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Start	Pg	Doc Type	Doc Date	Title	Box	Package
1		MEMO	9/24/1997	EXTERNAL REVIEW- VOLUNTARY CORRECTIVE ACTION COMPLETION REPORT FOR POTENTIAL RELEASE SITE (PRS) 53-001(A) (COVER MEMO)	184	
2		VCA COMPLETION REPORT	9/1/1997	VOLUNTARY CORRECTIVE ACTION COMPLETION REPORT FOR POTENTIAL RELEASE SITE 53-001(A) STORAGE AREA FIELD UNIT 2, SEPTEMBER 1997, LA-UR-97-X)00(	184	

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**Los Alamos**  
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**memorandum**

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Los Alamos, New Mexico 87545

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Date: September 24, 1997

**SUBJECT: EXTERNAL REVIEW - VOLUNTARY CORRECTIVE ACTION  
COMPLETION REPORT FOR POTENTIAL RELEASE SITE (PRS)  
53-001(a)**

The VCA completion report for PRS 53-001(a) is attached. Please review this document and return your comments to Nancy Riebe by September 26, 1997. (Comment resolution forms are attached.)

If you have any questions regarding the technical content of this report please contact Tyson Lanford at 661-5232.

TEG/nar

Attachments: (1) VCA Report  
(2) Comment resolution forms

**Distribution:**

Joe Mose, LAAO, MS A316, w/Attachments 1 and 2  
Dave Bradbury, EM/ER, MS M992, w/Attachments 1 and 2  
Pat Shanley, ESH-19, MS K498, w/Attachments 1 and 2  
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VCA File w/Attachment 1  
RPF, MS M707, w/Attachment 1  
EES-15 Files w/o Attachments

# Voluntary Corrective Action Completion Report for

Potential Release Site  
53-001(a)  
Storage Area

Field Unit 2

Environmental  
Restoration  
Project

September 1997

A Department of Energy  
Environmental Cleanup Program

**Los Alamos**  
NATIONAL LABORATORY

LA-UR-97-XXXX

Voluntary Corrective Action Completion Report

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**VOLUNTARY CORRECTIVE ACTION COMPLETION REPORT FOR  
POTENTIAL RELEASE SITES 53-001(a), STORAGE AREA**

**1.0 INTRODUCTION**

This voluntary corrective action (VCA) completion report addresses potential release site (PRS) 53-001(a), which is located in Technical Area (TA)-53 at Los Alamos National Laboratory (the Laboratory), Los Alamos, NM (Figure 1.0-1). This PRS is listed in Table A of the Hazardous and Solid Waste Amendments (HSWA) Module of the Laboratory's RCRA permit and is not on the list of Laboratory sites in or near a watercourse. PRS 53-001(a) has now been remediated.

PRS 53-001(a) is an active product storage area. The contaminated area associated with the site's previous function as a hazardous waste storage area is located directly east of the present concrete product storage pad. This concrete storage pad was constructed after the 1991 Tiger Team assessment (most likely in 1992) and has never been used to store hazardous waste. The covered concrete pad is approximately 8 ft by 24 ft with a perimeter 4 in. concrete curb. The pad is posted as "New, Used (non-PCB) Oil."

Prior to construction of the concrete pad, the site was used as a hazardous waste accumulation area. The area is estimated to have been in use since 1968, when operations at Building TA-53-2 began. A photograph of the area, dated 1989, shows a sign identifying the area as a satellite waste accumulation area.

Phase I RCRA Facility Investigation (RFI) sampling was conducted at this site in 1995. Based on the detection of a chemical of potential concern (COPC), aroclor 1260, at concentrations greater than the screening action level (SAL) and preliminary remediation goal (PRG) in the surface and subsurface soil, a cleanup of this site was recommended. The proposed corrective action for this PRS was to remove the contaminated soil and return the area to the original grade with clean fill material (ER Project 1996, 1324).

This site was selected for remediation because aroclor 1260 was detected in the soil adjacent to the product storage area at concentrations of concern and because the remedy was obvious (i.e., excavation and removal) and final. The VCA was conducted to eliminate contamination from this PRS that could be of concern for human health reasons.

**2.0 SITE CHARACTERIZATION PRIOR TO REMOVAL**

**2.1 Field Activities**

The initial Phase I RFI sampling was conducted in the summer of 1995. The objective of the Phase I sampling was to determine whether contamination was present from the storage area. The approved RFI Work Plan (LANL 1994, 1157) proposed the collection of four surface soil samples around the concrete pad. The initial sampling indicated that polychlorinated biphenyls (PCBs) were present in the soil near the storage area above the SAL of 1.0. Based on the results of this sampling, and in response to a Notice of Deficiency (NOD) from EPA Region 6, sample location 53-1054 was resampled in the summer of 1997 to include a surface sample (0-6 in) and two subsurface samples (24-36 in. and at the soil/tuff interface). Six additional surface soil samples were collected (1997 effort) down gradient from the storage area to further characterize the extent of the contamination (Figure 2.1-1). The sampling was designed to determine the vertical and horizontal extent of the contamination. A VCA plan was written to address the PCB contamination found at PRS 53-001(a) and was approved by DOE in the summer of 1997.

