Los Alamos Environmental Restoration Records Processing Facility

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Los Alamos National Laboratory

UNIVERSITY OF CALIFORNIA

Environmental Restoration Project
MS M992
Los Alamos, New Mexico 87545
505-667-0808/FAX 505-665-4747

Date: September 30, 1996
Refer to: EM/ER:96-519

Mr. Ted Taylor
Los Alamos Area Office
U.S. Department of Energy, MS A316
Los Alamos, NM 87544

SUBJECT: NON-HSWA UNITS PROPOSED FOR NFA

Dear Ted:

The Los Alamos National Laboratory Environmental Restoration (ER) Project has successfully investigated and recommends an additional 84 sites for no further action (NFA) within the Resource Conservation and Recovery Act facility investigation (RFI) work plans and RFI reports. While these sites are not listed in the Hazardous and Solid Waste Amendments (HSWA) Module VIII of the Laboratory's RCRA hazardous waste facility permit, they received as much consideration and evaluation as HSWA units to determine NFA.

After reviewing RFI work plans and RFI reports submitted by the ER Project, the Environmental Protection Agency has reviewed potential release sites (PRSs) that do not warrant further investigation and need not be added to the permit. The removal of these 84 units is a result of both field and archival investigations, as well as site cleanups, performed by the Laboratory. Each of these sites has been reviewed by the Department of Energy, Los Alamos Area Office staff prior to submitting the proposal for NFA in work plans or RFI reports to EPA.

Enclosed please find 2 copies of the request for the 84 non-HSWA units proposed for NFA.

This deliverable, along with the supporting documentation within your staff's possession, contains sufficient information to justify and receive acceptance from the U.S. Department of Energy and other stakeholders for the removal of 84 PRSs from further consideration by the ER Project. Additional Records pertaining to this request are kept on file at the ER Project's Record Processing Facility.

If you have any further questions regarding the permit modification, please contact Dave McInroy at 665-0819.

Sincerely,

Jorg Jansen
Program Manager

JJ:el

Enclosure: Request for Non-HSWA Units Proposed for NFA (2 copies)

Cy (w/enc.):
G. Allen, CST-18, MS E525
G. Gould, ESA-4, MS G787
D. Griswold, AL-ERD, MS A906
J. Harry, EES-5, MS M992
B. Hoditschek, NMED-HRMB
B. Koch, LAAO, MS A316
D. Krier, EES-1, MS D462
M. Leavitt, NMED-GWQB
D. McInroy, EM/ER, MS M992
R. Michelotti, CST-18, MS E525
N. Naraine, DOE-HQ, EM-453
D. Neleigh, EPA, R.6, 6PD-N (2 copies)
J. Platt, NMED-SWQB
A. Pratt, EES-13, MS J521
C. Rodriguez, EM/ER, MS A117
P. Shanley, ESH-19, MS M992
N. Weber, NMED-AIP, MS J993
J. White, ESH-19, MS K490
S. Yanicak, NMED-AIP, MS J993
RPF, MS M707

Cy (w/o enc.):
T. Baca, EM, MS J591
M. Boettner, EM/ER, MS M992
R. Bohn, EM/ER, MS M992
T. Glatzmaier, DDEES/ER, MS M992
J. Levings, AL-ERD, MS A906
D. McInroy, EM/ER, MS M992
W. Spurgeon, DOE-HQ, EM-453
J. Vozella, LAAO, MS A316
K. Zamora, LAAO, MS A316
EM/ER File, MS M992

Request for Non-HSWA Units Proposed for NFA

September 1996

A Department of Energy
Environmental Cleanup
Program

Los Alamos
NATIONAL LABORATORY

LA-UR-96-3398

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ACRONYMS AND ABBREVIATIONS

ACRONYMS AND ABBREVIATIONS

Some of the acronyms and abbreviations included in the following list require further definitions. In those cases, the definitions are included in parentheses.

AOC	Area of concern (A site that potentially contains hazardous substances, such as radionuclides, but no hazardous constituents defined by the Resource Conservation and Recovery Act.)
CEARP	Comprehensive Environmental Assessment and Response Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CMP	Corrugated metal pipe
COC	Contaminant of concern (Any constituent present in environmental media or on structural debris at a concentration that may present a risk to human health or the environment.)
CST-7	Waste Management Group (now CST-5)
D&D	Decontamination and decommissioning (Decontamination: The removal of unwanted material (especially radioactive material) from the surface of or from within another material. Decommissioning: The permanent removal from service of surface or subsurface facilities and components necessary for preclosure activities only, after facility closure, in accordance with regulatory requirements and environmental policies.)
DA	Deferred action (Postponement of selection and implementation of corrective measures until a future date, usually following decommissioning of an active site.)
DDT	Dichloro diphenyl trichloroethane (a pesticide)
DOE	US Department of Energy
EM	Environmental Management (Division)
EM-7	Waste Management Group (now CST-5)
EM-8	Environmental Protection Group (now ESH-19)
ENG	Facilities Engineering Division
EPA	US Environmental Protection Agency
ER	Environmental restoration (A term used to describe cleanup of federal facility lands according to a process laid out in RCRA. "Restoration" does not necessarily imply cleaning up a site to its original or pristine condition; rather, it denotes cleaning up a site to a level suitable for the site's future intended use. In some cases [sites identified as needing no further action], the site is considered restored without any cleanup.)

HE	High explosive
HSE	Health, Safety, and Environment (Division) (now ESH Division)
HSE-5	Industrial Hygiene Group (now ESH-5)
HSE-7	Waste Management Group (now CST-5)
HSE-9	Environmental Chemistry Group (now CST-3)
HSWA	Hazardous and Solid Waste Amendments of 1984
IA	Interim Action
IWP	Installation work plan (A master plan for the ER Project that is updated annually. It contains information mandated in the Laboratory's permit to operate under RCRA, including several plans, one of which is a public involvement plan. Required information that applies projectwide is provided in this document so that it will not need to be repeated in each of several documents prepared for the project.)
JCI	Johnson Controls World Services Inc.
LANL	Los Alamos National Laboratory
LANSCE	Los Alamos Neutron Scattering Center
LASCP	Los Alamos Site Characterization Program
LASL	Los Alamos Scientific Laboratory
MDA	Material disposal area (An area used any time between the beginning of Laboratory operations in the early 1940s and the present for disposing of potential chemically and/or radioactively contaminated materials.)
MSDS	Material Safety Data Sheet
NFA	No further action (A decision that no further investigation or remediation is warranted for a PRS, based on risk levels for residential use, recreational use, or industrial use.)
NMED	New Mexico Environment Department
NOD	Notice of deficiency (A notice issued to DOE and the Laboratory by EPA or NMED stating that some aspect(s) of a plan or report does not meet regulatory requirements. The ER Project must then propose a solution acceptable to the regulator before the plan or report will be approved.)
NPDES	National pollutant discharge elimination system
NTS	Nevada Test Site

OU	Operable unit (An operable unit may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site.)
PAH	Polyaromatic hydrocarbon
PCB	Polychlorinated biphenyl
PRS	Potential release site (A site suspected of releasing contaminants into the environment. The ER Project has responsibility for investigating and, if necessary, cleaning up such sites on and around the Laboratory site. PRS is a generic term that includes SWMUs [hazardous waste sites listed in the HSWA Module] and sites that have been identified as potentially contaminated by radioactivity.)
PVC	Polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
RFA	RCRA facility assessment (The first step in the RCRA corrective action process, generally equivalent to the preliminary assessment/site investigation taken under Superfund Amendments and Reauthorization Act of 1986.)
RFI	RCRA facility investigation (Investigative and analytical studies performed to gather the data necessary to determine the type and extent of contamination at a potential release site.)
SAL	Screening action level (Media-specific concentration levels for constituents derived using conservative intake assumptions and used during the RCRA field investigation, primarily to identify contaminants of concern.)
SOP	Standard operating procedure
SPCC	Spill Prevention Control and Countermeasures
SVOC	Semivolatile organic compound (An organic compound that can be extracted from soil or water samples, using the appropriate solvents.)
SWMU	Solid waste management unit (Any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at or around a facility at which solid wastes have been routinely and systematically released.)
TA	Technical area (The Laboratory established technical areas as administrative units for all its operations. There are currently 49 active TAs spread over 43 square miles.)
TAH	Total aromatic hydrocarbons

TCLP	Toxicity characteristic leaching procedure (A test that measures the mobility of organic and inorganic chemical contaminants in wastes. The test, designed by the United States Environmental Protection Agency, produces an estimate of the potential for leachate formation by a waste if it is placed in the ground.)
TIC	Tentatively identified compound
TMCR	Total multiple constituents ratio
TRU	Transuranic
TSCA	Toxic Substances Control Act
UHTREX	Ultra-high-temperature reactor experiment
UST	Underground storage tank
UTL	Upper tolerance level
VCP	Vitrified clay pipe
VOC	Volatile organic compound (An organic [carbon-containing] compound that evaporates [volatilizes] readily at room temperature.)

CHAPTER 1

1.0 INTRODUCTION

The Los Alamos National Laboratory (Laboratory) Environmental Restoration (ER) Project has successfully investigated and recommended an additional 84 sites for no further action (NFA) within the Resource Conservation and Recovery Act (RCRA) facility investigation (RFI) work plans and RFI reports.

After reviewing RFI work plans and RFI reports submitted by the ER Project, the Environmental Protection Agency (EPA) has indicated that the additional 84 potential release sites (PRSs) do not warrant further investigation and need not be added to the permit. The term PRS is used to collectively describe those solid waste management units (SWMUs) that are not listed in the Hazardous and Solid Waste Amendments (HSWA) Module of the Laboratory's RCRA Hazardous Waste Facility permit and areas of concern (AOCs) under the jurisdiction of the Department of Energy. The removal of these sites is a result of both field and archival investigations as well as site cleanups performed by the Laboratory.

This document contains sufficient information to justify and receive acceptance from the US Department of Energy (DOE) and other stakeholders for the removal of the 84 PRSs from further consideration by the ER Project.

Chapter 1 includes explanations of the criteria used for recommending the PRSs for NFA and a table of the PRSs that meet those criteria. Chapter 2 provides a description of each PRS, the rationale for the recommendation, and the date on which the EPA reviewed the Laboratory's decision for NFA. Maps showing the locations of the PRSs are located in Appendix A; the maps are arranged numerically according to technical area. Appendix B contains the regulatory review documents. Records pertaining to this modification request are kept on file at the ER Project's Records Processing Facility.

1.1 Criteria for Proposing No Further Action

The criteria for proposing no further action for potential release sites within the Laboratory's ER Project are listed below. The designation of NFA is a regulatory term. However, in this instance, the same NFA criteria used to delist SWMUs identified in the HSWA Module are used for units not identified in the permit. By using the same criteria, the ER Project can ensure the EPA, the New Mexico Environment Department, the DOE, the public, and other interested stakeholders that the same standards were used in investigating all potentially contaminated sites within the Project.

1.1.1 NFA Criterion 1

The site cannot be located or has been found not to exist, is a duplicate PRS, or is located within and therefore investigated as part of another PRS.

Examples/Explanations: For purposes of the HSWA Module of the RCRA Hazardous Waste Facility permit, units falling under Criterion 1 may have been mistakenly identified as SWMUs in an earlier study. For example, a SWMU was identified based on personnel interviews; however, field and archival investigations cannot substantiate its existence. In addition, a site mistakenly may have been assigned more than one PRS number. In this case, retain one number for investigation and propose the duplicate number(s) for NFA. Also, if one PRS is within the boundary of another and has similar contaminants, the contained site can be proposed for NFA, while the bounding site is being investigated.

1.1.2 NFA Criterion 2

The site has never been used for the management (that is, generation, treatment, storage, or disposal) of RCRA solid or hazardous wastes and/or constituents, or other Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances.

Examples/Explanations: Any inadvertently identified unit (e.g., a product tank with no known releases) that did not manage waste would a be candidate for NFA.

1.1.3 NFA Criterion 3

No release to the environment has occurred, nor is likely to occur in the future.

Examples/Explanations: "Release" is defined as any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment.

Units falling under Criterion 3 are those where no release has occurred, or where a release of any hazardous constituents to the environment may be unlikely due to the engineering (secondary containment or overflow prevention) or management (inspection or inventory) controls. For example, if a unit is completely contained within a building with no migration route to the environment, a visual inspection of the unit and examination of engineering drawings, if available, may be satisfactory for documentation of no release.

1.1.4 NFA Criterion 4

There was a release, but the site was characterized and/or remediated under another authority which adequately addresses corrective action, and documentation, such as a closure letter, is available.

Examples/Explanations: For example, an underground storage tank for which certification of closure has been received from NMED may be requested for NFA. Another example would be a one-time spill that has been cleaned up in accordance with applicable standards, such as the Spill Prevention Control and Countermeasures (SPCC).

RCRA hazardous waste management units should not be considered under RCRA corrective action, because requirements under interim status or the Laboratory's RCRA Hazardous Waste Facility permit adequately address releases from these units. Additionally, RCRA generator requirements adequately address proper management of less-than-90-day storage areas and satellite accumulation areas.

Temporary storage areas in use since 1980 (less-than-90-day and satellite storage areas) must operate according to 40 CFR 262, which requires that the units be routinely inspected. To avoid further consideration by the ER Project, engineering and management controls must be present. If the site was active prior to 1985 (internal Laboratory inspection checklist), and there is evidence that indicates a release has occurred prior to that date, the site may undergo corrective action under the ER Project.

Releases to surface water through a storm sewer are regulated under the national pollutant discharge elimination system (NPDES) storm water program, and releases through other NPDES-permitted outfalls are also exempt from RCRA. However, an outfall that was active prior to the Clean Water Act may now be permitted under the NPDES program, but still be required to be

investigated under RCRA corrective action authority. The NPDES permit addresses only the actual water discharge from the outfall and does not address corrective action or remediation of material deposited at the outfall over time. In this instance, the soil at the outfall may need to be sampled.

1.1.5 NFA Criterion 5

The PRS has been characterized or remediated in accordance with current applicable state or federal regulations, and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use.

Examples/Explanations: A site where an expedited cleanup or voluntary corrective action was performed in accordance with an approved plan would be candidates for NFA.

Following EPA's proposed Subpart S and RAGS guidance, determination that a contaminant is not present will be made by comparison with background data. Determinations of acceptable level of risk will be based on subsequent comparisons with SALs. Constituents exceeding SALs can be further evaluated in risk assessments based on projected future land use scenarios. If the contaminants present can be demonstrated to present an acceptable risk, the site is a candidate for NFA.

1.2 List of Potential Release Sites Recommended for No Further Action

Table 1-1 contains 84 PRSs that require no further investigation by the ER Project. The table includes the PRS identification number, the former operable unit (OU) number, the technical area (TA) number, the unit type, the criterion used for recommending NFA, and the date on which the EPA reviewed the Laboratory's decision for NFA. The prefix of the PRS number denotes the TA where the PRS exists. For example, PRS 3-001(d) is located at TA-03.

