Driscoll at (214) 655-6785.

Sincerely,


William K. Horner, P.E.
Chief
RCRA Permits Branch (6H-P)

Enclosure

cc: Benito Garcia, NMED
Al Tiedman, LANL

List of Deficiencies

Specific Comments

Figure 5-70. Screening and analysis of initial investigations at SWMU Group 19-1. - SWMU Group 19-1 (East Gate Laboratory) pp. 5-143 through 5-155 - All samples should be analyzed for Semivolatile and TAL Metals for Sample Locations 19-002, 19-001 and 19-003 rather than only analyzing 50 % of the samples for these hazardous constituents.

Chapter 6, SWMUs Proposed for No Further Action:

SWMU 0-024 (Cistern on Barranca Mesa) p. 6-3 - Provide the documentation for Aldrich 1991 as to removal of contents of the cistern.

Areas of Concern C-73-001 through C-73-004 - Provide some documentation of removal of tanks and any testing for contamination.

Annex I - Table I-2 p. I-7 through I-9 - Several RFI phase reports are listed as being completed in 1995, it would be preferable if some of these reports were combined into one submittal rather than numerous submittals.

ATTACHMENT B

Revised Sample Table (figure 5-70, OU 1071 RFI Work Plan) for SWMU Group 19-1

(East Gate Laboratory)

Sample Location	No. of Samples	Sample Description
19-002	8	Surface material from disposal area
19-002	6	Channel sediments from disposal area
19-001, 19-003	6	Channel sediments at outfalls
C-19-001	6	Channel sediments from mesa-top channels downslope of old laboratory
19-001	1	Septic tank sludge
19-001	2	Subsurface material beneath tank
19-001, 19-003	4	Subsurface material beneath drainlines
19	2	Field duplicates

Field Surveys	Field Screening (Level I)	Laboratory Analysis (Level III/IV)																								
		Site Survey/Mapping	Geophysical Survey (Level I)	Soil Gas Survey (Level III)	Gross Alpha, Beta, Gamma (Level I)	Lithologic Logging	Combustible Gas/Oxygen	Organic Vapor	Gross Alpha, Beta, Gamma	Gamma Spectrometry	³ H	Total U (²³⁴ U, ²³⁸ U)	²³⁸ Pu, ^{239/240} Pu	⁹⁰ Sr	¹³⁷ Cs	²⁴¹ Am	⁶⁰ Co	Volatile Organics (VOA) (SW 8240)	BTEX (SW 8020)	Semivolatile Organics (SVA) (SW 8270)	TPH(418.1)	Target Analyte List Metals	TCLP Metals	PCB and Pesticides (SW 8080)		
		Number of samples analyzed depends on results of field screening and/or field survey. * =50%, + =30%																								

ATTACHMENT C

Personal Communication Record:

Interview with W. Clarence Courtright, July 1991

PERSONAL COMMUNICATION

Interviewer: M. J. Aldrich *MAJ*

Date: 17 July 1991

Individual Interviewed: W. Clarence Courtright, HSE-DO

SUBJECT: SWMU 0-008 (Weather Hutment) and SWMU 0-024 (Cistern)

C. Courtright stated that the weather hutment (SWMU 0-008) was called "Point Weather" and was located out on Kwage Mesa either at the very end of the mesa or near the point of land where the canyon wall changes orientation from WNW to NS about 1.25 miles east of the rodeo grounds. He stated that no hazardous materials were ever used at the hutment.

C. Courtright was involved with the removal of expended munitions and gun components from a cistern (SWMU 0-024) on Barranca Mesa in 1965. He stated that the cistern was an unlined hole in the Bandelier Tuff and had a wood cover. Everything was removed from the cistern, and it was left in a clean condition. The cistern was located at the east end of Barranca Road just west of the deer trap trailhead. Courtright indicated that it is probably in Plat #102 on the east side of Barranca Road but may be on one of the adjacent plats.

ATTACHMENT D

Los Alamos Airport Underground Storage Tank Removal Documentation

RECEIVED - NOV 1 1999
Chp a

TO: Jim Aldrich Group EES-1 MS/D462

667-1495

From: Charles P. Richards HS-5 MS/k494

667-3133

Subject: TA-73 AVGAS TANK REMOVAL, EXCAVATION PERMIT #5689

I have attached a copy of my original statement on the above referenced Excavation Permit.

The spill described was the only release found during the removal of the 4 tanks. All of the tanks and the plumbing removed were in excellent condition and there were no releases by the contractor during the operation.

TA-73 OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 73 operations are currently limited to activities of the Los Alamos Airport which is operated by Johnson Controls Inc. under contract to the DOE. Private and commercial aircraft use the facility with limitations restricting the use by general aviation..