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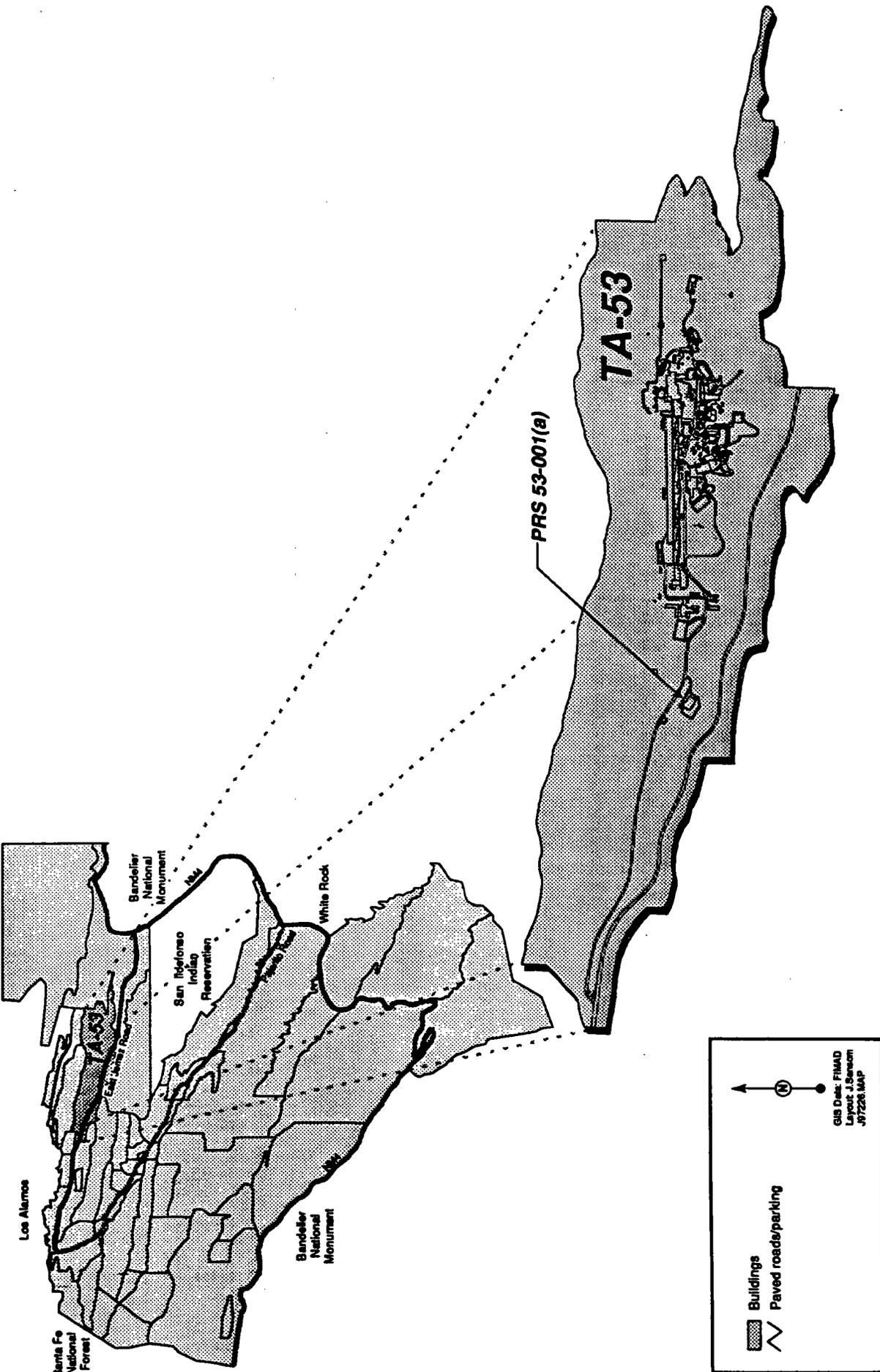
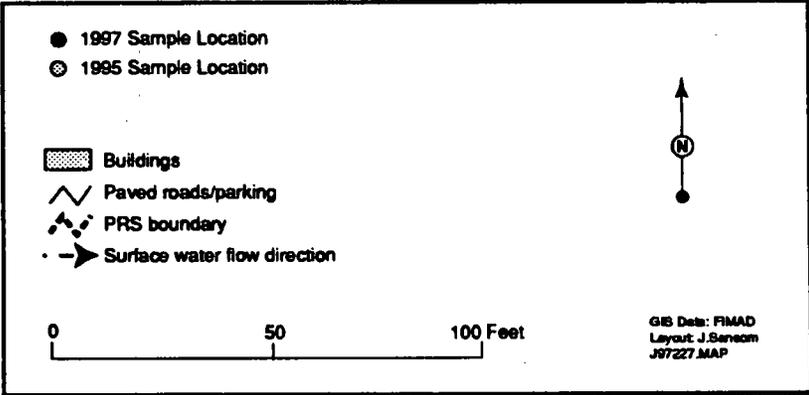
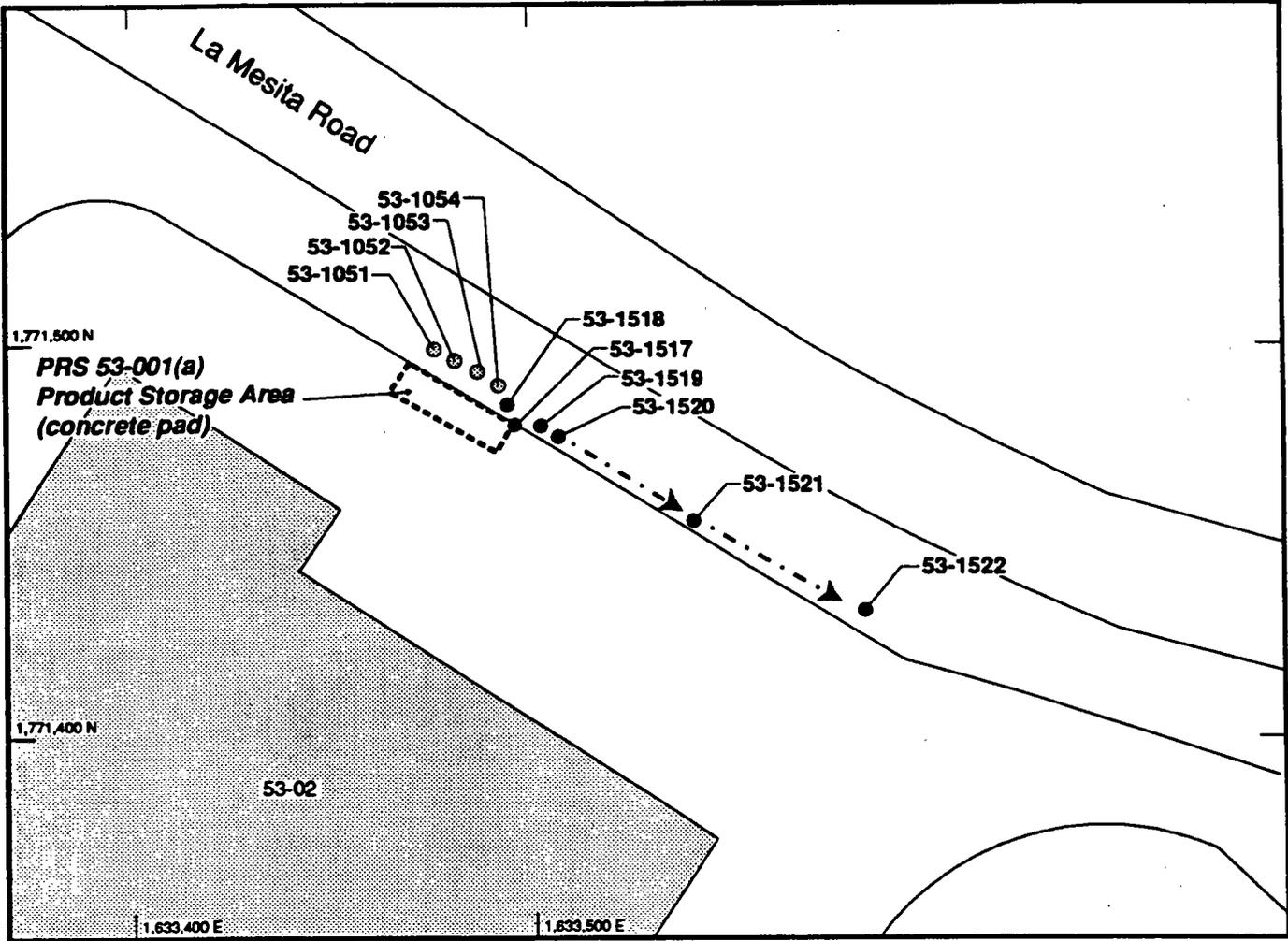


Figure 1.0-1 Site map of TA-53 and PRS 53-001(a)

M. W. WILSON & ASSOCIATES

PRS 53-001(a)



**Figure 2.1-1 Site map of Phase I sample locations**

The results of the 1995 and 1997 sampling (Figure 2.1-2) were presented in the VCA Plan and are summarized below.