TABLE 1-1

NON-HSWA UNITS RECOMMENDED FOR NO FURTHER ACTION

PRS Number	OU	TA	Unit Type	Criterion Used	EPA Review Date	Count
0-029(a)	1071	00	Transformer	5	1/5/95	1
0-029(b)	1071	00	Transformer	5	1/5/95	2
0-029(c)	1071	00	Transformer	5	1/5/95	3
0-030(c)	1071	00	Septic system	5	11/2/95	4
0-030(q)	1071	00	Septic system	5	11/2/95	5
3-001(d)	1114	03	Satellite storage area	3	11/1/95	6
3-001(f)	1114	03	Satellite storage area	3	11/1/95	7
3-001(g)	1114	03	Satellite storage area	3	11/1/95	8
3-001(h)	1114	03	Satellite storage area	3	11/1/95	9
3-001(j)	1114	03	Satellite storage area	3	11/1/95	10
3-001(l)	1114	03	<90 day storage	1	11/1/95	11
3-001(n)	1114	03	Satellite storage area	3	11/1/95	12
3-001(o)	1114	03	Satellite storage area	3	11/1/95	13
3-001(q)	1114	03	Satellite storage area	3	11/1/95	14
3-001(s)	1114	03	Satellite storage area	3	11/1/95	15
3-001(t)	1114	03	Satellite storage area	3	11/1/95	16

TABLE 1-1

NON-HSWA UNITS RECOMMENDED FOR NO FURTHER ACTION
(continued)

PRS Number	OU	TA	Unit Type	Criterion Used	EPA Review Date	Count
3-001(u)	1114	03	Satellite storage area	1	11/1/95	17
3-001(v)	1114	03	Satellite storage area	3	11/1/95	18
3-001(w)	1114	03	Satellite storage area	3	11/1/95	19
3-001(x)	1114	03	Satellite storage area	3	11/1/95	20
3-001(y)	1114	03	Satellite storage area	3	11/1/95	21
C-3-001	1114	03	Gas trap	2	11/1/95	22
C-3-002	1114	03	One-time spill-leak from asphalt machine	3	11/1/95	23
C-3-003	1114	03	One-time spill-stained asphalt	2	11/1/95	24
3-004(a)	1114	03	Container storage	3	11/1/95	25
3-004(b)	1114	03	Container storage	3	11/1/95	26
3-004(e)	1114	03	Storage area	3	11/1/95	27
3-004(l)	1114	03	Storage area	3	11/1/95	28
C-3-004	1114	03	Miscellaneous debris	2	11/1/95	29
C-3-005	1114	03	Oil emulsion spill	4	11/1/95	30
3-006(a)	1114	03	Burn site	1	11/1/95	31
C-3-007	1114	03	Storage area	3	11/1/95	32

TABLE 1-1

NON-HSWA UNITS RECOMMENDED FOR NO FURTHER ACTION
(continued)

PRS Number	OU	TA	Unit Type	Criterion Used	EPA Review Date	Count
3-008(b)	1114	03	Firing site	3	11/1/95	33
C-3-008	1114	03	Storage area/rad contaminated	3	11/1/95	34
C-3-009	1114	03	Storage area	3	11/1/95	35
C-3-010	1114	03	Concrete Slab	2, 3	11/1/95	36
C-3-011	1114	03	Waste oil tank	3	11/1/95	37
C-3-012	1114	03	Satellite storage area	3	11/1/95	38
C-3-015	1114	03	Underground dist. tank	3	11/1/95	39
3-016(a)	1114	03	Septic system	2	11/1/95	40
3-016(b)	1114	03	Septic system	2	11/1/95	41
3-016(c)	1114	03	Septic system	2	11/1/95	42
3-016(d)	1114	03	Septic system	2	11/1/95	43
3-016(e)	1114	03	Septic system	1	11/1/95	44
3-016(f)	1114	03	Septic system	1	11/1/95	45
C-3-017	1114	03	Underground storage tank	3	11/1/95	46
C-3-018	1114	03	Underground storage tank	3	11/1/95	47

TABLE 1-1

NON-HSWA UNITS RECOMMENDED FOR NO FURTHER ACTION
(continued)

PRS Number	OU	TA	Unit Type	Criterion Used	EPA Review Date	Count
C-3-019	1114	03	Underground storage tank	1	11/1/95	48
C-3-021	1114	03	Underground storage tank	4	11/1/95	49
3-023	1114	03	Sump	3	11/1/95	50
3-030	1114	03	Surface impoundment	1	11/1/95	51
3-036(e)	1114	03	Aboveground tank	3	11/1/95	52
3-036(f)	1114	03	Aboveground tank	3	11/1/95	53
3-036(g)	1114	03	Aboveground tank	4	11/1/95	54
3-036(h)	1114	03	Aboveground tank	2	11/1/95	55
3-036(i)	1114	03	Aboveground tank	2	11/1/95	56
3-036(j)	1114	03	Aboveground tanks	2	11/1/95	57
3-038(e)	1114	03	Waste lines	2	11/1/95	58
3-040(a)	1114	03	Storage area	2	11/1/95	59
3-040(b)	1114	03	Storage area	3	11/1/95	60
3-043(i)	1114	03	Aboveground tank	3	11/1/95	61
3-047(c)	1114	03	Drum Storage	2	11/1/95	62

TABLE 1-1

NON-HSWA UNITS RECOMMENDED FOR NO FURTHER ACTION
(continued)

PRS Number	OU	TA	Unit Type	Criterion Used	EPA Review Date	Count
3-047(h)	1114	03	Storage area	3	11/1/95	63
3-047(i)	1114	03	Satellite storage area	3	11/1/95	64
3-047(j)	1114	03	Drum Storage	3	11/1/95	65
3-047(k)	1114	03	Drum Storage	3	11/1/95	66
3-048	1114	03	Satellite storage area	3	11/1/95	67
3-050(b)	1114	03	Exhaust emissions Off-gas scrubber of HEPA filter sys.	5	11/1/95	68
3-050(c)	1114	03	Exhaust emissions Off-gas scrubber of HEPA filter sys.	5	11/1/95	69
3-051(d)	1114	03	Soil contamination (oil from leaking compressor)	3	11/1/95	70
3-056(b)	1114	03	Container storage area	2	11/1/95	71
3-056(e)	1114	03	Satellite storage area	1	11/1/95	72
3-056(f)	1114	03	Drum storage	1	11/1/95	73
3-056(g)	1114	03	Satellite storage area	3	11/1/95	74
3-056(i)	1114	03	Drum storage	3	11/1/95	75
3-056(j)	1114	03	Storage area	2	11/1/95	76
3-057	1114	03	Sump/grease trap	2	11/1/95	77
3-058	1114	03	Container storage	3	11/1/95	78

TABLE 1-1

NON-HSWA UNITS RECOMMENDED FOR NO FURTHER ACTION
(continued)

PRS Number	OU	TA	Unit Type	Criterion Used	EPA Review Date	Count
18-009(b)	1093	18	Transformer	3	9/23/94	79
C-60-001	1114	60	Underground tank	4	11/1/95	80
C-60-002	1114	60	Underground tank	4	11/1/95	81
C-60-003	1114	60	One-time spill at pesticide shed	4	11/1/95	82
C-60-004	1114	60	Underground tank	1	11/1/95	83
C-61-001	1114	61	Transformer storage area- PCB leak	1	11/1/95	84

CHAPTER 2

2.0 JUSTIFICATION FOR NO FURTHER ACTION

The justifications for NFA for the PRSs listed in Table 1-1 are presented below. These justifications and descriptions were taken from the RFI work plans or workplan addendum for the former operable units (OUs) and from RFI reports. The references, figures, tables, and document sections cited within each excerpt are located in the applicable work plans, RFI reports, or addenda listed in Table 2-1.

TABLE 2-1

SOURCES FOR PRS JUSTIFICATIONS AND DESCRIPTIONS

Operable Unit	Title of Document	Date of Document	Text Reference
1071	RFI Phase Report, Operable Unit 1071, SWMU Aggregate 0-G, Leakage from PCB Transformers	April 1993	(LANL 1993, 1347)
1071	RFI Report for Potential Release Sites 0-030(c) and 0-030(q)	June 1995	(LANL 1995, 1350)
1114	RFI Work Plan for Operable Unit 1114, Addendum 1	July 1995	(LANL 1994, 1156)
1086	RFI Work Plan for Operable Unit 1086	July 1993	(LANL 1993, 1087)
1100	RFI Work Plan for Operable Unit 1100	May 1994	(LANL 1994, 1157)

The 84 PRSs are described in numerical order beginning with Subsection 2.1. Complete references for the work plans, RFI reports, and addenda are provided at the end of this chapter. These documents and the EPA review letters and notices of deficiency (NODs) cited at the ends of the excerpts are located at the Records-Processing Facility. Copies of the regulatory review documents are located in Appendix B of this document.

2.1 PRS 0-029(a)—Transformer

PRS 0-029(a) consists of possible soil contamination as a result of systematic releases from three transformers located on a power pole of a ground water production well (Well #5) in Los Alamos Canyon. The well is located in the bottom of Los Alamos Canyon adjacent to the stream channel, approximately 0.5 mile upstream of Totavi. The power pole is located about 20 feet from the site boundary closest to the stream channel. The well is no longer part of the water supply system of LANL or Los Alamos County, and the Department of Energy (DOE) is planning to return the site to the San Ildefonso Pueblo. The structures at the site, originally scheduled for demolition, are being turned over to the Pueblo at its request. Two transformers on the power pole contained oil with 162 and 292 ppm PCBs (LANL 1990a, and Bailey 1992). The transformers were removed on October 14, 1987.

PCB contamination found in the soil east and southeast of the well house was well below the TSCA cleanup level of 10 ppm for non-restricted use (FR 52 [63]: 10688). Nevertheless, the decision was made (March 30, 1992, S. Slaten, DOE) to clean up the site because it has been leased by DOE from the San Ildefonso Pueblo. The contaminated soil was considered to be like the other debris at the well site that was also cleaned up before the property is returned to the Pueblo. In response to the Pueblo request, the well house and well were left in place and decontaminated rather than decommissioned.

The cleanup, which was completed on August 6, 1992, began with decontamination of the well house followed by removal of the soil. The boundary of the area selected for excavation (Figure 3-5) was conservatively selected to ensure all contaminated soil (PCBs and mineral oil) was removed. No confirmatory sampling was done, however, because the levels of PCB contamination were far below the TSCA cleanup level. Approximately 20 cubic yards of soil were removed from the area.

Since this PRS has been remediated in accordance with applicable regulations and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use, this PRS is recommended for NFA under Criterion 5.

EPA Review: OU 1071 RFI Report review letter dated 1/5/95.

2.2 PRS 0-029(b)—Transformer

PRS 0-029(b) consists of possible soil contamination as a result of systematic releases from three transformers which were located on a power pole that was used to supply electric power to a ground water production well (Well #4) in Los Alamos Canyon. These transformers were removed

on October 14, 1987. The well was decommissioned and the well house removed in 1989 (Aldrich 1991a). The well was located in the bottom of Los Alamos Canyon adjacent to the stream channel, approximately one mile upstream from Totavi. The power pole was located about 20 feet from the site boundary closest to the stream channel. The site boundary is about 50 feet from the channel of the stream. Transformers from this site were found to contain 231, 206, and 362 ppm of PCBs (LANL 1992a, and Bailey 1992). PCBs were not detected in soil samples from PRS 0-029(b) and, therefore, if present, they are far below the regulatory cleanup level of 10 ppm. In addition, PRS 0-029(b) was situated in the construction zone for the widening of NM 502. The site was likely buried beneath the fill used to construct the new road grade for NM 502, as part of the construction activities.

Since this PRS has been characterized in accordance with applicable regulations and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use, this PRS is recommended for NFA under Criterion 5.

EPA Review: OU 1071 RFI Report review letter dated 1/5/95.

2.3 PRS 0-029(c)—Transformer

PRS 0-029(c) consists of possible leakage from a transformer which was located on a power pole that was used to supply electric power to a ground water production well (Well #1) in Guaje Canyon. The well is located about 100 feet from the stream channel, approximately 2 miles upstream of the confluence with Los Alamos Canyon. The power pole was located about 20 feet from the site boundary closest to the stream channel. The site boundary is also about 100 feet from the access road that runs along Guaje Canyon. The transformer located there was removed April 19, 1986. Soil from this site was found to contain less than 0.1 ppm PCBs (LANL 1992a).

Levels of PCB concentrations at PRS 0-029(c) are below the regulatory cleanup level of 10 ppm.

Since this PRS has been characterized in accordance with applicable regulations and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use, this PRS is recommended for NFA under Criterion 5.

EPA Review: OU 1071 RFI Report review letter dated 1/5/95.

2.4 PRSs 0-030 (c,q)—Septic System

These PRSs are former Atomic Energy Commission facilities located outside the current boundaries of Los Alamos National Laboratory (LANL). PRS 0-030(c, q) are septic tanks that

handled sanitary waste from residences in the original townsite. As described in the RFI Work Plan for Operable Unit (OU) 1071, PRS 0-030(c) was a septic tank on private property north of the intersection of Canyon Road and Manhattan Loop that is suspected to have served residences. PRS 0-030(q) was a septic tank on private property east of 22nd Street and north of the former Mesa Public Library site that is known to have served residences and buildings from the Los Alamos Ranch School (LANL 1992, 0781). Both tanks were removed during the Phase I RFI.

Prior to the RFI, chemicals of potential concern at PRSs 0-030(c, q) included volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), target analyte list (TAL) metals, polychlorinated biphenyls (PCBs), pesticides, total uranium, isotopic plutonium, cesium, and americium (LANL 1992, 0781).

The objectives of the Phase I investigation at PRSs 0-030(c, q) were to determine if there was residual soil contamination associated with these septic tank systems and, in the case of PRS 0-030(c), the related outfall area; and also to remove any remaining structures related to these PRSs from the site.

At the conclusion of the RFI Phase I activities, no chemicals of potential concern were retained through the human health screening assessment

Since this PRS has been remediated in accordance with applicable regulations and the available data indicate that contaminants pose an acceptable level of risk under current and projected future land use, this PRS is recommended for NFA under Criterion 5.

EPA Review: TA-0 RFI Report review letter dated 11/2/95.

2.5 PRS 3-001(d,f,g,h,j,n,o,q,s,t,v,w,x,y)—Satellite Storage Areas

Satellite storage areas and less-than-90-day accumulation areas were established at the Laboratory including at the former OU 1114 in conformance with 40 CFR 262, Standards Applicable to Generators of Hazardous Waste and managed under the Laboratory Spill Prevention Control and Countermeasure Plan (LANL 1990, 17-820). Because any releases from storage areas will be addressed under the SPCC, there is no potential for considering these units as historical release sites. The EPA and the Laboratory have agreed that accumulation areas are not PRSs provided that they have no history of release and have no credible pathways to the environment (Twombly 1992, 17-681). PRSs listed in Table 2.5-1 meet these Criterion. These PRSs are listed on the Laboratory registry of satellite and less-than-90-day accumulation areas (McInroy 1992, 17-748, (LANL 1995, 17-1236).