The elevation of TA-73 ranges between 6,600 feet asl and 7200 feet asl. The technical area lies at the northern boundry of Los Alamos National Laboratory. It includes the eastern edge of East Mesa and a mojour portion of DP Canyon.

Vegetation is in the Pinion-Juniper and Ponderosa Pine/Pinion-Juniper overstory vegetation zones. TA-73 soil consists of Hackroy sandy loam on the mesa top but the landing strip area has been brought to a level contour by filling and grading with tuff from construction areas and gravel from the Rio Grande Valley below the Mesa.

The potentiometric surface of the main aquifer in the area lies between 5,860 and 5,940 feet asl. Over 1,000 feet of unsaturated tuff and volcanic rock seperates the surface of the mesa from the underlying aquifer. Studies have shown that the potential for percolation of water from the surface is very low due to the hydraulic properties of the tuff and its very low moisture content (IT, 1987a).

To: Harley Lane

Los Alamos Gas Co.667-8617

From: Charles P. Richards HS-5

MSK494

667-3133

SUMMARY OF AVGAS UST REMOVAL FUEL RELEASE

A small volume, approximately 5 gal, of Avgas leaked from the piping connecting tanks and accumulated in the depression in the valve access hole, contaminating the unconsolidated tuff in a 2 to 3 foot diameter area. Approximately, an area 8 feet in diameter around the spill was excavated and placed in a spoils pile north of the dig.

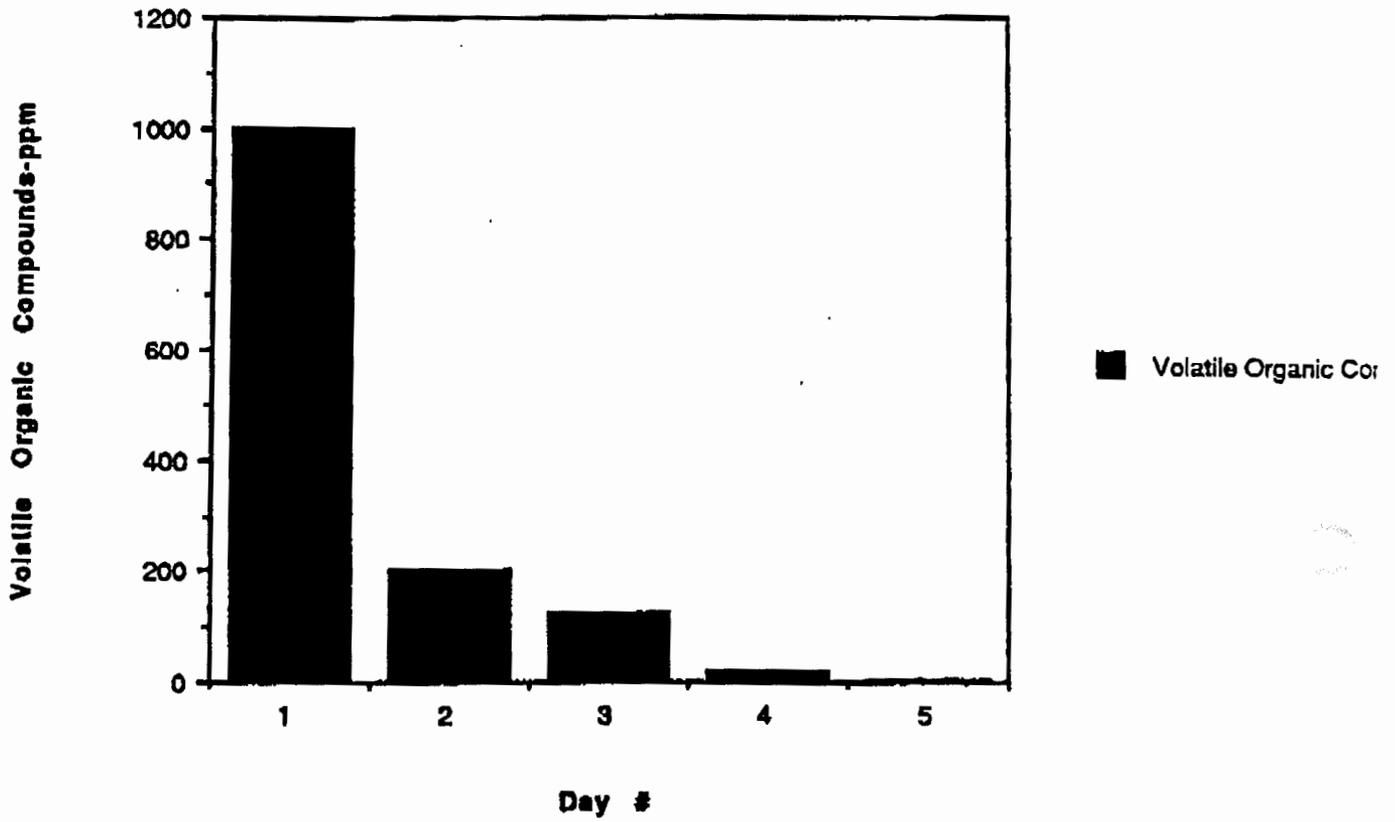
The pile of contaminated soils was about 8 cu. yds. in volume and measured 1000 ppm VOC's (PID) in the head space test. These results were confirmed by indicator tube results that showed 1000 ppm Aromatic Hydrocarbons.