- Two inorganics, copper and mercury, were detected at concentrations slightly above their respective background values of 15.5 mg/kg and 0.1 mg/kg. Copper was detected in one sample (0253-05-0004) at a concentration of 16.6 mg/kg, while mercury was detected in two samples (0253-95-0002 and 0253-95-0004) at concentrations of 0.16 mg/kg. All other inorganics were either undetected or detected at concentrations below their respective background upper tolerance limits (UTLs) and were eliminated from further evaluation.
- Copper and mercury were detected above background, but below their SALs of 2800 mg/kg and 23 mg/kg, respectively, and were submitted to the multiple chemical evaluation (MCE) to determine the potential risk of combined effects. The MCE for noncarcinogenic effects had a sum of maximum normalized concentrations of 0.02, which was below the target value of 1.0. As a result, copper and mercury were eliminated from further evaluation.
- Isotopic uranium was analyzed for in one sample (0253-95-0001). Uranium-234, uranium-235, and uranium-238 were detected below their respective background UTLs (1.94 pCi/g, 0.084 pCi/g, and 1.82 pCi/g) and were eliminated from further evaluation.
- The VOCs, trichloroethene and toluene, were detected in one sample (0253-95-0001). The concentrations detected of 0.022 mg/kg and 0.005 mg/kg were below their respective SALs of 3.2 mg/kg and 790 mg/kg. Toluene was submitted to the MCE for noncarcinogens mentioned above, which had a sum of maximum normalized concentrations of 0.02. As a result, toluene was eliminated from further evaluation. Trichloroethene was not submitted to the MCE because it was the only carcinogen detected below SAL. Therefore, it was eliminated from further evaluation because it was three orders of magnitude below its SAL.
- Aroclor-1260 was detected above the SAL of 1.0 in one surface soil sample (0253-95-0004) collected in 1995 and was retained as a COPC. In addition, two pesticides, endosulfan II and endrin aldehyde, were detected in the same sample. Concentrations for these organics were 0.1 mg/kg and 0.07 mg/kg, respectively. The endosulfan II and endrin aldehyde were below their respective SALs of 390 mg/kg and 20 mg/kg and were submitted to the MCE for noncarcinogens.
- The MCE for noncarcinogenic effects had a sum of maximum normalized concentrations of 0.02, which was below the target value of 1.0. As a result, endosulfan II and endrin aldehyde were eliminated from further evaluation.
- Samples collected in 1997, and analyzed for PCBs only, contained aroclor-1260 in all but one sample. The concentrations ranged from <0.04 mg/kg to 3.9 mg/kg. Two sample locations, one adjacent to the concrete pad and the other 10 ft from the storage area, had aroclor-1260 concentrations above the SAL of 1.0. The sample collected from 50 ft downgradient from the concrete pad had no detectable concentrations of PCBs.

Based on the Phase I sampling efforts and the risk-based screening assessments conducted at this PRS, aroclor-1260 was identified as a COPC.

## 2.2 Nature and Extent

The purpose of the initial Phase I sampling (1995) was to determine the presence or absence of contamination from the storage area at PRS 53-001(a). This sampling effort identified aroclor-1260 (a PCB) as the only COPC at the PRS. The additional Phase I sampling (1997) indicated that contamination, i.e., detection of aroclor-1260 in the surface soil, existed along the drainage course and in

PRS 53-001(a)

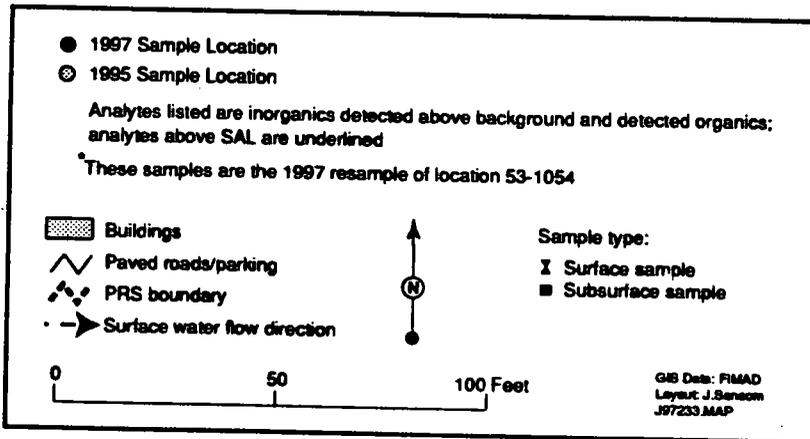
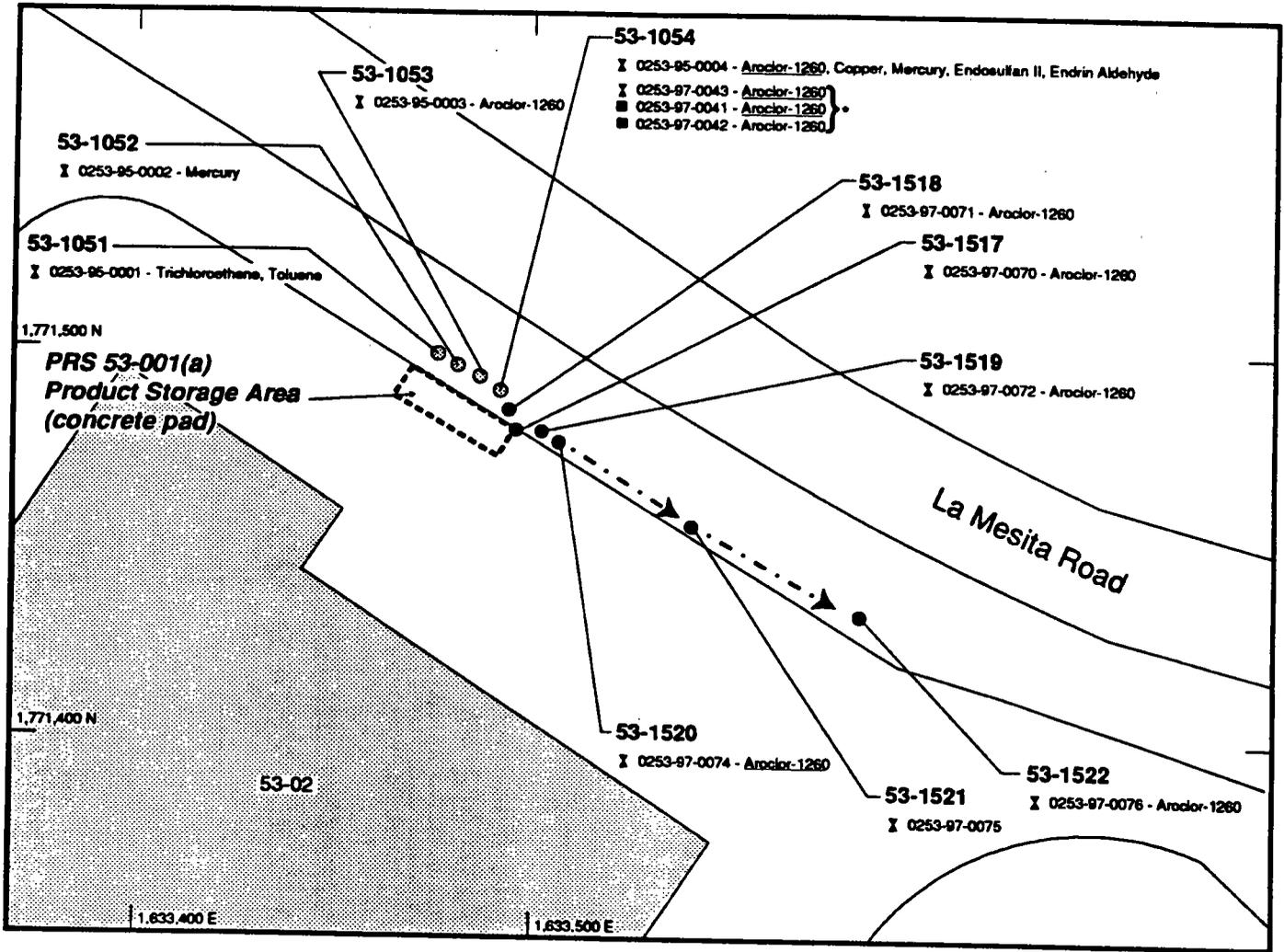