TABLE 2.5-1

APPROVED SATELLITE AND LESS-THAN-90-DAY ACCUMULATION AREAS

PRS	LOCATION	AREA	DESCRIPTION	STATUS
3-001(d)	TA-3-170	Outside, NW of building	Satellite accumulation	Removed
3-001(l)	TA-3-38	Rm. 103, paint shop	<90 day accumulation	Active
		Rm. 122, NTS shops	Satellite accumulation	Active
		Rm. 125, NTS shops	Satellite accumulation	Active
		Rm. 132, NTS shops	Satellite accumulation	Active
3-001(g)	TA-3-473	Located inside transportable	Satellite accumulation	Removed
3-001(h)	TA-3-66	Rm. 105C	Satellite accumulation	Removed
		Rm. 107	Satellite accumulation	Removed
		Rm. B100, foundry	Satellite accumulation	Active
		Rm. B100, foundry (mezzanine)	Satellite accumulation	Active
		Rm. B104	Satellite accumulation	Removed
		Rm. B107	Satellite accumulation	Removed
		Rm. B3	Satellite accumulation	Removed
		Rm. C100	Satellite accumulation	Active
		Rm. C100 (south wall)	Satellite accumulation	Removed
		Rm. C100	Satellite accumulation	Removed
		Rm. D108	Satellite accumulation	Active
		Rm. D108	Satellite accumulation	Active
		Rm. D2	Satellite accumulation	Active
		Rm. G103	Satellite accumulation	Active
		Rm. G105	Satellite accumulation	Active
		Rm. G3	Satellite accumulation	Active
		Rm. G4	Satellite accumulation	Active
		Rm. H105	Satellite accumulation	Active
		Rm. J1	Satellite accumulation	Active
		Rm. J104	Satellite accumulation	Removed
		Rm. J105	Satellite accumulation	Removed

TABLE 2.5-1 (continued)

APPROVED SATELLITE AND LESS-THAN-90-DAY ACCUMULATION AREAS

PRS	LOCATION	AREA	DESCRIPTION	STATUS
		Rm. K2	Satellite accumulation	Active
		Rm. K104	Satellite accumulation	Active
		Rm. P1	Satellite accumulation	Active
		Rm. P103	Satellite accumulation	Active
		Rm. R108	Satellite accumulation	Active
		Rm. R100	Satellite accumulation	Active
		Rm. R11	Satellite accumulation	Active
		Rm. R4	Satellite accumulation	Active
		Rm. R3	Satellite accumulation	Removed
3-001(j)	TA-3-34	South loading dock	Satellite accumulation	Removed
3-001(n)	TA-3-32	Rm. 104 and on south loading dock	Satellite accumulation	Active
3-001(o)	TA-3-35	Rm. 100	Rad can waste container	Removed
3-001(q)	TA-3-43	Rm. 108A	Satellite accumulation	Removed
		Rm. A326	Satellite accumulation	Removed
3-001(s)	TA-3-494	Rm. 101	Satellite accumulation	Active
		Rm. 107	Satellite accumulation	Active
3-001(t)	TA-3-502	Rm. N111	Satellite accumulation	Removed
3-001(v)	TA-60-29	Pesticide storage shed	Satellite accumulation	Active
3-001(w)	TA-3-1818	Rm. 110	Satellite accumulation	Removed
3-001(x)	TA-3-22	Inside, SW corner	Satellite accumulation	Active
3-001(y)	TA-3-29	Wing 7, Rm. 7148	Satellite accumulation	Active
		Wing 5, Rm. 5123	Satellite accumulation	Active
		Wing 3, Rm. 3118	Satellite accumulation	Active
		Machine shop	Satellite accumulation	Active
3-056(g)	TA-3-16	Rm. 65	Satellite accumulation	Removed

Because any releases from these storage areas will be addressed under the Laboratory's SPCC Plan and they have no history of release and have no credible pathways to the environment, these PRSs are recommended for NFA under Criterion 3 .

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.6 PRS 3-001(l)—Less-Than-90-Day Storage Area

PRS 3-001(l) is reported to be a less-than-90-day storage area southeast of TA-3-316, the Relativis Electronic Beam Facility. According to the satellite accumulation records and a former ENG-5 waste coordinator employed during the 1980s, no such storage area existed (Buksa 1994, 17-1181). TA-3-65 is located directly east of TA-3-316. During the 1989 Weston site reconnaissance a storage area was noted west of building TA-3-65, the source storage building, and labeled as an "HSE drum storage area" (LANL 1992, 17-582). It is believed the area found during the Weston investigation in June 1989 was, in fact, the temporary drum storage area for the Relativis Electronic Beam Facility. Three 55-gal. drums were found, yet the contents were unknown. In October 1989 the approximate location of the storage area was graded and paved with concrete. Presently, there are five transportable buildings TA-3-2006, -2007, -2008, -2009, -2010 that sit on the concreted area (Lab Job 10262-3).

The exact location of PRS 3-001(l) was never identified and cannot be found; however, even if there were releases from the drums, the contaminated soil would have been removed or redistributed during construction (Buksa 1994, 17-1181). This PRS is therefore recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.7 PRS 3-001(u)—Satellite Storage Area

PRS 3-001(u) consists of two satellite accumulation areas located inside buildings on Sigma Mesa. The storage areas were addressed in the RFI Work Plan for OU 1114 as PRS 60-001(c) in Subsection 6.2.2.1 (LANL 1993, 1090). PRS 60-001(c) was approved for NFA by DOE on November 28, 1995.

Since it is a duplicate of PRS 60-001(c), this PRS is recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/8/95.

2.8 PRS C-3-001—Gas Trap

PRS C-3-001 consists of two gas trap manholes. One manhole is located at the southeast corner of building Technical Area (TA) 3-1498, the Data Communications Center. It was installed in 1987 and consists of a manhole and two 8-in.-diameter vent pipes which protrude from either side of the manhole (Griggs 1993, 17-850). The other gas trap manhole is designated structure TA-3-1872. It is at the southwest corner of TA-3-28, an office building. There is an inverted U-pipe

welded to the vent pipes so that it points toward the ground and prevents rainwater and airborne debris from entering. The pipes are connected to the communication cables duct banks that enter the building below surface grade and serve as a fresh air supply to personnel working in the duct banks.

The gas trap manholes were used to provide ventilation for personnel in the duct banks. This site has never managed RCRA hazardous waste and is therefore recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.9 PRS C-3-002—One-time Spill

PRS C-3-002 consists of an oil leak from an asphalt laydown machine located at TA-3-187. The leak occurred while the machine was being serviced and consisted of 15-40 weight motor oil and C-4 hydraulic oil (Texaco, Inc. 1993, 17-987). There is no evidence that the oil migrated off the asphalt surface. Sorb-all™ was added to the spill and was disposed (LANL 1992, 17-582).

C-3-002 is a one-time spill of hydraulic oil. The MSDS for the oil states that it is not a hazardous substance (Texaco, Inc. 1993, 17-987). Because the spill was not significant and did not migrate from the immediate area, C-3-002 is proposed for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.10 PRS C-3-003—One-time Spill

PRS C-3-003 is an oil stain located a few feet east of the northeast dock at the main tech shops, TA-3-39. The stain measures 10 x 10 ft and is entirely on asphalt; no staining was noted in the grass area to the east. According to a site worker who was in charge of machining operations adjacent to the dock from 1978 to 1991, only pure mineral oil was stored on the dock (usually indoors) in quantities of 100 gal. for machining operations. The food-grade mineral oil, Carnation™ white mineral oil, was stored as product on the dock from 1978 to 1991. During the DOE Tiger Team investigation in 1991, the loading dock area was re-asphalted (Sobolinski 1994, 17-1098).

A 1988 photograph shows the oil stain was completely contained on the asphalt. The oil was Carnation™ white mineral oil, which is not hazardous and therefore does not present a threat to the environment (Witco 1994, 17-1187). This PRS is therefore recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.11 PRS 3-004(a)—Container Storage

PRS 3-004(a) is an inactive temporary storage area in a basement hallway of TA-3-29. The drums were located outside room 4041 and contained radioactively contaminated paper and glass. At the time of the RFA inspection for the SWMU report, eighteen 55-gal. steel drums were stored on a concrete pad.

The waste is scheduled to go to TA-54, MDA-G once the 18 drum capacity is reached (generally 30 to 45 days).

There were no known releases from the storage area (LANL 1990, 0145); therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.12 PRS 3-004(b)—Container Storage

PRS 3-004(b) is an inactive drum storage area on a concrete pad in room 2005, inside building TA-3-29. The drums contained radioactively contaminated paper and glass and included solids, flammable material, inorganics, and metals. No drums remain in the area (LANL 1990, 0145). This site has not been used for drum storage since 1994.

The storage areas inside TA-3-29 are administratively controlled and there are no indications or documentation to support past releases from the drums; therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.13 PRS 3-004(e)—Storage Area

PRS 3-004(e) is one 55-gal. drum in wing 4, inside building TA-3-29, for the storage of enriched-uranium processing operation wastes. The wing 4 waste consists of glove box wastes, such as rags, paper, rubber gloves, and similar items. All potentially radioactively contaminated material is drummed as low-level waste. Drums are under the administrative control of the operating group and are picked up routinely by the Laboratory's Waste Management Group (CST-7) for disposal at TA-54 (Buksa 1994, 17-1169).

The drum storage is active and consists only of solid radioactive waste with no history of containment incidents; therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.14 PRS 3-004(f)—Storage Area

PRS 3-004(f) is listed in the SWMU Report as a room in the basement of TA-3-29 where calcium fluoride slag is stored (LANL 1990, 0145). The slag was originally stored in a vault in the late 1980s, not the basement. In 1991, the slag was moved to room 4064 in the basement. Slag cylinders, 3 in. high and 6 to 8 in. in diameter are stored in paint cans inside 55-gal. drums used for secondary containment. The slag is generated by reducing uranium fluoride with calcium metal using an iodine booster. The slag is stored in the basement for future use (Buksa 1994, 17-1169).

The slag is securely stored with proper secondary containment and is actively monitored. There has been no historical release (Buksa 1994, 17-1169); therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.15 PRS C-3-004—Miscellaneous Debris

PRS C-3-004 is identified as a construction debris pile 15 ft x 15 ft located northwest of TA-3-66, the Sigma Building (LANL 1990, 0145). The pile accumulated in this area in 1987 when a machine shop was added to the building. The materials noted were scrap metal, wood, an old battery, and an empty one- or two-gallon kerosene can. The debris was removed by the contractor when construction of the machine shop was completed in 1988 (Lab Job #7910-03).

The area containing the construction debris was cleaned and all materials were removed in 1988 when the addition to the building was completed. The debris pile designated C-3-004 did not involve the management of RCRA hazardous waste or constituents; therefore, this PRS is recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.16 PRS C-3-005—Oil Emulsion Spill

PRS C-3-005 is an oil emulsion spill that occurred in August 1986 when cleaning an asphalt oil distributor truck with kerosene to remove excess asphalt and oil. The tank valve on the truck was accidentally opened resulting in a discharge of oil emulsion and residual kerosene that flowed through the storm drain [PRS 3-045(g)] and into Sandia Canyon. After the spill occurred, oil was noted in the stream and absorbent booms were placed across the stream to prevent the spread of oil. An earthen berm was then constructed across the drainage channel and the oil was removed

using absorbent pillows, vermiculite, and skimmers. Approximately 30 drums of the oil/water mixture were filled. The cleanup was stopped when it was determined that the channel below the pooled oil area was oil-free. Drums of oily water, vermiculite and adsorbent pillows were taken to a disposal site at the Los Alamos airport (LANL 1986, 17-394).

Immediate corrective actions were taken by Pan Am World Services, Inc., the maintenance contractor at the time of the spill, (contractor from 1986-1991) to prevent a similar release (LANL 1986, 17-394).

C-3-005 is recommended for NFA due to the extensive cleanup (1986 and 1991-1994) and re-engineering (1993-1994) that has taken place near the storm drain and down the entire outfall drainage area (cleanup associated with PRS 3-029)(LANL 1992, 17-1196; LANL 1992, 17-1197; Williams 1992, 17-1198; Tiedman 1992, 17-1199). In addition, C-3-005 was the result of a one-time release that was cleaned up immediately after it occurred. Furthermore, 1991 sample results from water collected from the storm drain after remediation/cleanup of asphalt in the storm drain, were less than the minimum detection limit of 2 mg/L for total petroleum hydrocarbons in water (Nielsen 1991, 17-968). Therefore this PRS is recommended for NFA under Criterion 4.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.17 PRS 3-006(a)—Burn Site

PRS 3-006(a) is identified as a burning area, TA-3-12, built in 1945 and removed in 1949. This PRS has been renumbered to PRS 61-003 and was addressed in the RFI Work Plan for OU 1114 in Subsection 6.2.1.2 (LANL 1993, 1090). PRS 61-003 was approved for NFA by DOE on October 11, 1995.

Since this PRS is a duplicate of PRS 61-003, it is recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.18 PRS C-3-007—Storage Area

PRS C-3-007 is an area of concern inside the Press Building, TA-3-35. This building, constructed in 1953, is located on Sigma Road east of Diamond Drive, across from the CMR Building, TA-3-29. According to the SWMU Report the building contains approximately 10,000 ft^2 of space, of which 3,625 ft^2 in the northern part of the building are designated as a material access area for processing uranium-235 (LANL 1990, 0145). From 1975 until 1985, this part of the building was used for fuel element production, where uranium-238, uranium-239, and graphite are used in the

process. The rest of the building was used for the fabrication of cable assemblies in support of the weapons program, rack mechanics, the Meson Physics Facility, and service programs (LANL 1985, 17-1038). Storage areas for radioactive materials, mostly uranium-235, were located throughout the building. There is no record of releases from the storage areas to the environment.

C-3-007 is recommended for NFA under Criterion 3 because there is no record of releases from the storage areas to the environment.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.19 PRS 3-008(b)—Firing Site

PRS 3-008(b) is listed in the SWMU Report as a decommissioned firing site in a small, indoor, high-pressure firing chamber once located in room A-3J of the Administration Building, TA-3-43, during the 1960s (LANL 1990, 0145). The room was used for hydrostatic testing of electro-explosive devices. Small-scale studies were performed in the room to check timing delays and firing characteristics. Approximately 10 explosive cartridges (squibs) were fired during the testing from 1964 to the early 1970s (Buksa 1994, 17-1160). Explosive charges consisted of squibs that contained 120 mg of diazodinitrophenol. Single devices contained a maximum 2.5 g of explosives. The high-pressure firing chamber in room A-3J is now an internal room to A-3L and is used as an office and storage (Foley 1995, 17-1102).

The firing chamber was completely contained and experiments involved only small amounts of high explosives. The chamber was used during a 10-year period with no history of releases to the environment (Buksa 1994, 17-1160); therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.20 PRS C-3-008—Storage Area

PRS C-3-008 was a storage building for nuclear materials, TA-3-164. The building is located 90 ft east of TA-3-102, the tech shops addition, and southwest of TA-3-29. TA-3-164 was constructed in 1963 for storing sealed canisters of radioactive material, mostly uranium, in 55-gal. drums. In 1993 TA-3-164 was emptied of all material and in 1994 was decontrolled. Decontrolling the building consists of surveying the entire building, identifying areas of contamination, and cleaning. All contamination identified during surveying was cleaned to acceptable levels (Buksa 1994, 17-1109).

TA-3-164 has never contained RCRA waste or constituents and has no history of radioactive releases. There is no floor drain in the building and no liquids were stored that could have caused a potential release; therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.21 PRS C-3-009—Storage Area

PRS C-3-009 is an active warehouse, TA-3-169, used for storing equipment, product oil, and chemicals (cyanide, stored in locked cage) for use in TA-3-66, the Sigma Building. The structure was built in 1963 and contained a staging area for equipment to be sent to salvage and a container storage area for waste oil to be picked up by CST-7. The waste oil drums have secondary containment consisting of a polyurethane catchment basin with a grate on which the drums of waste oil are placed. There is no history of releases from the storage areas inside of TA-3-169 (Sobojinski 1995, 17-1168).

This PRS is recommended for NFA under Criterion 3 because there is no history of releases from the storage areas inside of TA-3-169.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.22 PRS C-3-010—Concrete Slab

PRS C-3-010 is possible remnant contamination from a decommissioned cooling tower, TA-3-19, once located 30 ft north of TA-3-16, the Van de Graaff Facility. The cooling tower was installed in 1952 and removed in 1966; a concrete slab formerly occupied by transformers is all that remains. There is no history of chromate usage or evidence of staining on the concrete slab or surrounding soil (LANL 1993, 17-930).

No visible contamination can be found around the former location of the cooling tower. No further action is being proposed because this unit did not manage hazardous waste or cause a release of hazardous substances into the environment. This PRS, therefore, is recommended for NFA under Criteria 2 and 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.23 PRS C-3-011—Waste Oil Tank

PRS C-3-011 is the former location of a decommissioned 250-gal. aboveground (approximately one ft aboveground) leaded gasoline storage tank on metal legs. The tank was located in a

bermed materials storage area on a hill directly north of the Asphalt Batch Plant. The tank was in service for approximately ten years to fuel small equipment used by the Roads and Grounds crews. The tank was removed in 1988. According to JCI employees, there is no record of release from this storage tank (LANL 1994, 17-1172).