Testing of the in-hole spill site after cleaning to consolidated Tuff indicated non detectable levels of VOC,s and Aromatic HC's. The Tuff was scraped clean and found to be un-fractured and well cemented.

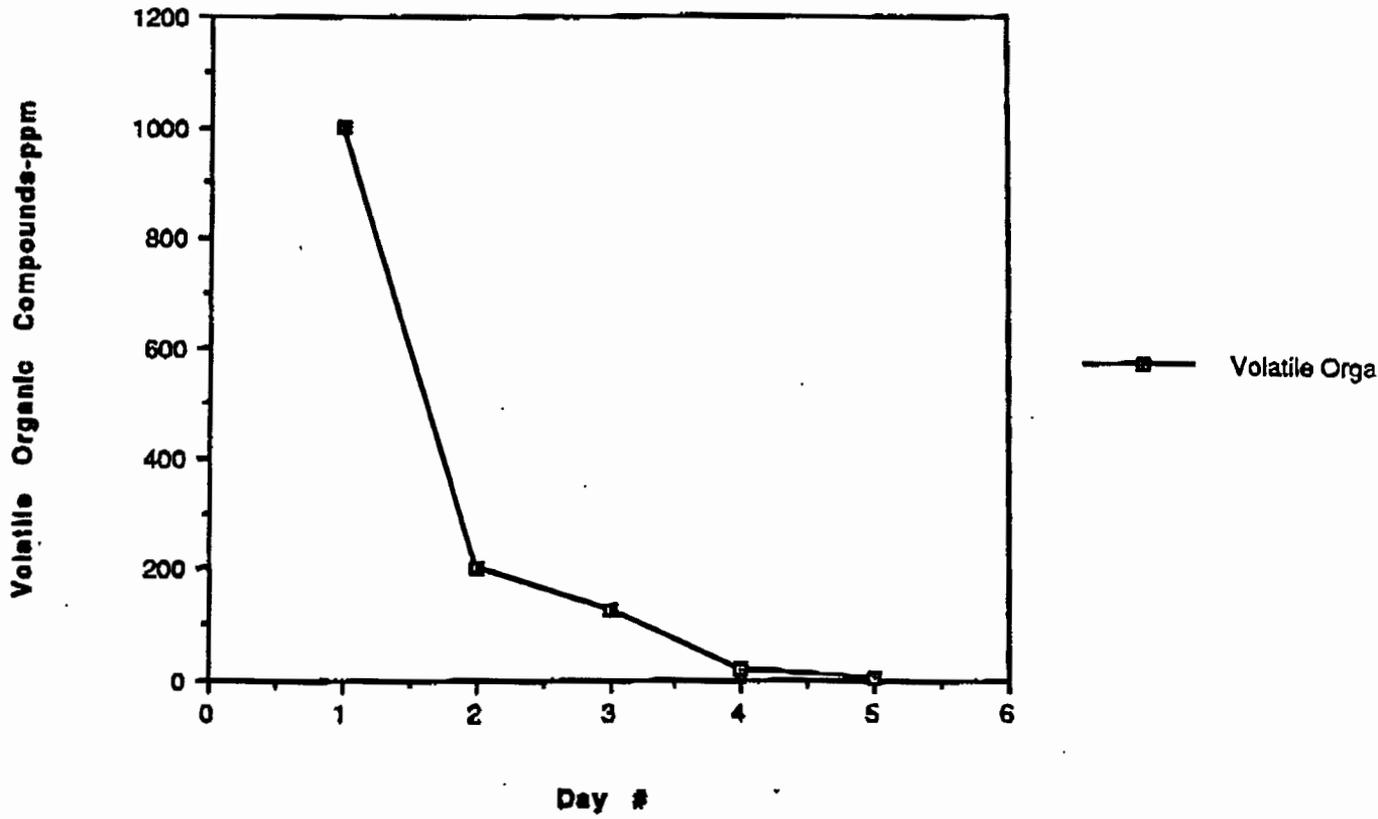
On monday, May 4, Head Space tests of the previously spread soils were negative with respect to VOC's and AHC's. This data is displayed in the attached bar graph.