Figure 2.1-2 PRS 53-001(a), Site map of Phase I sample locations with detected analytes

some places at depth. The sampling detected aroclor-1260 in the surface soil at a concentration of 0.2 mg/kg approximately 5 ft north and upgradient from the concrete pad, but did not detect aroclor-1260 at a distance of 50 ft downgradient from the storage area. At 100 ft downgradient, aroclor-1260 was detected at a concentration approximately an order of magnitude below the PRG of 1.0 mg/kg. PCBs were not detected in the sample collected from beneath the concrete pad. On the basis of the results of the sampling, it was concluded that the PCB contamination was confined to area just east and north of the concrete pad and in the drainage at this PRS. Screening and confirmatory sampling during the VCA activities were used to determine whether the remedial activities were successful in removing the contamination from this area to below the PRG concentration.

### 2.3 Risk Calculations and/or Cleanup Level Derivation

PRS 53-001(a) lies within DOE-owned land and is removed from public access roads. The anticipated future land use is expected to be continued Laboratory operations (i.e., industrial land use).

The PRG for the COPC, aroclor-1260, retained at this site is presented in Table 2.3-1. The recommended PCB cleanup level of 1.0 mg/kg is presented in EPA's "Guidance on Remedial Actions for Superfund Sites with PCB Contamination" (EPA 1990, 1143) and corresponds to a cancer risk level of  $10^{-5}$ . With this approach, the residual risk remaining at the site following remediation should be within the acceptable risk range of  $10^{-4}$  to  $10^{-6}$  for carcinogens.

**TABLE 2.3-1  
PRG FOR PRS 53-001(a)**

COPCs	PRGs <sup>1</sup> (mg/kg)	Rationale
PCBs	1.0	Carcinogen; based on EPA guidance <sup>2</sup> and a risk of $10^{-5}$

<sup>1</sup> Based on an industrial scenario

<sup>2</sup> EPA 1990, 1143

Analytical results from the 1995 and 1997 Phase I sampling efforts indicated that the PCB, aroclor-1260, was the only COPC at this site. The cleanup objective was to remediate the area so that PCB concentrations were below 1.0 mg/kg and therefore within or below the risk range of  $10^{-5}$  to  $10^{-6}$ .

### 3.0 REMEDIAL ACTIVITIES AND RESULTS OF CONFIRMATORY SAMPLING

The remedial action for this PRS consisted of removing the contaminated soil from the area east of the product storage area. This was accomplished using shovels and a backhoe with a front-end loader. The contaminated soil was subsequently placed in B-25 containers.