This PRS is recommended for NFA under Criterion 3 because the gasoline tank did not leak and there were no releases to the environment.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.24 PRS C-3-012—Satellite Storage Area

PRS C-3-012 was a storage cabinet located outdoors at the southeast entrance to the filter tower for wing 3 of TA-3-29. At the time of one inspection in 1989, the cabinet contained photo processing supplies, organic chemicals, and a plastic bag labeled "hot material inside" (LANL 1992, 17-582). The SWMU Report incorrectly reports the location on the south side of wing 5 (LANL 1990, 0145). The cabinet was used for temporary storage of unwanted chemicals from wing 3 prior to removal and disposal by HSE-5. The cabinet was used for only a few years and has been removed (Hoard 1993, 17-913).

The storage cabinet was not used for chemical waste. Only unused chemicals from laboratories were temporarily stored in the cabinet and were picked up routinely for use elsewhere in the Laboratory. There is no evidence of past spills and no documentation exists to suggest a release had occurred. In addition, no information could be found concerning the "hot material" that was identified during the site reconnaissance survey. This PRS is therefore recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.25 PRS C-3-015—Underground Tank

PRS C-3-015 is an active 15-year-old unleaded gasoline storage tank located 100 ft northeast of the service station, TA-3-36. The 5,038-gal. tank has not been upgraded since installation in 1980. The tank undergoes a pressurized tightness test each year, and will continue to do so until 1998, when it must either be upgraded or permanently closed under State of New Mexico Underground Storage Tank Regulations section 401: Upgrading of Existing Systems; 40 CFR 280.21; State of New Mexico Environmental Improvement Board Underground Storage Tank Regulations 801: Permanent Closure and Changes-in-Service (New Mexico Environmental

Improvement Board 1990, 644); and 40 CFR 280.71. The most recent tightness test confirmed that the tank is free of leaks.

C-3-015 is recommended for NFA under Criterion 3 because the tank has no history of leaks and is addressed under the State of New Mexico UST Regulations.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.26 PRS 3-016(a)—Septic System

PRS 3-016(a) includes a 1,000-gal. precast fiberglass septic tank, TA-3-1484, and associated seepage pit, TA-3-1667. The tank was installed in 1984 and served TA-3-130, the calibration building. TA-3-130 has always been used to calibrate instruments for the detection of radioactive contamination. The seepage pit is located northeast of the building. According to the Weston Report performed during the RCRA Facility Assessment (RFA), the septic tank received only sanitary waste from the lavatory (LANL 1992, 17-582). The building manager confirmed that no radioactive waste entered the sewage system, only domestic waste (Elsele 1995, 17-1257). The seepage pit, TA-3-1667, was installed in 1986 and was connected to the septic tank by an overflow pipe. Prior to the installation of the pit, the overflow was discharged to a leach field or was pumped out regularly (LANL 1989, 17-018). According to engineering records, in 1992 the septic tank and seepage pit were abandoned in place when the sanitary sewer became routed to the sanitary waste system consolidation pipeline (SWSC).

PRSs 3-016(a) has been exclusively used for domestic sewage. This septic system is not associated with structures that contained, stored, or used RCRA hazardous waste or constituents and is, therefore, recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.27 PRS 3-016(b)—Septic System

PRS 3-016(b) is a 1,000-gal. precast fiberglass septic tank, structure TA-3-272, located 60 ft from the southeast corner of TA-3-271. This building stored equipment to be salvaged. According to resident employees, no chemicals were stored in TA-3-271 (Buksa 1994, 17-1104). The tank was installed in 1966 and served the lavatory in the building. In 1971 a lift station was installed, structure TA-3-693, approximately 360 ft south of the building. The plumbing changes consisted of abandoning in place the line from the building to the tank and then connecting a sewer line directly from the building to the lift station (Engineering drawing ENG-C 41463). Given the date of installation for the lift station, it is assumed the septic tank was abandoned in place in 1971.

PRSs 3-016(b) has been exclusively used for domestic sewage. This septic system is not associated with structures that contained, stored, or used RCRA hazardous waste or constituents and is, therefore, recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.28 PRS 3-016(c)—Septic System

PRS 3-016(c) is a 500-gal. septic tank, structure TA-3-79, that served only the lavatory in TA-3-70, the parks and refuse office. This building was used as the Roads and Grounds scale house and office building operated by The Zia Company from 1954 to 1971. The tank discharged to a small drain field directly south of the building (LANL 1994, 17-1172). Engineering drawing ENG-C 41486 shows a sanitary sewer cleanout at the approximate location of septic tank TA-3-79, and an eight-inch concrete sanitary waste line extending from the cleanout toward the southeast to a pump/lift station. Available records do not confirm that the septic tank was removed after TA-3-70 was connected to the sanitary sewer system in 1971.

PRSs 3-016(c) has been exclusively used for domestic sewage. This septic system is not associated with structures that contained, stored, or used RCRA hazardous waste or constituents and is, therefore, recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.29 PRS 3-016(d)—Septic System

PRS 3-016(d) is listed as a septic pit in the SWMU Report (LANL 1990, 0145). The PRS is actually a sanitary lift station, TA-3-1638, that serves the university house, TA-3-443 (Engineering drawing ENG-C 44762). The building is used to welcome foreign visitors and dignitaries. The sewer line from this lift station leads to the TA-3 wastewater treatment plant.

PRSs 3-016(d) has been exclusively used for domestic sewage. This septic system is not associated with structures that contained, stored, or used RCRA hazardous waste or constituents and is, therefore, recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.30 PRSs 3-016(e,f)—Septic Systems

PRSs 3-016(e,f) are listed as septic pits located northwest of TA-3-1616 and TA-3-1617, transportable office buildings. Engineering drawing ENG-C 44762 shows that the pits are actually

a single lift station, structure TA-3-1639. The lift station was addressed as PRS 3-014(s) in the RFI Work Plan for OU 1114 in Subsection 5.5.1.1.6 (LANL 1993, 1090). PRS 3-014(s) was recommended for NFA in an RFI report dated February 26, 1996.

Since these PRSs are duplicates of PRS 3-014(s), they are recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.31 PRS C-3-017—Underground Storage Tank

PRS C-3-017 is a 55-gal. underground fuel storage tank located north of an office building, TA-3-28. Since the 1950s the tank was used to supply fuel to a backup generator. During removal in 1989, the tank was found to be empty and dry and was taken to the Los Alamos county landfill for disposal (per instructions on Engineering drawing ENG-C 45550 under Lab job 9593).

This PRS is recommended for NFA under Criterion 3 because there was no evidence of historical releases during operation or removal.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.32 PRS C-3-018—Underground Storage Tank

PRS C-3-018 is a 100-gal. diesel fuel tank associated with generator house, TA-3-157, built in 1961 and removed in 1984. The tank is listed as an underground fuel tank but was actually suspended from the ceiling in TA-3-157. The generator served as backup power for the office building, TA-3-28, and was located north of the building. Prior to demolition of the generator house, the diesel tank was emptied into a fuel truck; the remaining diesel fuel was then transported to TA-3-22, where it was added to diesel storage tanks. The discarded tank was taken to the Los Alamos County landfill for disposal (Sobolinski 1994, 17-1171).

There is no history of releases from the tank inside TA-3-157; therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.33 PRS C-3-019—Underground Storage Tank

PRS C-3-019 is identified as an underground storage tank (UST) for petroleum product located north of the Van de Graaff Facility, TA-3-16. No UST was found during the 1989 or 1993 ER Program site reconnaissance visits. There is no indication of a vent or fill pipe that would suggest a

UST on engineering drawings (ENG-R 8005, 8008, 8010) or aerial photographs (LASL photo RN84-188103). The only structure located in the area of concern is a steam manhole. This PRS is therefore recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.34 PRS C-3-021—Underground Storage Tank

PRS C-3-021 is the location of a former 200-gal. underground fuel storage tank, structure TA-3-191, located 40 ft southeast of TA-3-18. The tank was installed in 1964 and removed in 1991. Upon removal of the tank, visual evidence and field screening analysis for total aromatic hydrocarbons (TAH) revealed that soil beneath the tank was contaminated with petroleum. Further investigation determined that the source of the petroleum release was the associated piping. After soil excavation July 2, 1991, two soil samples (191-1, and 191-2) were collected in accordance with Appendix C, Part XII, of the New Mexico UST Regulations, and analyzed by LANL's Environmental Chemistry Group. The soil samples were analyzed using EPA SW-846, Analytical Method 8260. The soil sample analyses revealed benzene soil concentration of less than 0.005 ppm for both samples. TAH concentrations ranged from 0.099 to 2.1 ppm. State soil cleanup levels, as specified in Part XII, Section 1209 (D), are 10 ppm for benzene and 50 ppm for TAH.

Additional soil was excavated to remove remaining contamination. The final depth of the excavation was approximately eight feet below land surface. Approximately 11 yd^3 of soil were excavated and transported to LANL's TA-54 land farm for treatment. Six more samples revealed that soil contamination was below State soil cleanup levels listed above. A new diesel fuel tank was placed inside a cement vault in the former location of tank TA-3-191. The final closure report to NMED/Underground Storage Tank Bureau was submitted on February 21, 1992 (Tiedman 1992, 17-872).

C-3-021 is recommended for NFA under Criterion 4 because the site underwent official cleanup and closure in 1992 (NMED 1992, 17-1244).

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.35 PRS 3-023—Sump

PRS 3-023 is an active duplex concrete sump consisting of two motors and two pumps located in the lowest level of the Sherwood Building, TA-3-105, room 10, pit "level C." Fusion experiments that used dielectric oil were performed in TA-3-105. The sump was installed in 1959 and collected

water from floor drains and sinks in the basement of TA-3-105 and discharged contents to an outfall north of TA-3-207 (Engineering drawing ENG-C 20763). In 1991 the piping was rerouted to drain the sump to the sanitary sewer. Prior to 1991, the sump discharged water from floor drains and sinks to the storm drain located north of TA-3-207. This area was sampled in 1994 as PRSs 3-013(a,b) see Subsection 5.9.1.1 in the RFI Work Plan for OU 1114 (LANL 1993, 1090).

This PRS is recommended for NFA under Criterion 3 because the sump is completely contained inside TA-3-105 with no pathway to the environment. In addition, there is no history of leaks from the sump structure.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.36 PRS 3-030—Surface Impoundment

PRS 3-030 was a temporary earthen pit used to contain water flushed from the chilled water system of TA-3-66, the Sigma Building. This PRS is a duplicate of PRS 3-012(a) addressed in the RFI Work Plan for OU 1114 in Subsection 6.1.4.1.3.2 (LANL 1993, 1090). This PRS is therefore recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.37 PRS 3-036(e)—Aboveground Tank

PRS 3-036(e) is soil containing small spills from a 5,000-gal. aboveground tank in the work area near the asphalt batch plant, TA-3-70. The tank, TA-3-1969, was used for reclamite storage. During the May 1989 inspection, the tank showed no evidence of leaks, nor were there any reports of spills (LANL 1992, 17-582). The tank was emptied and removed from service in 1986 or 1987 and remains on site approximately 225 ft west of TA-3-70. The 1990 SWMU Report also noted that the reclamite storage tank had ruptured and spilled 1,500 gal. of oil emulsion in 1987 (Barnett 1987, 17-348) but that spill was actually from tank TA-3-75 [PRS 3-036(a)].

The reclamite storage tank was used to store heavy oil for reconditioning asphalt. The tank is currently empty and inactive. There is no visual evidence, either on the tank or on the ground around the tank, that there were ever any spills from this tank.

PRS 3-036(e) is proposed for NFA under Criterion 3 because the tank did not leak and there were no releases to the environment.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.38 PRS 3-036(f)—Aboveground Tank

PRS 3-036(f) is the location of a decommissioned 500-gal. aboveground (approximately 8 to 10 ft aboveground) unleaded gasoline storage tank on metal legs. The tank was located in a bermed materials storage area on a hill directly north of the Asphalt Batch Plant. The tank was in service for approximately 10 years to fuel small equipment used by the Roads and Grounds crews. JCI removed the tank in approximately 1990. No release has occurred from the tank to the environment (LANL 1994, 17-1172).

PRS 3-036(f) is proposed for NFA under Criterion 3 because this gasoline tank did not leak and there were no releases to the environment.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.39 PRS 3-036(g)—Aboveground Tank

PRS 3-036(g) is an active 5,000-gal. aboveground tank located south of TA-3-22. The tank, installed in 1951, holds sulfuric acid used to neutralize cooling water from TA-3-22. Secondary containment was added around the tank after a noncompliance violation in 1990 resulting in a release to NPDES Outfall 01A001.

PRSs 3-036(g) has never managed hazardous waste and has excellent integrity and secondary containment. Additionally, the NMED approved the spill report on the acid release conditionally, based upon completion of corrective actions listed in the report to the EPA (Tiedman 1991, 17-829). Investigation indicated that the release was caused primarily by operational problems and communication deficiencies. Operational and administrative changes were initiated to correct these problems and interim physical plant modifications of the neutralization system were completed. These modifications included new pH monitoring equipment and a lock on the discharge valve from the environmental tank (Sneesby 1994, 17-1159). The NMED closed out this incident after the Laboratory paid a $12,500 fine (NMED 1992, 17-832). This PRS is recommended for NFA under Criterion 4.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.40 PRS 3-036(h)—Aboveground Tank

PRS 3-036(h) consists of two 4,000-gal. storage tanks for cooling water corrosion inhibitors located 50 ft east of TA-3-22, the Steam Plant. The tanks have secondary containment and have been active since 1973. The tanks contain an organic copper compound and an organic

phosphate compound used as corrosion inhibitors to protect equipment (Sobojinski 1993, 17-890). The chemicals are gravity fed to water treatment house, TA-3-24, where they are mixed with the treated effluent from the TA-3 wastewater treatment plant. The effluent water is mixed with the inhibitors prior to circulation through the cooling tower.

There have had no uncontrolled releases to the environment from either storage tank, nor have the tanks managed hazardous waste (Sobojinski 1993, 17-890). This PRS is recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.41 PRS 3-036(l)—Aboveground Tank

PRS 3-036(l) is a 250-gal. emergency diesel fuel tank, installed in 1970, the tank is located approximately 20 ft east of TA-3-22. Because of past spills and leaks, an asphalt berm was constructed around the tank in 1989 to contain any future releases. In 1990 the tank was moved to a concrete secondary containment area 50 ft north of its original location. There are no drains from the secondary containment structure. The contaminated soil and the asphalt berm from the previous tank location were removed in the summer of 1990 and taken to the TA-54 landfill. The former location of the fuel tank is now covered with a 6-in.-thick concrete pad measuring 20 ft long by 20 ft wide that supports new transformers for TA-3-22 (Paxton 1983, 17-240).

The emergency diesel fuel tank never managed hazardous waste; therefore, NFA is recommended under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.42 PRS 3-036(j)—Aboveground Tanks

PRS 3-036(j) consists of two 150,000-gal. diesel fuel tanks installed in 1954 as backup power for TA-3-22. The two tanks are connected to a pump house, TA-3-57, which then connects to TA-3-22. The only release to the environment from these tanks occurred in 1991. An odor of natural gas was detected and analysis indicated that a fitting on a gas line needed to be replaced. The backup fuel system was brought on-line and pressurized. JCI personnel immediately discovered a leak in the underground line connecting TA-3-57 to TA-3-22. Diesel fuel from one of the tanks was discharged onto the ground and entered a storm water channel where it drained into a watercourse. The spill was discovered immediately by JCI operators, the fuel line was shut off, and the discharge ceased. The fuel discharged to a small drainage to Sandia Canyon, which is an ephemeral tributary to the Rio Grande. The total amount discharged was estimated to be 100 to

200 gal. (LANL 1992, 17-834). The Laboratory's Emergency Management Office was notified of the diesel spill and subsequently notified DOE, NMED, and EPA (LANL 1992, 17-834; Bellows 1991, 17-835).