This data and the attached geophysical information may be sufficient to enable you to complete your report to EID.

Data from "AVGAS SPILL TEST"



Data from "AVGAS SPILL TEST"



DRAINAGE

SERVICE

145'

104'

INDARY

PUMPS

GAS SHACK

SIDE WALK
HOSE REELS

47'

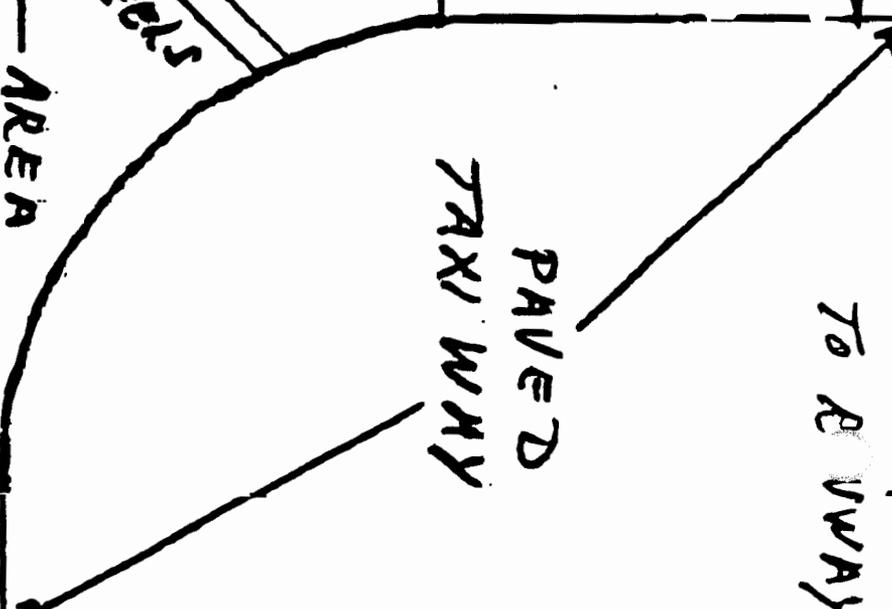
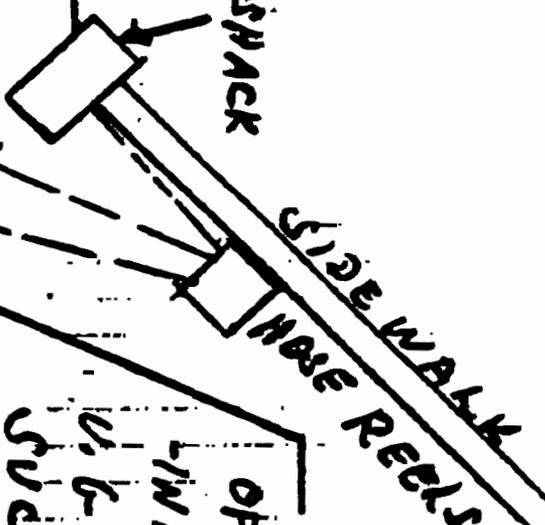
AREA OF SOIL CONTAMINATION AT U.G. VALVE IN SUCTIION LINE

PAVED TAXI WHY

TO R HWY

76'

IAEF





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JAN 6 1993

Jerry L. Bellows
Area Manager
Department of Energy
Los Alamos Area Office
Los Alamos, New Mexico 87544

Re: RFI Workplan for OU 1071
Los Alamos National Laboratory
NM0890010515

Dear Mr. Bellows:

The Environmental Protection Agency (EPA) hereby approves your RCRA Facility Investigation (RFI) Workplan for Operable Unit 1071 (OU 1071). The approved RFI Workplan consists of the RFI Workplan dated May 20, 1992, and the November 16, 1992 Notice of Deficiency Response.

You shall immediately initiate the implementation of this approved RFI Workplan, according to the schedule contained in the Workplan. If you have any questions, please contact Barbara Driscoll of my staff at (214) 655-6770.

Sincerely,

Jack Dinta

for Allyn M. Davis, Director
Hazardous Waste Management Division (6H)

cc: Kathleen Sisneros, NMED
Al Tiedman, LANL

1-21
Paul Jim RPF
rwv

Post-it [®] Fax Note	7671	Date	10.3.94	# of pages	4
To	Janet Harry	From	Jan Novak	Co.	225-1
Co/Dept.	EM/ED	Phone #	7-1637	Fax #	5-4747
					5-3285