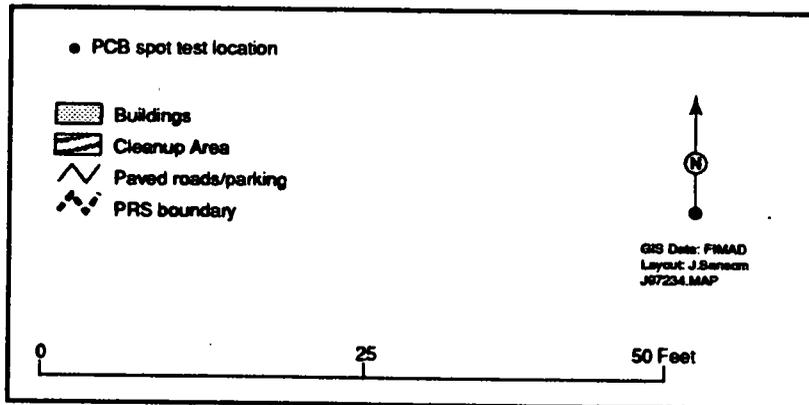
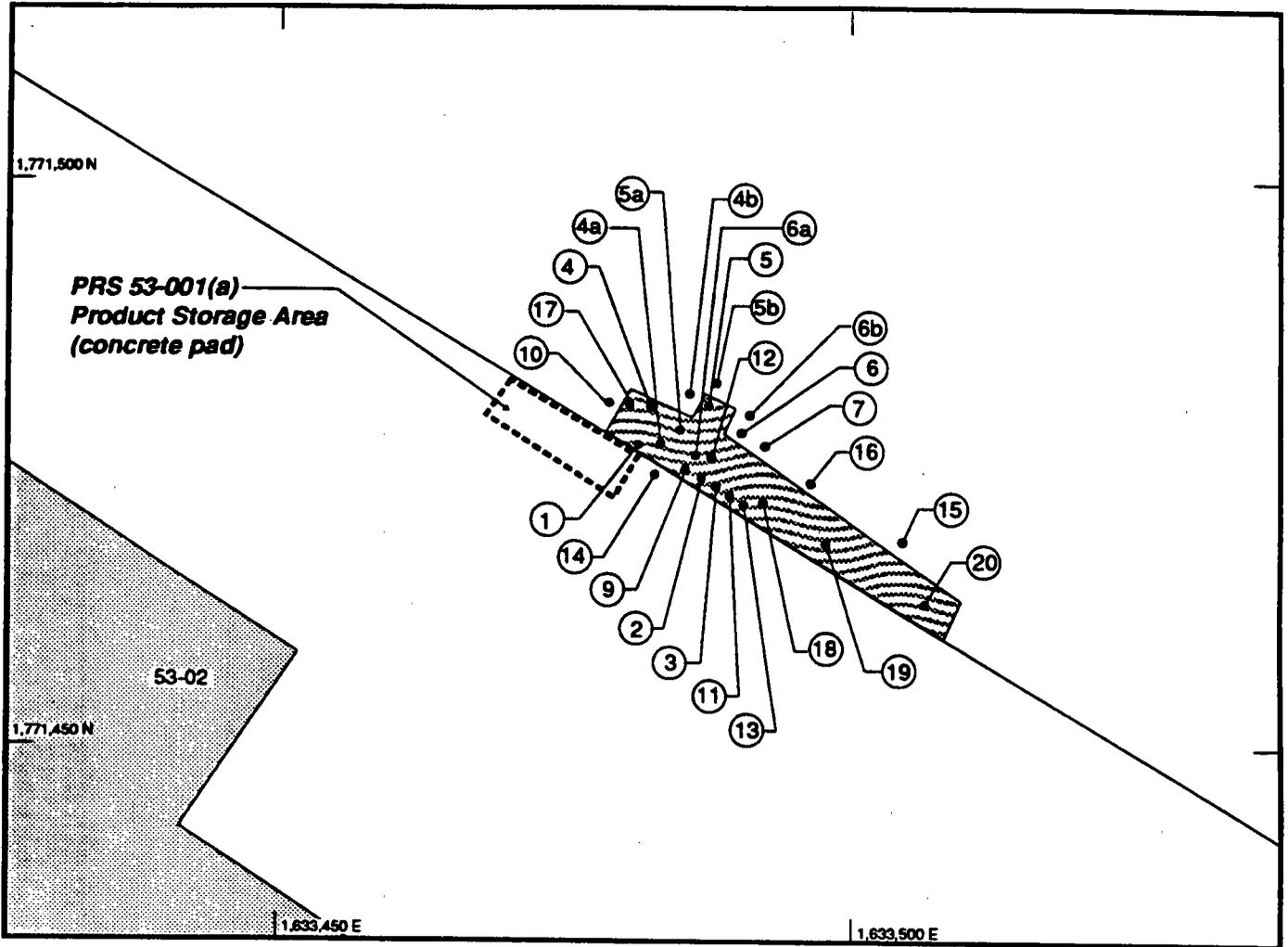
#### 3.1 Remedial Implementation

Field activities begin on September 3, 1997, with the excavation and removal of the contaminated soil identified in the 1995 and 1997 Phase I sampling. Excavation and removal of contaminated soil continued on September 4, 1997. Confirmatory samples were collected on September 5, 1997. Waste characterization sampling was conducted on September 10, 1997. Based on confirmatory sample analytical results, additional contaminated soil was excavated and removed, and additional confirmatory samples collected on September 17, 1997.

The maximum remediation area was identified from the Phase I sampling data and the physical boundaries of the site. The area was bounded in the east/west direction by two fixed laboratory sample results at sample locations 53-1518 and 53-1521 (Figure 2.1-2). The remediation area was bounded to



**PRS 53-001(a)**



**Figure 3.1-1 PRS 53-001(a), PCB spot test sample locations**

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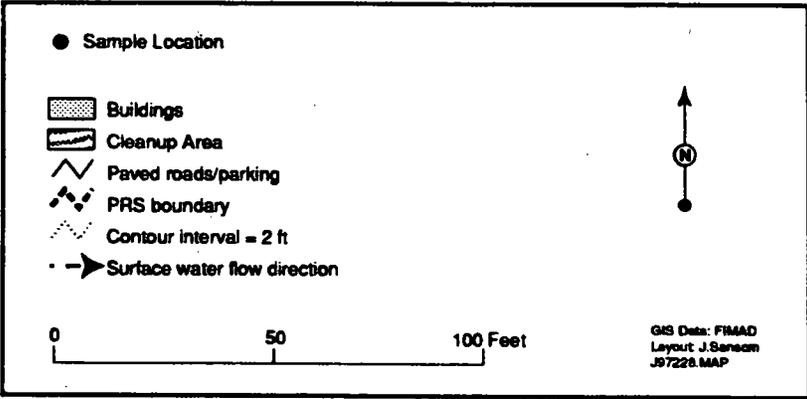
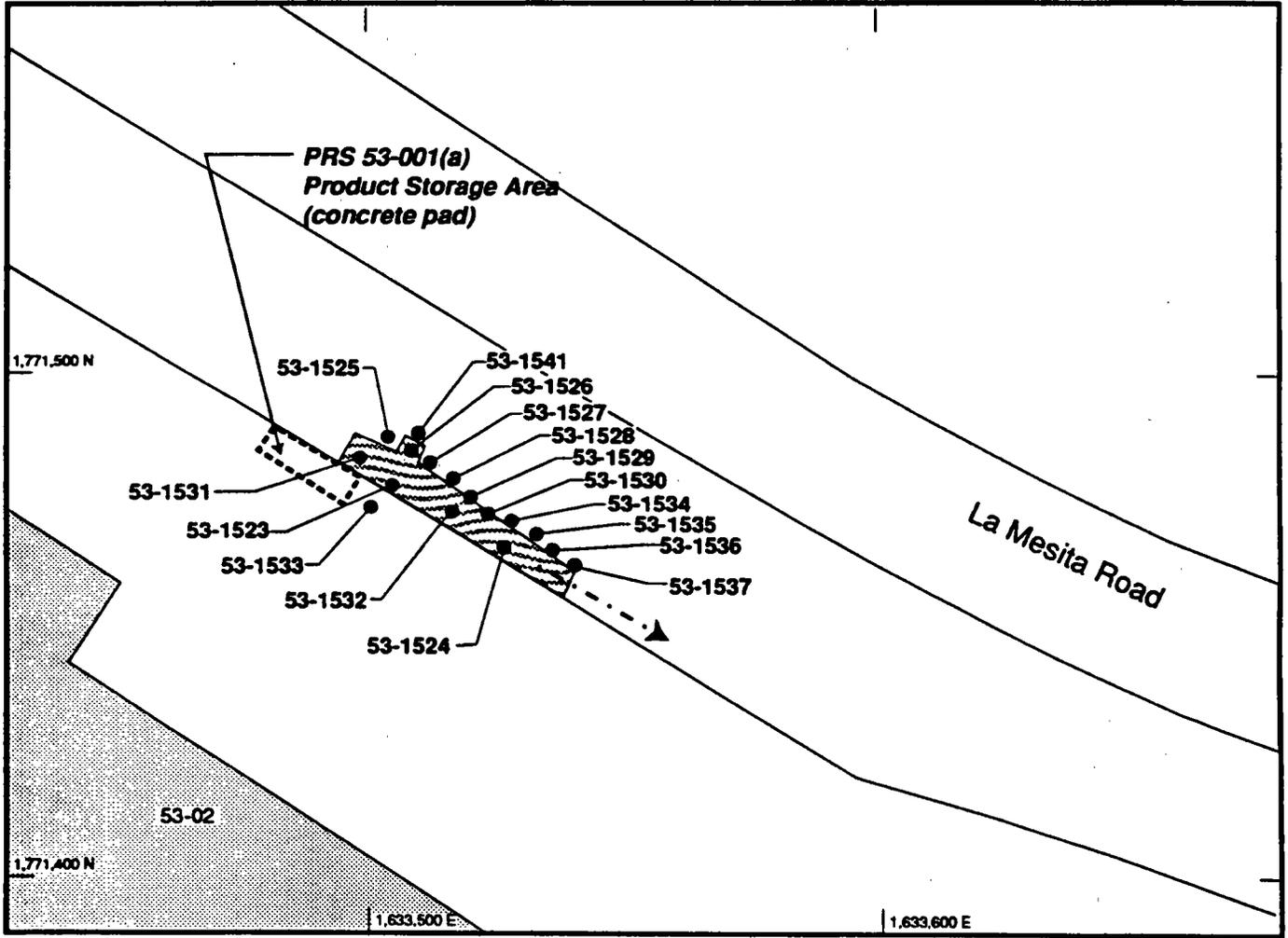