The diesel spill was contained in the watercourse within minutes of the spill using absorbent booms and pillows. Pools of diesel fuel were removed using a wet/dry vacuum and absorbents. The removed fuel and absorbents were placed in drums and were properly disposed. Contaminated soil was removed, sampled, and properly disposed. Contaminated rocks were cleaned with low-pressure water and any discharge associated with the cleanup was contained and properly disposed. NPDES outfalls located downstream of the of the spill were controlled by re-routing or stopping their discharges to ensure that the spill was contained (NMED 1992, 17-832). The corrective action was to install a temporary fuel line until JCI Engineering designed and installed a permanent replacement (LANL 1992, 17-834). In addition, there was continuous monitoring of water flow in the canyon for a period of one year and annual leak testing for the backup fuel systems at all three steam plants. The site was inspected in February 1992, by NMED and found that the corrective actions taken were satisfactory.

The two tanks are structurally sound and have automatic leak detection systems. In addition, no hazardous waste has been managed in either tank. The only historical release on record is the 1991 spill from the pump house line which was addressed. Because this PRS has not managed hazardous waste or constituents it is recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.43 PRS 3-038(e)—Waste Lines

PRS 3-038(e) is a drain line from a sink at TA-3-65, the radiological materials storage building, that connects the sink to the industrial waste line running to TA-50. In 1987 to 1988, approximately one gallon of potassium hydroxide (KOH) and one gallon of sodium hydroxide (NaOH) mixed with hundreds of gallons of water were discharged into the drain (Watanabe 1994, 17-1162). During this time, experiments in TA-3-65 involved bombardment of neutrons in polymer plastic. Potassium hydroxide and sodium hydroxide were applied to the plastic in order to visually track the neutrons. Approximately 50 to 100 ml (2 to 3 oz) of KOH or NaOH were used in each experiment (Watanabe 1994, 17-1162). Currently, the sink is active and is also used as an emergency eyewash station.

This PRS is recommended for NFA under Criterion 2 because the small, dilute quantities of potassium hydroxide and sodium hydroxide do not exhibit the corrosive characteristics of RCRA

hazardous waste as described in 40 CFR 261.20, Subpart C. The sink that transported the liquid waste was discharged to the industrial waste line and was then routed to TA-50.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.44 PRS 3-040(a)—Storage Area

PRS 3-040(a) is a vault located in TA-3-30 used for staging shipments. The vault is designated as room 124 and is part of the main receiving bay, room 131. TA-3-30 was built in 1952 and the vault was constructed at that time. There is no history of chemical storage. According to an employee of the building since 1976, the vault has always been used for the purpose of staging shipments which at one time included rolls of used film in plastic bags. The bags of film were placed in wooden crates pending shipment to Albuquerque for silver recovery. The frequency of shipments was approximately four times per year (Buksa 1995, 17-1254).

PRS 3-040(a) is recommended for NFA under Criterion 2 because no hazardous waste or constituents were stored in the vault. There have been no known releases inside the vault. There are no floor drains in room 124; therefore, no pathway to the environment exists.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.45 PRS 3-040(b)—Storage Area

PRS 3-040(b) was a film disintegrator once located in room A-3B in the basement of the Administration Building, TA-3-43. The disintegrator, a completely enclosed system for shredding classified film, operated from 1988 until 1991. The film pieces exited the disintegrator via a hose and were deposited into plastic bags inside a 55-gal. drum. When a certain volume was reached, the bags were sent to Phoenix, Arizona for silver recovery (Buksa 1994, 17-1182).

PRS 3-040(b) is recommended for NFA under Criterion 3 because the disintegrator was a completely enclosed system with no possibility of contamination outside the system. In addition, there was no pathway to the environment from the basement room.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.46 PRS 3-043(l)—Aboveground Tank

PRS 3-043(l) is a 35-gal. fuel oil tank, TA-3-93, that was located east of the south wing of the Physics Building, TA-3-40 (Engineering drawing ENG-C 11340). The tank was installed in 1953

and removed in 1966. There were no reports of historical releases during removal (Goodrich 1966, 17-982). In 1966 a natural gas generator was installed, then removed in 1988. Currently, there is a new diesel generator along with a 550-gal. UST inside a cement vault.

This PRS is recommended for NFA under Criterion 3 because there is no documentation that suggests the original 35-gal. tank, or the other tanks subsequently placed in the same location, have leaked. Presently, the tank in the location of PRS 3-043(i) is covered under current state UST regulations.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.47 PRS 3-047(c)—Drum Storage

PRS 3-047(c) is an outdoor fenced yard used since the mid-1970s to store metal forms for forming concrete and small pieces of equipment, e.g., lawnmowers. Form oil (a light lubricating oil used to prevent concrete from adhering to the metal forms) was stored in 55-gal. drums in this yard until 1990. The yard is not paved and small oil stains were visible under some of the small pieces of equipment stored in the yard during several site visits conducted by ER Project personnel in 1993 and 1994. According to JCI employees interviewed, there is no record of any spill or source of contamination associated with the storage yard other than the small drips from the lawn care equipment (LANL 1994, 17-1172).

PRS 3-047(c) is proposed for NFA because there are no known releases from the drum storage and the small amount of 10W-30 motor oil released into the environment from forklifts and lawn mowing equipment is not considered a hazardous wastes, or a threat to the environment (Unocal 1992, 17-1253). This PRS is recommended for NFA under Criterion 2 since no hazardous waste or constituents were managed at this site.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.48 PRS 3-047(h)—Storage Area

PRS 3-047(h) is potentially contaminated soil from a product storage area located northeast of TA-3-170, the Liquid and Compressed Gas Facility. The SWMU report noted a drum storage area consisting of two 55-gal. drums, one containing trichloroethane (TCE) and the other containing vacuum pump oil. The storage area was covered by a roof and was surrounded by an approximate 75 ft length of asphalt to the north and 100 ft of asphalt to the east. Both drums were grounded and were placed over a secondary containment drip pan most of the time (Chacon 1995, 17-

1258). These drums were stored in this area from the early 1980s until 1989 (Buksa 1994, 17•1183).

Because the storage area was covered by a roof, the likelihood of any runoff entering the environment is minimal, even if a spill did occur. Secondary containment would also eliminate any potential pathways to the environment. This PRS is recommended for NFA under Criterion 3 because no release to the environment occurred (Buksa 1994, 17•1183).

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.49 PRS 3•047(I)—Satellite Storage Area

PRS 3•047(I) is identified in the SWMU Report as potentially contaminated soil from a product drum storage area located on the south side loading dock of TA•3•216, the Weapons Test Support Facility (LANL 1990, 0145). According to the RFA (Weston) report, stains were noted on the cement immediately around the drums but did not extend to the edge of the loading dock (LANL 1992, 17•582). At the time of the investigation, trays were under the spigot to contain any minor leaks from dispensing. The area surrounding the loading dock is completely asphalted. During a site visit in 1994, no obvious contamination was found. There were only rust rings from metal stands that held the drums.

The dock area of TA•3•216 is very clean and orderly. There is no evidence of a release to the environment from the product storage area; therefore, NFA is recommended under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.50 PRS 3•047(J)—Drum Storage

PRS 3•047(J) is identified in the SWMU Report as an inactive drum storage area located adjacent to the east dock of the Van de Graaff Facility, TA•3•16 (LANL 1990, 0145). The area is an asphalt pad approximately 8 ft long x 4 ft wide that contained two 55•gal. drums. According to a former site worker employed at the Van de Graaff Facility since the early 1980s, the drums were used to store waste mineral spirits and cutting oil from the machine shop. Nothing known to be radioactively contaminated was allowed to be machined in the shop. Apparently, the area was active for only a few years in the early 1980s. Machining operations ceased in 1987 (Buksa 1994, 17•1142).

According to the machine shop supervisor, the drums of mineral spirits and cutting oil were only stored temporarily with no history of releases. While there is a small stain on the asphalt pad, it is

contained in the immediate area and would not have been the result of a substantial release, therefore this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.51 PRS 3-047(k)—Drum Storage

PRS 3-047(k) is listed as potentially contaminated soil from a product storage area located at TA-3-374, the drum storage shed, west of TA-3-31, the chemical warehouse. The shed was constructed in the early 1970s and is a 90 ft long x 20 ft wide x 12 ft high structure. The area around the shed is completely covered with asphalt and serves as a parking lot. The nearest area containing soil is greater than 200 ft southwest of the parking lot. TA-3-374 housed an oil dispensing unit for new vacuum pump oil and sealed drums that contained new cleaning solvents for Laboratory-wide use.

The oil dispenser was removed, date unknown, and presently the shed contains only empty drums and equipment such as a forklift. There were no reported or documented spills, yet stains were noted on the pavement during the Weston site reconnaissance visit in 1989. Weston listed some contaminants of concern that were stored there, including oil, trichloroethene, toluene, 2-butanone, freon, ethylene glycol, and chloroethene (LANL 1992, 17-582). The structure has no drains or any source of water (LANL 1992, 17-855).

During a site visit in April 1994, stains were present on the concrete floor of the shed; however, because no documentation exists regarding past spills, the stains are most likely from vehicular traffic or the equipment that is now stored in TA-3-374 (Buksa 1994, 17-1184).

The waste coordinator for TA-3-30, the general warehouse, and TA-3-31, the chemical warehouse, reviewed available records concerning the shed and found no spill occurrence related to TA-3-374.

The area of concern did not handle or manage waste, only sealed drums of product solvent and product oil. All solvent containers were not opened and remained completely sealed while on site. TA-3-374 has no credible off-site pathways and has no history of releases to the environment, therefore this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.52 PRS 3-048—Satellite Storage Area

PRS 3-048 consists of twenty-five 55-gal. transuranic (TRU) waste canisters inside a remote-handled hot cell in wing 9, located in the south wing of building 29. The waste contains primarily metal TRU waste and plastic pending shipment to TA-54 and eventually the Waste Isolation Pilot Plant (WIPP) (Buksa 1994, 17-1169).

The hot cells in wing 9 are completely contained units with no pathway to the environment. There has been no release of hazardous or radioactive waste (Buksa 1994, 17-1169); therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.53 PRS 3-050(b)—Exhaust Emissions

PRS 3-050(b) is attributed to emissions from exhaust stacks located at TA-3-34. Construction of TA-3-34 was completed in April 1955. Active tritium work was carried out in this building until 1984. In July 1986, the tritium effluent stack was shut down because all tritium and tritium handling systems were removed. Radioactive air releases have been documented and the available data show 28,000 Ci of tritium were released from TA-3-34 from 1976 through 1985 (Goosney 1986, 17-918).

These radioactive releases are at least four orders of magnitude lower than the minimum radioactivity necessary to cause soil contamination exceeding SALs (Radian 1993, 17-1192).

In addition, actual data from preliminary soil screening results in locations surrounding TA-3 from 1991 through 1993 show alpha, beta, and gamma activities at background levels (Fresquez 1993, 17-787; Fresquez 1991, 17-498; Fresquez 1991, 17-259; Fresquez 1992, 17-241; Fresquez 1992, 17-1026).

No further action is proposed for this PRS aggregate based on the following reasons: preliminary soil screening results show no contamination exceeding SALs; CAP88-PC calculation for these emissions indicates that the emissions were not sufficient to cause radioactive deposition in excess of SALs; these areas of suspected soil contamination from the stack emissions were not the sites of hazardous waste management; and these areas were incorrectly designated as PRSs based solely on the potential presence of radioactivity.

Since this PRS has been characterized in accordance with current applicable regulations and the data indicate that contaminants pose an acceptable level of risk under curent and projected future land use, it is recommended for NFA under Criterion 5.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.54 PRS 3-050(c)—Exhaust Emissions

PRS 3-050(c) is attributed to emissions from exhaust stacks located at TA-3-35. TA-3-35 was constructed in 1954 as part of the Sigma Complex and was used to manufacture enriched uranium-loaded graphite and carbide fuel elements. In November 1991, TA-3-35 was declared surplus or inactive due to lack of funds for facilities, equipment, and security upgrades (Mitchell 1991, 17-254). Small amounts of tritium were also handled in this facility (Enders 1973, 17-177). Available radioactive air emissions data show 260 µCi of uranium-235 were released from TA-3-35 from the 1960s through 1992 (LANL 1994, 17-1028).

These radioactive releases are at least four orders of magnitude lower than the minimum radioactivity necessary to cause soil contamination exceeding SALs (Radian 1993, 17-1192).

In addition, actual data from preliminary soil screening results in locations surrounding TA-3 from 1991 through 1993 show alpha, beta, and gamma activities at background levels (Fresquez 1993, 17-787; Fresquez 1991, 17-498; Fresquez 1991, 17-259; Fresquez 1992, 17-241; Fresquez 1992, 17-1026).

No further action is proposed for this PRS aggregate based on the following reasons: preliminary soil screening results show no contamination exceeding SALs; CAP88-PC calculation for these emissions indicates that the emissions were not sufficient to cause radioactive deposition in excess of SALs; these areas of suspected soil contamination from the stack emissions were not the sites of hazardous waste management; and these areas were incorrectly designated as PRSs based solely on the potential presence of radioactivity.

Since this PRS has been characterized in accordance with current applicable regulations and the data indicate that contaminants pose an acceptable level of risk under curent and projected future land use, it is recommended for NFA under Criterion 5.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.55 PRS 3-051(d)—Soil Contamination

PRS 3-051(d) is an active air compressor inside a metal shed located on the south side of the east wing of TA-3-40, the Physics Building. The shed sits on a concrete pad that abuts the asphalt parking lot. The compressor has been in operation since the building was constructed in 1953 and is only used as a power backup when the main compressor is serviced. Stains are visible directly below the compressor on the concrete pad due to small gasket leaks inherent in the equipment. The oil has not migrated off the pad. The stain is contained with Sorb-all™ which is changed by building personnel (Watanabe 1994, 17-1163).

This PRS is recommended for NFA under Criterion 3 because the oil leaks never migrated off the pad to any surrounding soil or vegetation located at greater than 200 ft. There is no documented PCB release from the compressor and no records indicating that there is reason to suspect the compressor contained PCBs at any concentration (Wechsler 1995, 17-1235).

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.56 3-056(b) —Container Storage Area

PRS 3-056(b) is located on a 30 ft x 100 ft concrete pad approximately 75 ft southeast of TA-3-70, the parks and refuse office. The concrete pad is surrounded by sand piles varying from 6 to 15 ft in height. Through 1993 heavy equipment, such as forklifts, operated throughout the storage area constantly removing and adding reels of cable for storage and drums both empty (for storage) and filled, as described below.

PRS 3-056(b) is located on the east half of the existing concrete pad and includes the surrounding area. It was used for the storage of large wooden cable spools for the Nevada Test Site testing facility (NTS) facility from the mid-1970s through 1989. In addition, drums containing sand and asphalt mixtures were stored on pallets in an unpaved, 20 sq. ft area (DOE 1987, 0264). Drums of oil saturated sand from a catch tray in a steam cleaning pit (for steaming oil and grease off equipment) were also stored here. New drums of roofing compound were also periodically stored in this area. The steam cleaning pit was decommissioned in 1990 and HSE-7 removed the drums at that time (Sobojinski 1992, 17-643).

No staining was observed during site visits or from historical aerial photographs of the area where the pad is located (LASL 1955, ER ID 0017011; LASL 1974, ER ID 0017267; LASL 1977, ER ID 0017869; LASL 1979, ER ID 0018923; LASL 1979, ER ID 0018923; LANL 1983, ER ID 0018925; LANL 1986, ER ID 0018010; LANL 1994, 17-1173).

Since this site has never managed hazardous waste or hazardous constituents, it is recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD Dated 11/8/95.