Figure 3.1-2 PRS 53-001(a), Site map of confirmatory sample locations

### 3.2.2 Sampling Results

The results from the soil sampling presented in this report are preliminary data from fixed laboratories. The data will be reevaluated once the final data packages are received. If there are any changes in the results presented in this report, these will be addressed in an addendum to the VCA Completion Report.

Confirmatory samples were collected from sixteen sample locations at the PRS. Seventeen samples of surface soil (0-6 in) were collected following the removal of the contaminated soil. Six other samples were collected from the tuff at several depths following the removal of the contaminated soil. All of the samples were analyzed for PCBs. The analytical results for the soil samples are presented in Appendix D and the detected analytes at each sample location are presented on Figure 3.2-1. The results are summarized below.

- Following soil removal, concentrations of aroclor-1260 in the surface soil within the cleanup area ranged from undetected (<0.04 mg/kg) to 0.1 mg/kg (Table 3.2-1 and Figure 3.2-1). These concentrations are below the industrial PRG of 1.0 and represent an estimated cancer risk range of  $10^{-6}$  to  $10^{-7}$ . The subsurface soil from 3-6 ft deep at two sample locations had no PCB detections. All other aroclors were undetected in the surface soil.
- The soil samples collected from underneath the asphalt pavement (0253-97-0092 and 0253-97-0093) had no detections of aroclor-1260 (<0.04 mg/kg) at depths of 4-10 inches and 12-18 inches (Table 3.2-1 and Figure 3.2-1).
- Following initial soil removal, confirmatory samples were collected approximately every 5 ft adjacent to the cleanup area (2-2.5 ft upgradient) to a distance of 50 ft downgradient from the concrete pad (Table 3.2-1 and Figure 3.2-1). All of the sample results indicated that aroclors were undetected (<0.04 mg/kg) in the unremediated surface soil, except for one sample location (53-1526, sample ID 0253-97-0080). This sample had a detected concentration of aroclor-1260 of 2.1 mg/kg, which is above the industrial PRG of 1.0 (Table 3.2-1 and Figure 3.2-1). A field duplicate of this sample (0253-97-0085) yielded an aroclor-1260 concentration of 0.06 mg/kg. Because of the high concentration detected in sample 0253-97-0080, additional soil removal was undertaken at this sample location.
- The results of the confirmatory samples collected following the additional soil removal showed aroclor-1260 at a concentration of 0.09 mg/kg in the soil from within the remediated area (0253-97-0111) and 0.1 mg/kg from an area approximately 2-3 ft upgradient from the remediated area (0253-97-0112) (Table 3.2-1 and Figure 3.2-1). These concentrations were below the SAL/industrial PRG of 1.0 and corresponded to an estimated cancer risk of  $10^{-6}$ . This cancer risk is at the lower end of the target risk range and does not represent an unacceptable risk to human health.

There were no PCBs detected at this PRS above either SAL or industrial PRG following final removal of the contaminated soil. The COPC identified in the Phase I investigation, aroclor-1260 remaining in the soil, was detected at concentrations that did not pose an unacceptable risk to human health (i.e., estimated cancer risk levels of  $10^{-6}$  to  $10^{-7}$ ) following remediation. These risk levels are at the lower end of or below EPA's cancer risk range of  $10^{-4}$  to  $10^{-6}$  (EPA 1990, 0559). The previous Phase I sampling found no other chemicals at concentrations above SALs. Therefore, based on the results of the confirmatory sampling, the remedial activities at PRS 53-001(a) were successful in reducing the levels of aroclor-1260 to below the risk-based cleanup value of 1.0. The remediation also addressed any surface water issues because the contaminated soil in and around the drainage from the storage area was remediated. Because no subsurface contamination remained following the soil removal, there are no groundwater-related issues at this PRS. Therefore, PRS 53-001(a) is recommended for no further action (NFA) based on the results of the VCA activities. The PRS has been successfully remediated, the site has been regraded, and best management practices (BMPs) in the form of hay bales have been put in place to control run-on and runoff from the site.

PRS 53-001(a)