2.57 PRS 3-056(e)—Satellite Storage Area

PRS 3-056(e) is generically described as waste storage facilities at the Cryogenics Buildings, TA-3-32 and TA-3-34.

This PRS is a duplicate of both PRS 3-001(j) and PRS 3-001(n), therefore this PRS is recommended for NFA under Criterion 1. PRS 3-001(j) and PRS 3-001(n) are both proposed for NFA in this document.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.58 PRS 3-056(f)—Drum Storage

PRS 3-056(f) is described in the SWMU Report as a waste storage facility located at TA-3-316, the high voltage test facility (LANL 1990, 0145). PRS 3-056(f) is listed as drum storage west of the building. This PRS was formerly PRS 3-001(n). PRS 3-001(n) was then renumbered to PRS 3-001(l). PRS 3-001(l) and PRS 3-001(n) are both proposed for NFA in this request.

This PRS is a duplicate of both PRS 3-001(l) and PRS 3-001(n), therefore this PRS is recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.59 3-056(g)—Satellite Storage Area

Satellite storage areas and less-than-90-day accumulation areas were established at the Laboratory including at the former OU 1114 in conformance with 40 CFR 262, Standards Applicable to Generators of Hazardous Waste and managed under the Laboratory Spill Prevention Control and Countermeasure Plan (LANL 1990, 17-820). Because any releases from storage areas will be addressed under the SPCC, there is no potential for considering these units as historical release sites. The EPA and the Laboratory have agreed that accumulation areas are not PRSs provided that they have no history of release and have no credible pathways to the environment (Twombly 1992, 17-681). PRSs listed in Table 2.5-9 meet these Criterion. These

PRSs are listed on the Laboratory registry of satellite and less-than-ninety-day accumulation areas (McInroy 1992, 17-748, (LANL 1995, 17-1236).

This PRS is listed in Table 2.5-1 included in Section 2.5 of this document, Satellite Storage Areas, PRSs 3-001(d,f,g,h,j,n,o,q,s,t,v,w,x,y).

Because any releases from this storage area will be addressed under the Laboratory's SPCC Plan and has no history of release and has no credible pathways to the environment, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.60 PRS 3-056(l)—Drum Storage

PRS 3-056(l) is an area used for drum storage on the east dock of TA-3-38, the JCI shops building. Weston (LANL 1989, 17016) identified a blue plastic 55-gal. drum with oil stains on the concrete dock just outside the electrical shop. According to the electrical shop supervisor who has worked at TA-3-38 for 20 years, oil stored in the drum is waste turbine oil. He stated that turbines are used in the shop to circulate water through the building. When the oil in the turbines is changed, it is temporarily stored in a drum until full and then taken to be recycled. He also stated that the waste turbine oil is very clean because it is changed frequently (Watanabe 1994, 17-1154). Small spills on the dock occurred when the drum was filled with the waste oil. The 1989 Weston site reconnaissance photograph shows staining; however, no stains had migrated more than two feet away from the drum. The drum storage is now located inside the electrical shop and the dock has been cleaned of all oil stains.

The material safety data sheet for turbine oil states that it is a very inert, nontoxic/noncarcinogenic type of oil. There is no historical evidence of a release to the environment, and the amount of oil spilled during transfer was very small. The dock was thoroughly cleaned when the storage area was removed and currently poses no risk.

Because there is no historical evidence of a release to the environment, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.61 PRS 3-056(j)—Storage Area

PRS 3-056(j) is listed in the SWMU Report as an outdoor storage area containing compressors and gasoline for the compressors west of TA-3-473, a transportable office building, south of the

Physics Building, TA-3-40 (LANL 1990, 0145). During a site visit in May 1994 there was no visible sign or documentation that compressors or drums of gasoline had ever been stored or spilled or leaked at this location. According to the Geoengineering (EES-4) Group Leader responsible for the area, the storage was used approximately four years during the late 1960s for satellite dishes and scaffolding. Other items stored in the area included a rack with pipes, conduit, electrical cable, and fuse boxes (Watanabe 1994, 17-1156).

This PRS is recommended for NFA because the storage area was not used to manage RCRA hazardous waste.

This PRS is recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.62 PRS 3-057—Sump/Grease Trap

PRS 3-057 is an inactive grease trap located 10 ft southeast of TA-3-100, a former cafeteria. The grease trap was installed in 1956 and is 2 ft wide by 3 ft long by 2.5 ft deep and constructed of 6-in. rebar-reinforced concrete walls. Contrary to the SWMU Report, the grease trap has no structure number. Water containing grease from the kitchen drained into the grease trap. There the grease was separated from the water through three grease filters, which were removed and replaced periodically to prevent clogging; the remaining liquid went to the sanitary sewer. Manhole TA-3-888 was constructed in 1968 as more structures required sanitary sewer drain service. This structure number was incorrectly identified in the SWMU Report as the grease trap (LANL 1990, 0145). The grease trap has been inactive since 1981 when the new cafeteria became active in the Otowi Building, TA-3-261.

The grease trap that served the cafeteria was not used for hazardous waste and is therefore recommended for NFA under Criterion 2.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.63 PRS 3-058—Container Storage

PRS 3-058 is described in the SWMU Report as TRU container storage areas within TA-3-29 (LANL 1990, 0145). Approximately two or three 55-gal. drums are located in the utility corridors between the laboratories in wings 2, 3, 5, and 7. Typically, the temporary accumulation areas store combustible and noncombustible waste such as gloves, tissues, rags, laboratory plastic ware, and broken laboratory equipment (Buksa 1994, 17-1169). The container storage areas are under

administrative control with no history of releases. The waste is placed in separate plastic bags inside each drum. Full drums are moved to the basement rooms 5070 and 5072 and accounted for daily. Prior to being removed from the building enroute to TA-54, radiation levels of the drums are measured (Buksa 1994, 17-1169).

The site did not manage or store RCRA hazardous waste. No release to the environment has occurred; therefore, this PRS is recommended for NFA under Criterion 3.

EPA Review: OU 1114 Addendum 1 NOD dated 11/8/95.

2.64 PRS 18-009(b)—Transformer

Transformer PRS 18-009(b) at Station TA-18-46 was removed in 1988 (LANL 1990, 0145). One of the three transformers at Station TA-18-46 contained oil with PCB concentrations above 50Φppm (Assaigai Analytical Laboratories, Inc. 1984, 16-0048; LANLΦ1992, 16-0047According to the SWMU Report (LANL 1990, 0145), this transformer was inspected before removal. There is no evidence from engineering records that leaks occurred. These site was designated as a PRS because PCBs are not regulated by RCRA. A July 1992 onsite inspection of this location revealed that the transformer has been replaced with a transformer containing less than 50 ppm PCBs.

Because there is no evidence of past or present leaks, NFA is proposed for this PRS under Criterion 3.

EPA Review: OU 1093 work plan review letter dated 9/23/94.

2.65 PRS C-60-001—Underground Tank

PRS C-60-001 is a 10 152-gal. UST for diesel fuel formerly designated TA-3-382, now designated TA-60-1. The tank, TA-3-Motor Pool-2, was installed in 1978 and removed in 1989. In 1988 an improperly conducted tightness test resulted in the assumption the tank was leaking, as reported in the Site Reconnaissance Report performed by Weston (DOE 1989, 17-018); however, no visible signs of contamination were present during the tank removal.

This area of concern has undergone closure under the New Mexico UST Regulations (Tiedman 1989, 17-619); therefore, this PRS is recommended for NFA under Criterion 4.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.66 PRS C-60-002—Underground Tank

PRS C-60-002 is a 4,000-gal. decommissioned diesel fuel UST, TA-3-318. The tank was located on Sigma Mesa near the decommissioned communications bunker, TA-3-219. The date the tank was installed is unknown. In 1987 the tank was excavated and removed as part of a Laboratory-wide UST removal program. After removal, the manufacturer's original chalk markings inside the tank showed that it never held product fuel. The tank was cut up and the metal scrap transported to the salvage yard (McIlroy 1993, 17-962).

This area of concern has undergone closure under the New Mexico UST; therefore, this PRS is recommended for NFA under Criterion 4.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.67 PRS C-60-003—One-time Spill

PRS C-60-003 is a one-time release from the Pesticide Storage Shed, TA-60-29. The only documented incident at the shed involved a ruptured 2-in. potable water line that was discovered January 3, 1989. According to the filed spill report (LANL 1989, 17-662), a furnace air pressure switch failed which subsequently caused a potable water line to the safety shower in the shed to freeze and rupture. Between 2,000 and 10,000 gal. of water were estimated to have been released from the ruptured pipe. The water flooded the mesa top north to the rim of Sandia Canyon and south to the rim of Mortandad Canyon. A stream of water ran into Mortandad Canyon extending about 150 ft down the canyon floor, approximately 60 yards from an intermittent stream. At the time of the discovery, the water had frozen into linear tongues of ice on top of the mesa.

Responding personnel constructed earthen berms around the spill boundary and pumped approximately 1,500 gallons of water out of the shed into two Hydroseeder tanks adjacent to the building. Most of the pesticide and herbicide products stored in the shed were in sealed metal or plastic-lined cardboard boxes. Several product containers came into contact with the water; however, the containers remained intact. Pesticides may have been dissolved in the water that was released into the surrounding soil, yet samples were taken. Analytical results indicate that no pesticides were detected, and only the herbicide 2,4-D was detected in concentrations of 1,189 and 11,890Φ g/l, respectively. No additional correction action was taken and the spill was reported to NMEID on January 4, 1989. This area of concern is a duplicate of PRS 60-001(d) addressed in the RFI Work Plan for OU 1114 in Subsection 6.2.4.1.1 (LANL 1993, 1090). PRS 60-001(d) was approved for NFA by DOE on October 11, 1995.

Since this release was remediated under the Laboratory's SPCC Plan, this PRS is recommended for NFA under Criterion 4.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.68 PRS C-60-004—Underground Tank

PRS C-60-004 is listed as a decommissioned tank located near TA-60-1. This tank is being addressed as C-60-001. C-60-001 is being proposed for NFA in this request (see documentation above).

Since this site is a duplicate of C-60-001, this PRS is recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

2.69 PRS C-61-001—Transformer Storage Area

PRS C-61-001 is listed as an active PCB storage area at TA-61-23 (LANL 1990, 0145). This PRS is actually a duplicate of 61-001, an inactive PCB storage area at TA-61-23 that was addressed in the RFI Work Plan for OU 1114, Subsection 5.10 (LANL 1993, 1090). PRS 61-001 was approved for NFA by DOE on November 28, 1995.

Since this site is a duplicate of PRS 61-001, this PRS is recommended for NFA under Criterion 1.

EPA Review: OU 1114 Addendum 1 NOD dated 11/1/95.

REFERENCES FOR CHAPTER 2

LANL (Los Alamos National Laboratory), June 1995. "RFI Report for Potential Release Sites 0-030(c) and 0-030(q)," Los Alamos National Laboratory Report LA-UR-95-2079, Los Alamos, New Mexico. (LANL 1995, 1350)

LANL (Los Alamos National Laboratory), April 1993. "RFI Report, Operable Unit 1071 Aggregate 0-G, Leakage from PCB Transformers," Los Alamos National Laboratory report, Los Alamos, New Mexico. (LANL 1993, 1347)

LANL (Los Alamos National Laboratory), May 1993. "RFI Work Plan for Operable Unit 1093," Los Alamos National Laboratory Report LA-UR-93-422, Los Alamos, New Mexico. (LANL 1993, 1085)

LANL (Los Alamos National Laboratory), July 1995. "RFI Work Plan for Operable Unit 1114, Addendum 1," Los Alamos National Laboratory Report LA-UR-95-731, Los Alamos, New Mexico. (LANL 1995, 1291)

Environmental Protection Agency Region 6, November 1995. "Notice of Deficiency, Addendum 1 to Work Plan for Operable Unit (OU) 1114, Los Alamos National Laboratory," letter to T. J. Taylor, Program Manager, Department of Energy, Los Alamos National Laboratory, from D. W. Neleigh, Chief, New Mexico, Federal Facilities Section, Dallas, Texas.

Environmental Protection Agency Region 6, November 1995. "RFI Report for Technical Area 0, Los Alamos National Laboratory," letter to T. J. Taylor, Program Manager, Department of Energy, Los Alamos National Laboratory, from D. W. Neleigh, Chief, New Mexico, Federal Facilities Section, Dallas, Texas.

Environmental Protection Agency Region 6, January 1995. "RFI Report on Aggregate 0-G, Operable Unit 1071, Los Alamos National Laboratory," letter to T. J. Taylor, Program Manager, Department of Energy, Los Alamos National Laboratory, from W. Honker, P.E., Chief, RCRA Permits Branch, Dallas, Texas.

Environmental Protection Agency Region 6, September 1994. "RFI Work Plan Approval and List of Modifications for Operable Unit 1093," letter to J. C. Vozella, Chief, Environment, Safety and Health Branch, Department of Energy, Los Alamos National Laboratory, from A. M. Davis, Director, Hazardous Waste Management Division, Dallas, Texas.

APPENDIX A

APPENDIX A

Maps

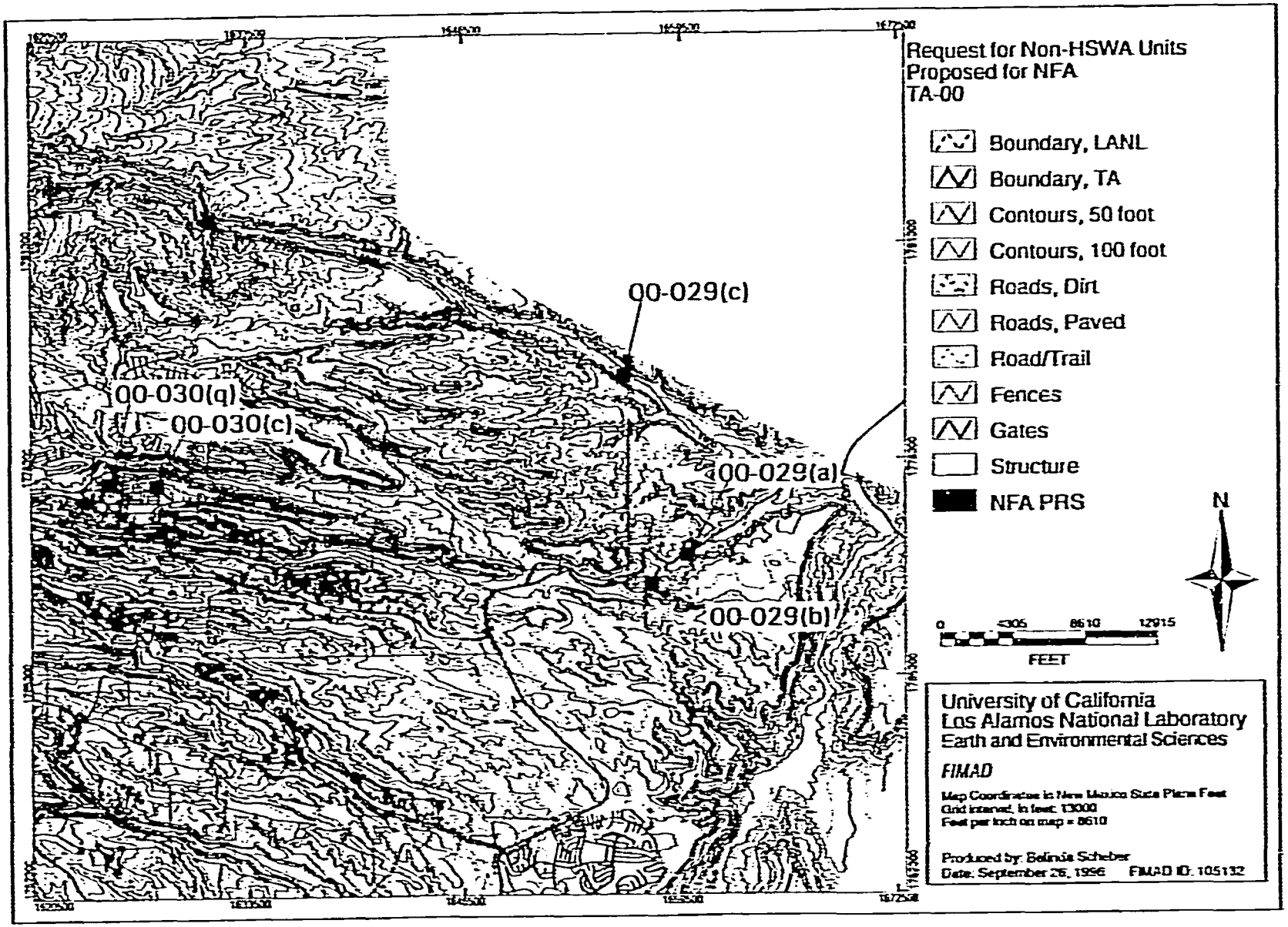

Figure A-1. Request for Non-HSWA Units Proposed for NFA, TA-00.