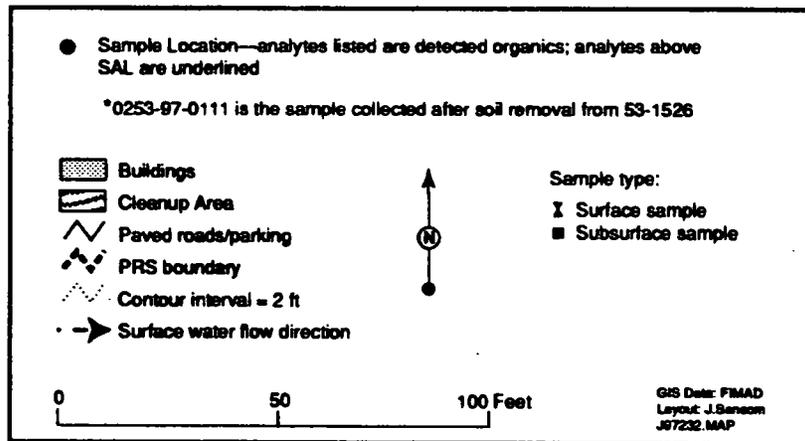
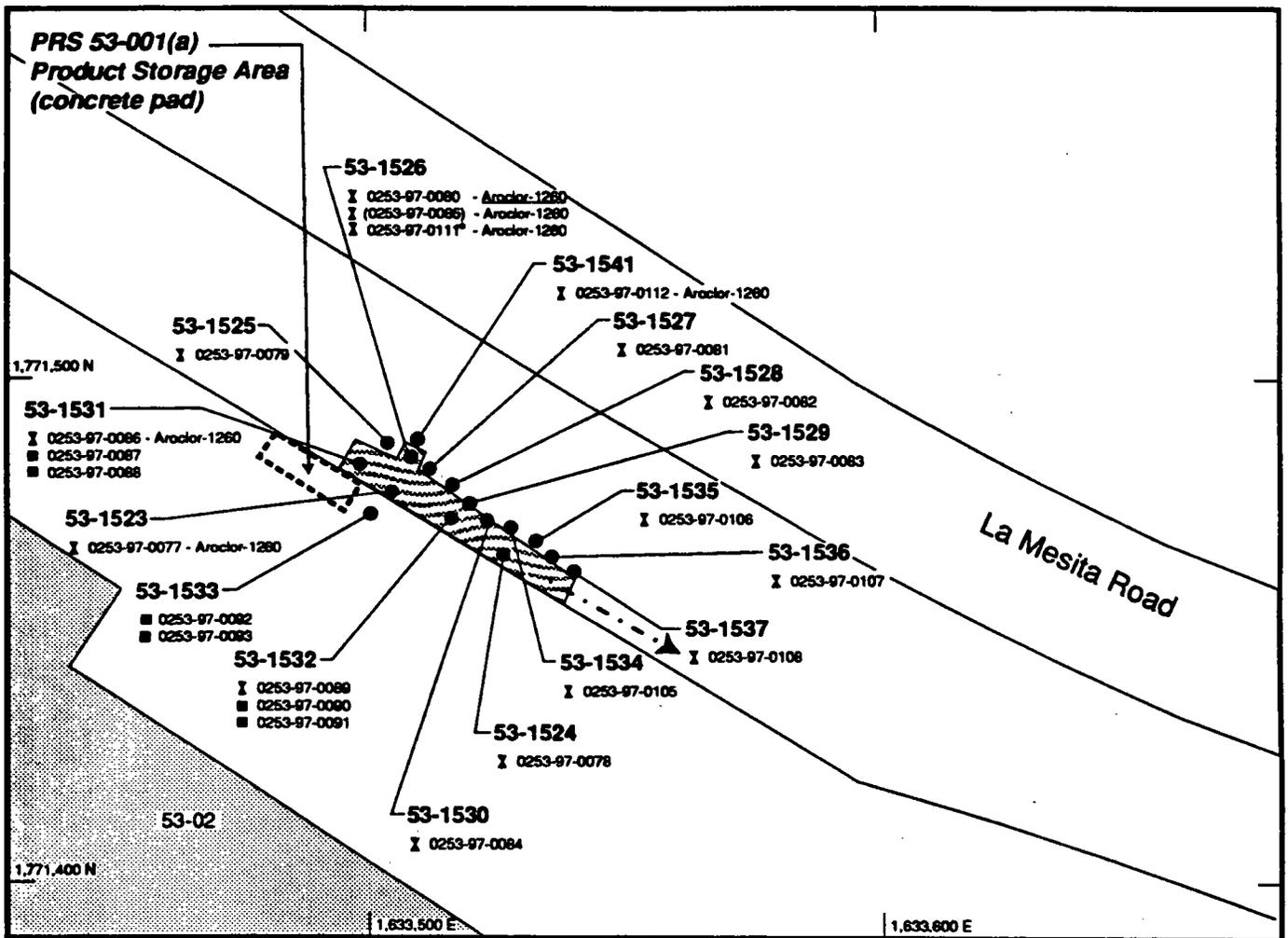


Figure 3.2-1 PRS 53-001(a), Site map of confirmatory sample locations with detected analytes

**TABLE 3.2-1  
PCBs DETECTED IN THE CONFIRMATORY SAMPLES AT PRS 53-001(a)**

Sample ID	Location ID	Depth (ft)	Aroclor-1260 (mg/kg)
SAL/Industrial PRG	N/A <sup>a</sup>	N/A <sup>a</sup>	1.0
EQL	N/A <sup>a</sup>	N/A <sup>a</sup>	0.04
0253-97-0077	53-1523	0-6	0.1
0253-97-0078	53-1524	0-6	0.04(U)
0253-97-0079	53-1525	0-6	0.03(U)
0253-97-0080	53-1526	0-6	2.1
0253-97-0081	53-1527	0-6	0.04(U)
0253-97-0082	53-1528	0-6	0.04(U)
0253-97-0083	53-1529	0-6	0.04(U)
0253-97-0084	53-1530	0-6	0.04(U)
0253-97-0085 <sup>b</sup>	53-1526	0-6	0.06
0253-97-0086	53-1531	0-6	0.07
0253-97-0087	53-1531	30-36	0.04(U)
0253-97-0088	53-1531	66-72	0.04(U)
0253-97-0089	53-1532	0-6	0.04(U)
0253-97-0090	53-1532	30-36	0.04(U)
0253-97-0091	53-1532	66-72	0.04(U)
0253-97-0092	53-1533	4-10	0.04(U)
0253-97-0093	53-1533	12-18	0.04(U)
0253-97-0105	53-1534	0-6	0.04(U)
0253-97-0106	53-1535	0-6	0.04(U)
0253-97-0107	53-1536	0-6	0.04(U)
0253-97-0108	53-1537	0-6	0.04(U)
0253-97-0111	53-1526	0-6	0.09
0253-97-0112	53-1541	0-6	0.1

<sup>a</sup> Not applicable

<sup>b</sup> Sample 0253-97-0085 is a field duplicate of 0253-97-0080

#### 4.0 WASTE MANAGEMENT

##### 4.1 Waste Types, Volumes, and Disposition

Wastes generated during the VCA are shown in Table 4.1-1.

**TABLE 4.1-1  
WASTE TYPES AND VOLUMES**

ITEM	WASTE TYPE	VOLUME
PPE	Solid, nonrad/nonhaz	1 55-gal. drum
Contaminated soil	Solid, PCB	4 55-gal. drums and 4 B-25s
Contaminated liquid - (decon liquids)	liquid, PCB	1 55-gal. drum

The volume of PPE generated during this VCA was approximately one 55-gallon drum. The PPE was visually inspected and radiologically screened. The PPE was deemed nonradioactive and nonhazardous based on the visual inspection and the radiological screening procedure.