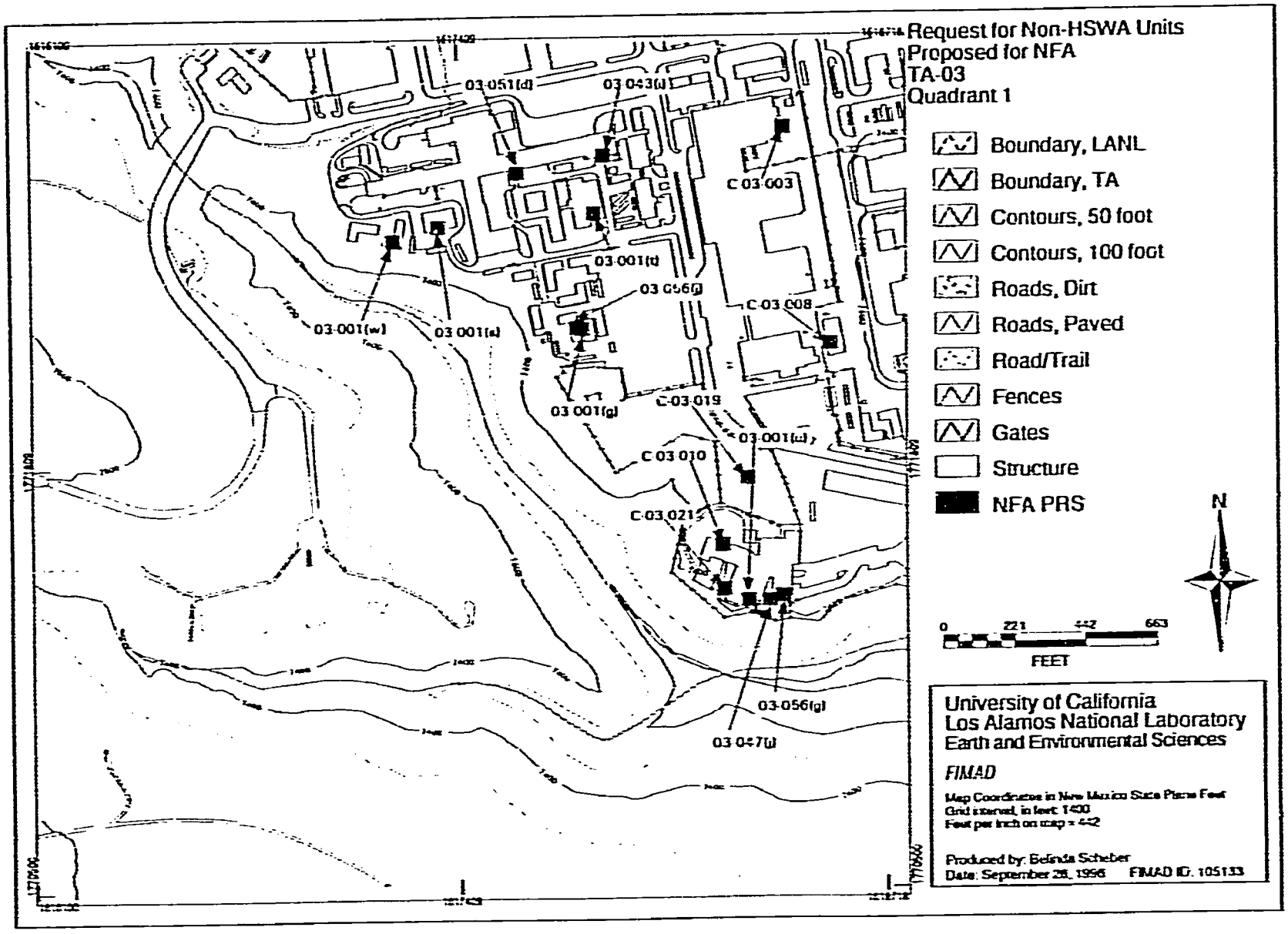

Figure A-2. Request for Non-HSWA Units Proposed for NFA, TA-03.

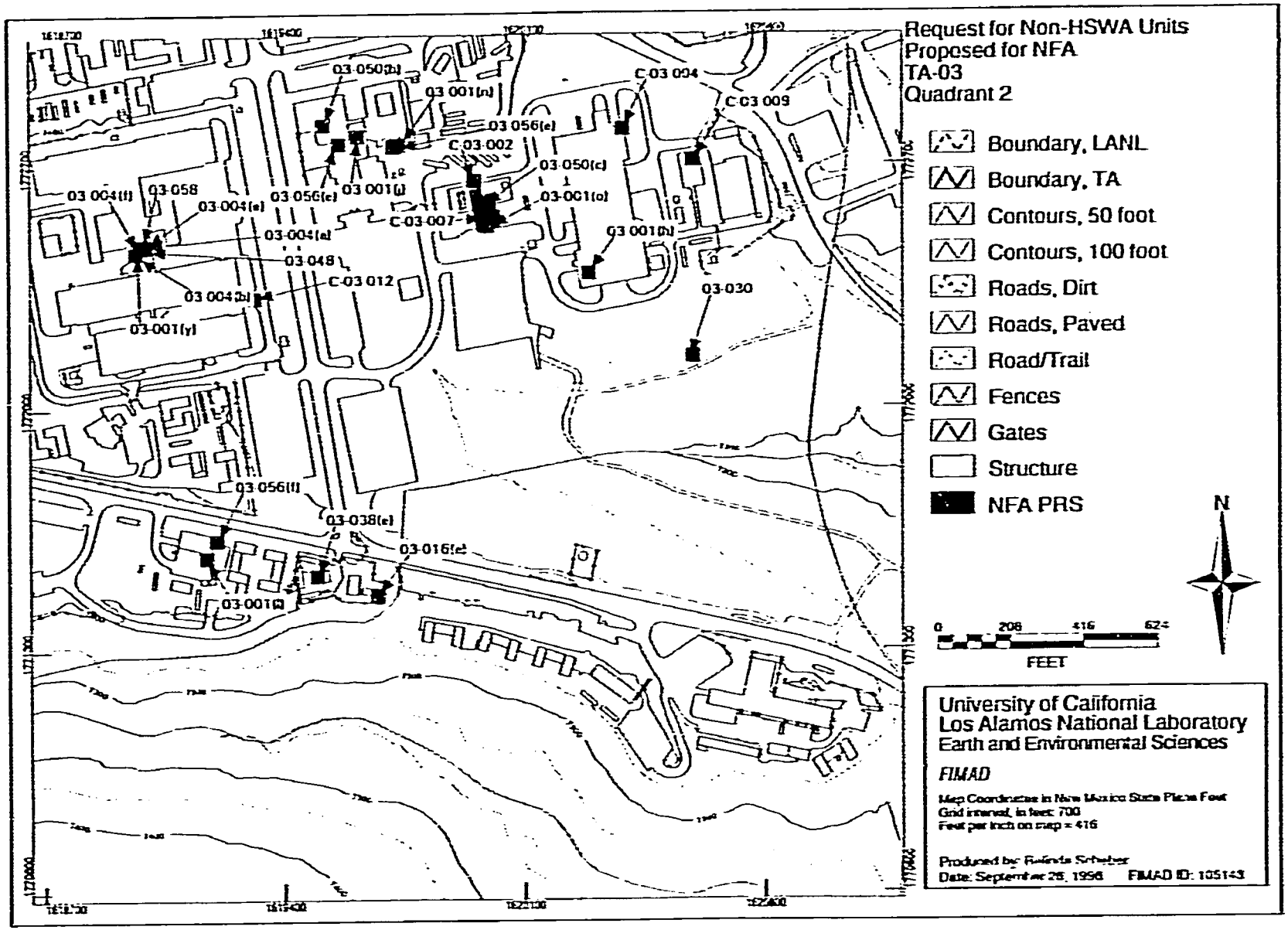

Figure A-3. Request for Non-HSWA Units Proposed for NFA, TA-03.

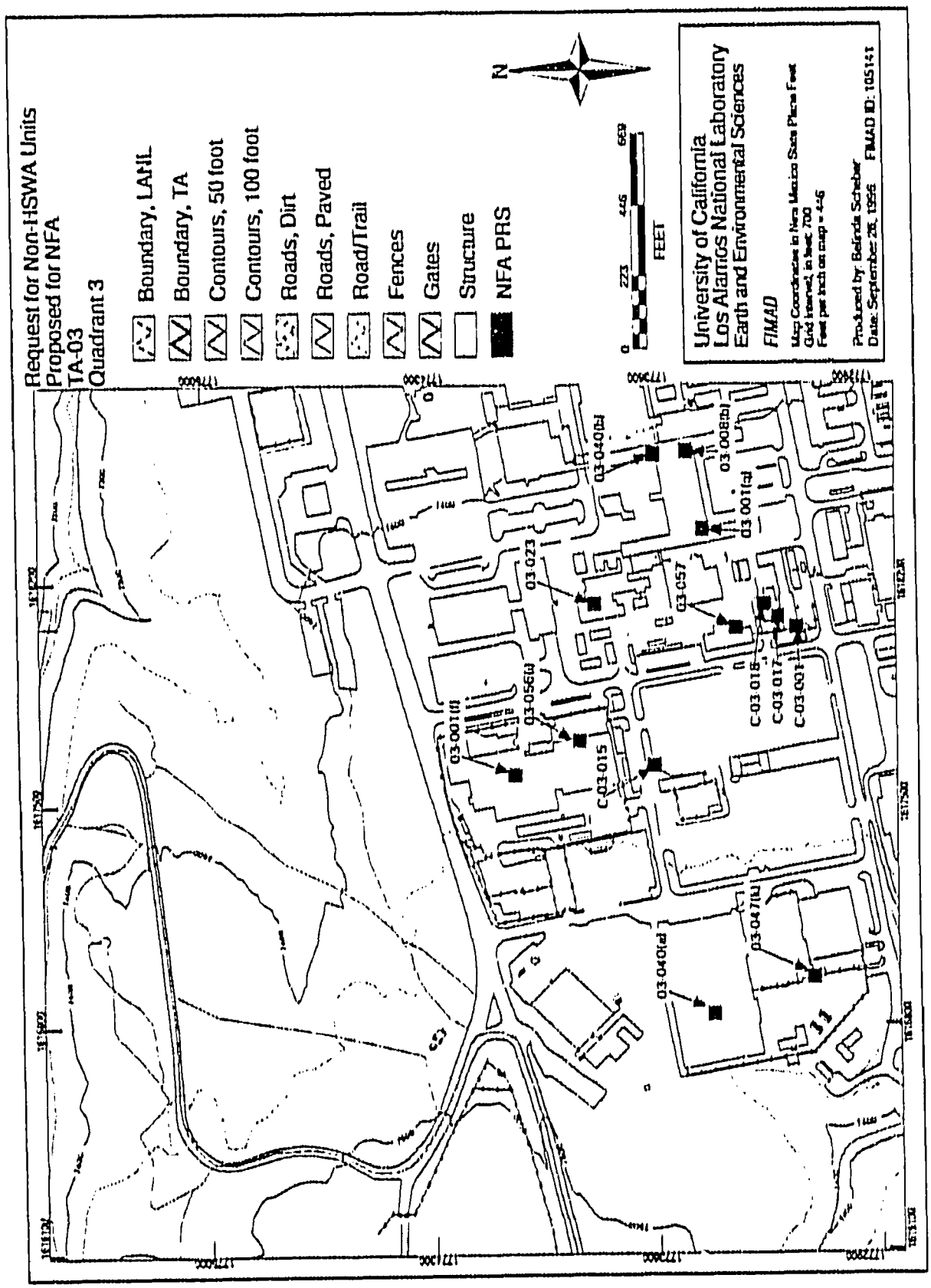

Figure A-4. Request for Non-HSWA Units Proposed for NFA, TA-03.

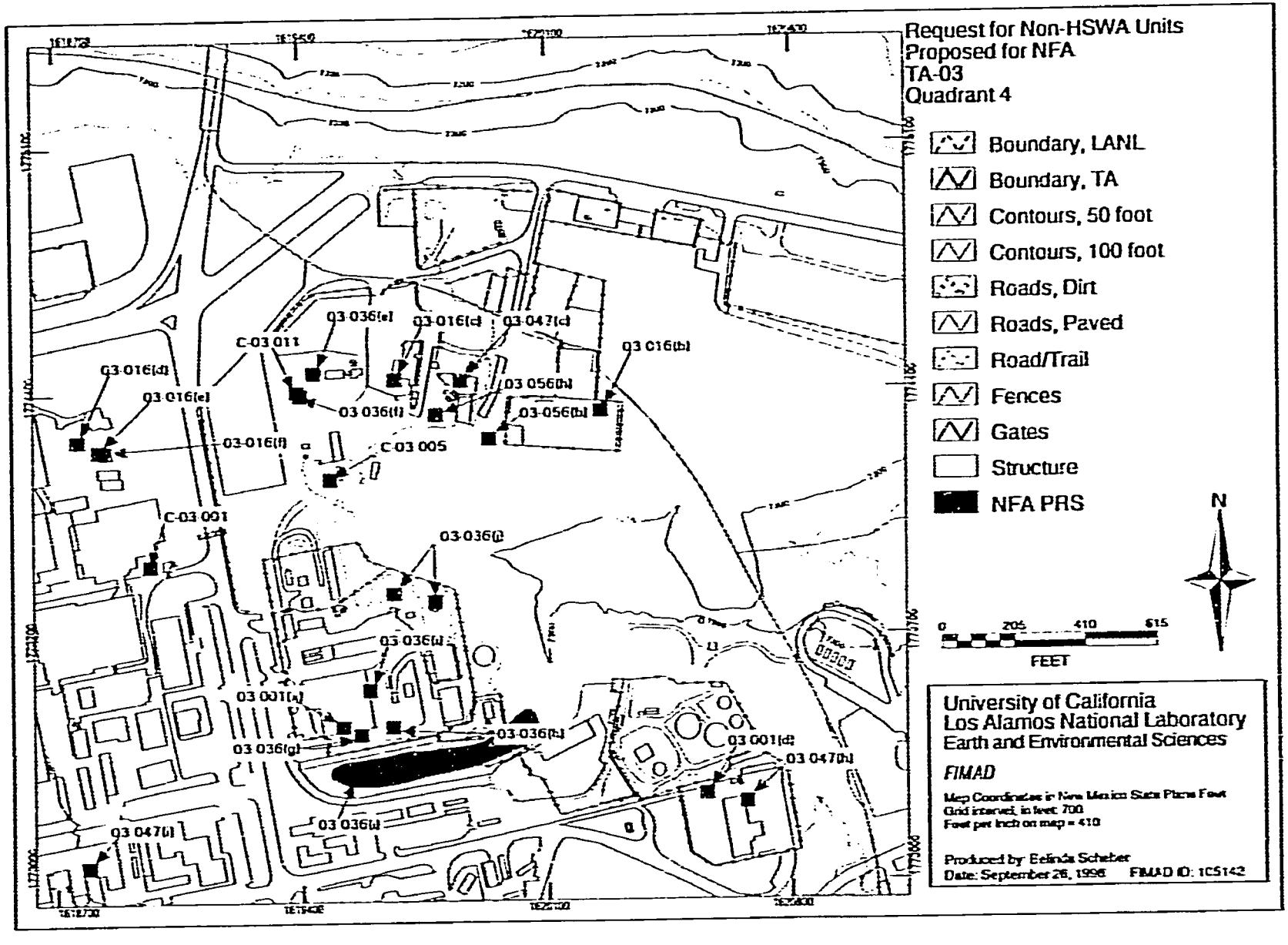

Figure A-5. Request for Non-HSWA Units Proposed for NFA, TA-03.