The contaminated soil from adjacent to the storage area was removed from the site and placed in B-25 containers and 55-gallon drums as part of the VCA. Approximately 12 cubic yards of material was removed from the site. During the placement of soil into the B-25 containers, a portion of the excavated soil in each backhoe bucket removed from the site was placed in a stainless-steel bowl, so that when the container was full a representative composite sample of the contents of the container existed. The contents of the bowl were homogenized by hand with a stainless-steel spoon. The bowl containing the sample was placed in that B-25 container for later waste characterization analysis. The waste was sampled for toxicity characteristic leaching procedure (TCLP) metals, SVOCs, VOCs, PCBs, organic pesticides, and by gamma spectroscopy to determine if the waste will meet the waste acceptance criteria for TA-54.

The contaminated liquids were generated as a result of decontamination procedures. The contaminated liquids were placed in a 55-gallon drum. The liquid waste was not sampled and will be classified based on the soil waste sample analysis results.

The waste is currently stored onsite pending final disposition. The PPE waste is classified as nonradioactive and nonhazardous waste. The contaminated soil and liquid waste is currently classified as Toxic Substances Control Act (TSCA) PCB waste.

#### **4.2 Waste Characterization Data**

The results of the laboratory analyses on the waste soil generated during the VCA activities are not yet available. The samples collected from the waste containers will be used for the purpose of waste disposition and not used to determine whether the VCA activities were effective in successfully remediating the PRS. The success of the remedial activities was discussed in Section 3.2.

The waste characterization data will be evaluated once the final data packages are received. A summary of the data quality assessment and the analytical results will be included as an addendum to this VCA Completion Report.

## REFERENCE LIST

EPA (US Environmental Protection Agency), March 8, 1990. "National Oil and Hazardous Substances Pollution Contingency Plan," Final Rule, 40 CFR Part 300, Federal Register, Vol. 55, No. 46, p. 8666. (EPA 1990, 0559)

EPA (US Environmental Protection Agency), August 1990. "Guidance on Remedial Actions for Superfund Sites with PCB Contamination," EPA540/G-90/007, Office of Emergency and Remedial Response, Washington, DC. (EPA 1990, 1143)

EPA (US Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," EPA540/R-94/012, Washington, DC. (EPA 1994, 1205)

Environmental Restoration Project, March 1996. "RFI Report for Potential Release Sites at TA's-20, -53, and -72 (located in former Operable Unit 1100), Field Unit 2," Los Alamos National Laboratory Report LA-UR-96-906, ER ID No. 54466, Los Alamos, New Mexico. (Environmental Restoration Project 1996, 1324)

LANL (Los Alamos National Laboratory), May 1994. "RFI Work Plan for Operable Unit 1100," Los Alamos National Laboratory Report LA-UR-94-1097, Los Alamos, New Mexico. (LANL 1994, 1157)

LANL (Los Alamos National Laboratory), March 1996. "Quality Assurance Project Plan Requirements for Sampling and Analysis," Los Alamos National Laboratory Report LA-UR-96-441, ER ID No. 53450, Los Alamos, New Mexico. (LANL 1996, 1292)

## APPENDIX A

No QA/QC issues were identified during the preliminary data quality assessment for the confirmatory sample data collected at this PRS.

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**APPENDIX B  
RFI ANALYTICAL RESULTS**

The data from the RFI Phase I investigation have been edited and validated. These data are available via the Facility Information Management and Display (FIMAD) database and will be provided upon request.

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**APPENDIX C  
BEFORE AND AFTER COST COMPARISON**

The estimated costs of this VCA are compared with the actual costs through August 1997 in Table C-1.

**TABLE C-1**

<b>Activity</b>	<b>Budget Cost</b>	<b>Actual Cost</b>
Pre-Field Activities	3,500	
Field Work	17,000	
Waste Management/Disposal	25,000	
Laboratory Analyses	10,000	
Post-Field Activities	2,500	
<b>Total Cost</b>	<b>\$58,000</b>	<b>\$5,000*</b>

\* This VCA was conducted in late August and early September; therefore very little of the costs were accrued in this reporting period.

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**APPENDIX D  
CONFIRMATORY SAMPLING RESULTS**

The data provided in this section is preliminary data from the quick-turnaround laboratory analyses. As such, these data have not undergone baseline validation and are not yet available in the FIMAD database. While the analytical results are not expected to change, this data will be reevaluated upon receipt of the final data packages. Once the data has been uploaded into the FIMAD database, a printout will be provided and inserted into the report in place of the preliminary data.

**TABLE D-1  
PCB SCREENING RESULTS**

<b>Sample No.</b>	<b>% diff.</b>	<b>PCB (ppm)</b>
1*	High	>25
2*	17%	0.5 - 1.0
3*	54%	4.1 - 15
4*	28%	1.1 - 4.0
4A	5%	<0.5
4B	7%	<0.5
5*	45%	4.1 - 15
5A	1%	<0.5
5B	20%	0.5 - 1.0
6*	30%	1.1 - 4.0
6A	3%	<0.5
6B	Low	<0.5
7*	24%	1.1 - 4.0
7A	<0	<0.5
8*	12%	0.5 - 1.0
9	54%	4.1 - 15
10	Low	<0.5
11	22%	1.1 - 4.0
12	31%	1.1 - 4.0
13	25%	1.1 - 4.0
14	Low	<0.5
5-2 (@ 2 ft)	11%	0.5 - 1.0

\*Indicates readings with old-style meter.

**APPENDIX E  
CERTIFICATE OF COMPLETION**

I certify that all the work pertaining to the voluntary corrective action PRS 53-001(a) has been completed in accordance with the Department of Energy approved VCA plan entitled VCA Plan for Potential Release Site 53-001(a), Storage Area. Based on my personal involvement or inquiry of the person or persons who managed this cleanup, a review of all data gathered and a visit to the site, to the best of my knowledge and belief, all criteria of the plan have been met or exceeded. I believe that the completion of this VCA is protective of both human health and the environment. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

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Field Unit 2, Field Project Leader  
Environmental Restoration Project  
Los Alamos National Laboratory

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Date Signed

LA-UNCLASSIFIED

**VOLUNTARY CORRECTIVE ACTION (VCA) COMPLETION REPORT  
APPROVAL/DISAPPROVAL FORM**

PRS(s) 53-001(a)

The undersigned have reviewed the VCA Completion Report and believe that the intent and goals of the VCA plan have been met.

FPL \_\_\_\_\_

Date \_\_\_\_\_

FPC \_\_\_\_\_

Date \_\_\_\_\_

I Theodore J. Taylor, DOE-LAAO, **APPROVE** \_\_\_\_\_, **DISAPPROVE** \_\_\_\_\_ the accompanying Voluntary Correction Report for PRS(s) 53-001(a), TA- 53.

The following reasons reflect the decision for disapproval:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signed: \_\_\_\_\_

Date \_\_\_\_\_

53-001(a)