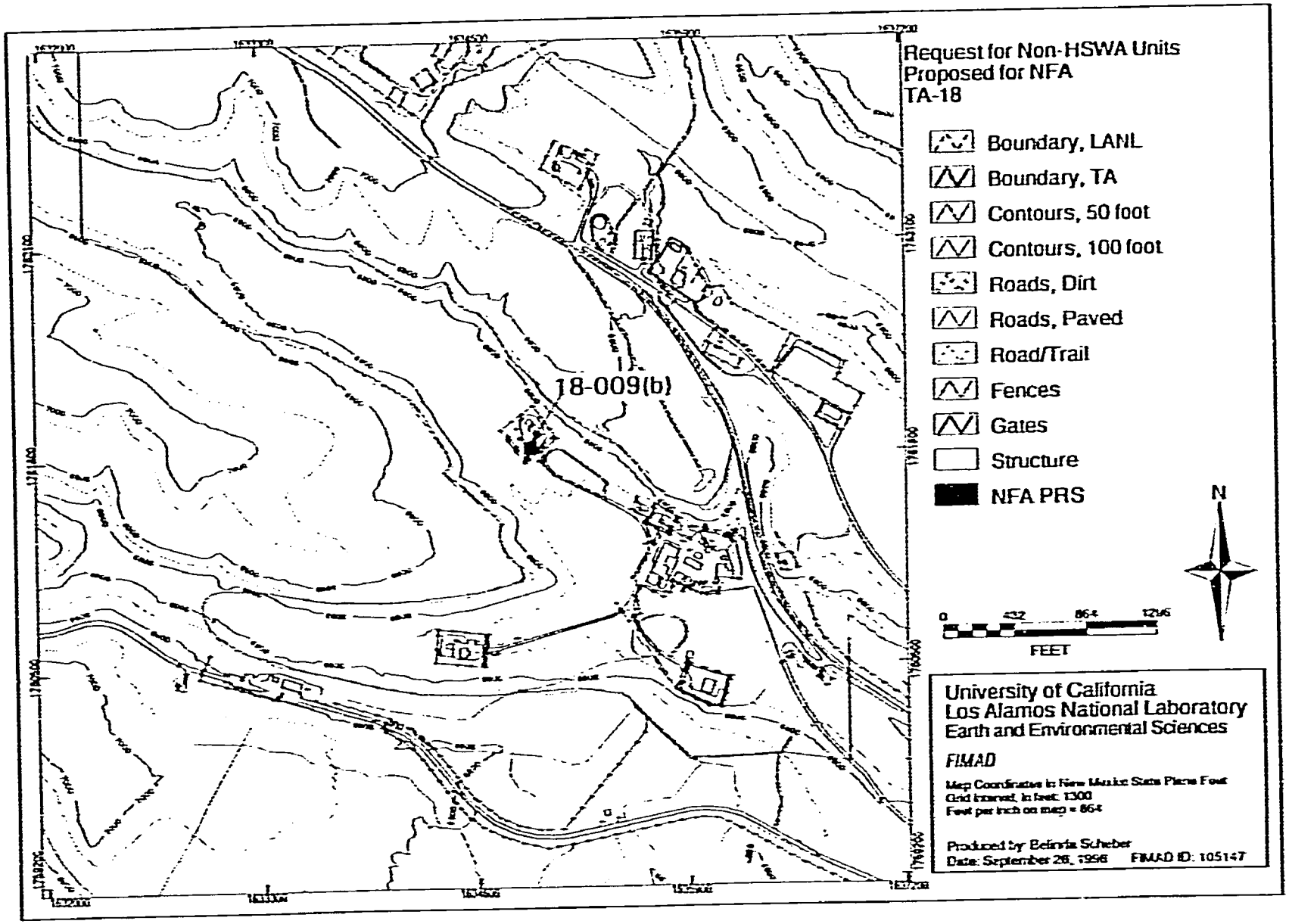

Figure A-6. Request for Non-HSWA Units Proposed for NFA, TA-18.

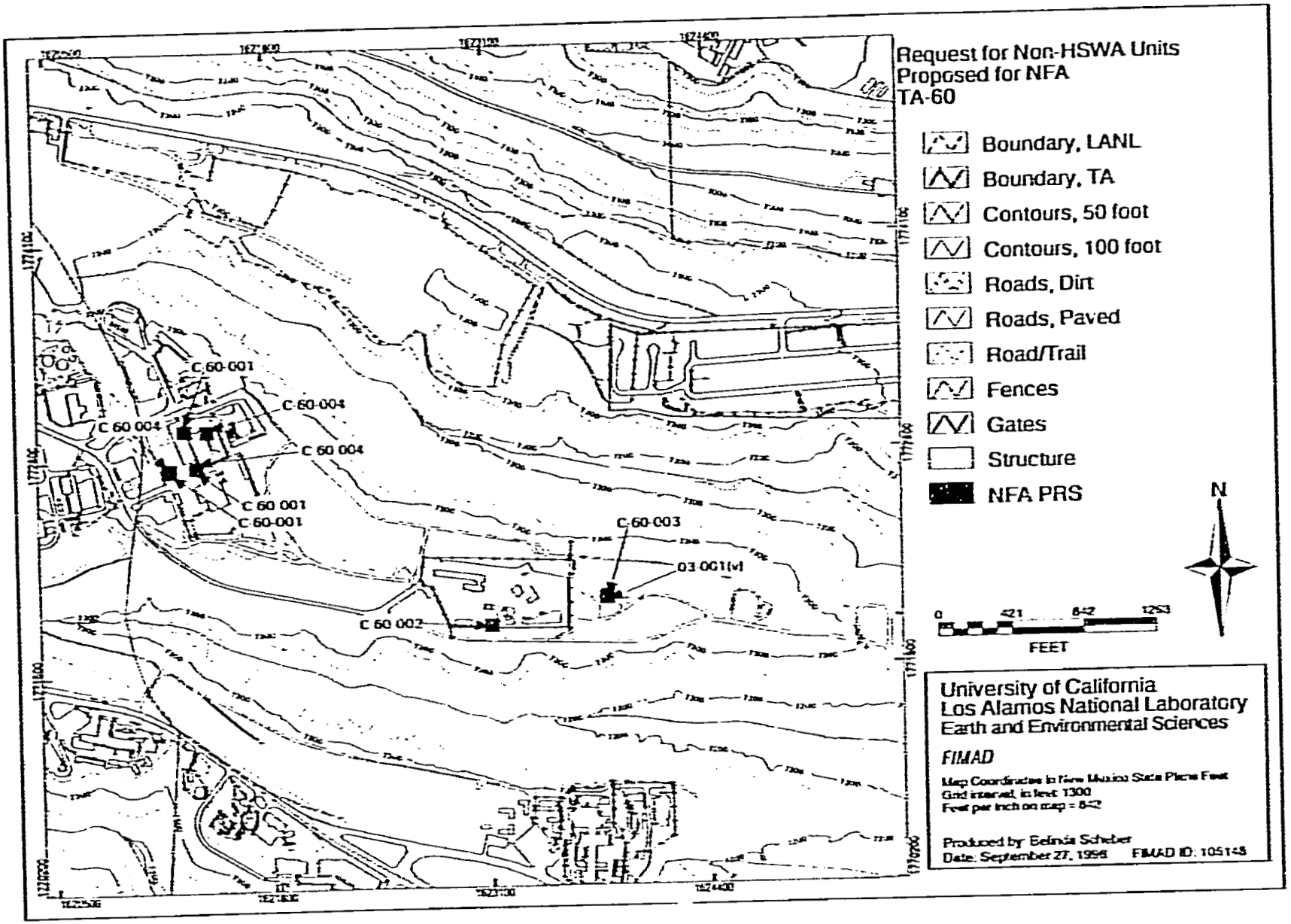

Figure A-7. Request for Non-HSWA Units Proposed for NFA, TA-60.

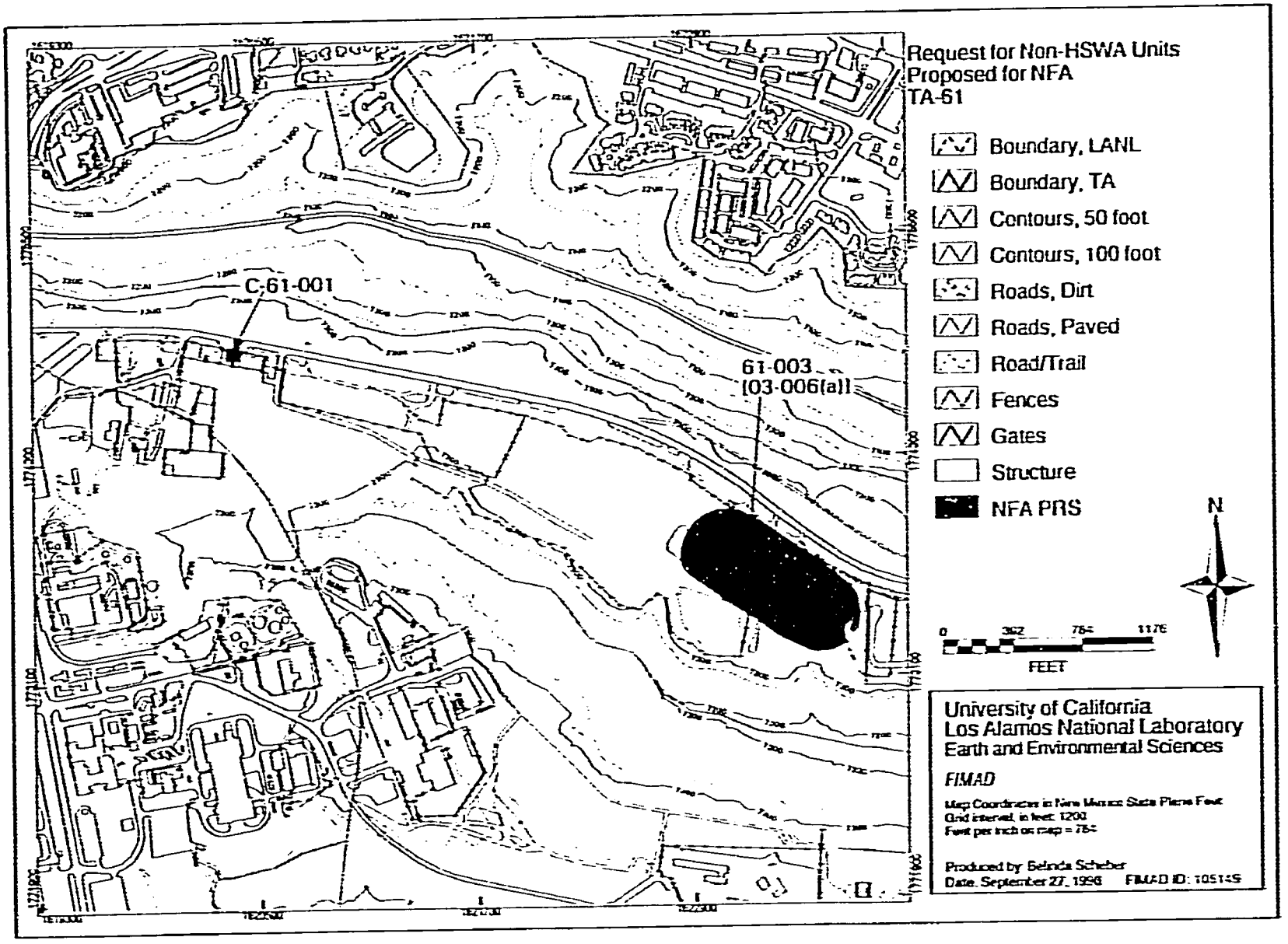

Figure A-8. Request for Non-HSWA Units Proposed for NFA, TA-61.

APPENDIX B

APPENDIX B

Regulatory Review Documents

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

NOV 0 2 1995

Bonnie - please handle Ted

cc: Art

Mr. Theodore J. Taylor
Program Manager
Department of Energy
Los Alamos Area Office
Los Alamos, NM 87544

Re: RFI Report for Technical Area 0
Los Alamos National Laboratory (NM0890010515)

Dear Mr. Taylor:

The Environmental Protection Agency (EPA) has reviewed your RCRA Facility Investigation Report for Technical Area 0. EPA would like to note that the upper tolerance limits presented in the report, the comparison of background polycyclic aromatic hydrocarbon (PAH) data, and the ecological screening approach used in the report have all been determined to be inappropriate by EPA. However, the septic tanks, 0-030 (c and q) have been removed and there does not appear to be either human health or ecological concerns associated with these sites. Therefore, Los Alamos National Laboratory may request a Class 3 permit modification to remove these sites from the RCRA permit.

Should you have any questions, please feel free to contact Ms. Barbara Driscoll at (214) 665-7441.

Sincerely,

David W. Neleigh, Chief
New Mexico and Federal
Facilities Section

cc: Mr. Benito Garcia
New Mexico Environment Department
Mr. Jorg Jansen
Los Alamos National Laboratory, MS M992

these units are not on permit; I called B. Driscoll shortly after receipt to let her know.

1.4.2.6.1.4.1.4

Bonnie - Pls prepare transmittal memo to Jorg. Ted

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JAN 30 1995

JAN 25 1995

Mr. Theodore J. Taylor
Program Manager
Department of Energy
Los Alamos Area Office
Los Alamos, NM 87544

Re: RFI Report on Aggregate 0-G, Operable Unit 1071
Los Alamos National Laboratory NM0890010515

Dear Mr. Taylor:

The Environmental Protection Agency (EPA) has reviewed the RCRA Facility Investigation (RFI) Report received May 25, 1993, for Aggregate 0-G in Operable Unit 1071. The Solid Waste Management Units (SWMUs) listed in the report, 0-029(a-c) do not require any additional investigation, and do not need to be added to the HSWA portion of the RCRA permit.

Should you have any questions, please feel free to contact Mrs. Barbara Driscoll of my staff at (214) 665-7441.

Sincerely,

for William K. Honker, P.E., Chief
RCRA Permits Branch

cc: Mr. Benito Garcia
New Mexico Environment Department
Mr. Jorg Jansen
Los Alamos National Laboratory

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

SEP 23 1994

Mr. Joseph C. Vozella, Chief
Environment, Safety and Health Branch
Los Alamos Area Office
Department of Energy
Los Alamos, NM 87544

Dear Mr. Vozella:

The Environmental Protection Agency (EPA) has reviewed and approves the RCRA Facility Investigation (RFI) work plan for Operable Unit 1093 with the enclosed modifications. The approved workplan shall consist of the RFI work plan submitted on May 14, 1993, the NOD response dated April 6, 1994 and the enclosed list of modifications. LANL shall immediately implement this work plan according to the proposed schedule.

Should you have any questions, please contact Barbara Driscoll of my staff at (214) 665-7441.

Sincerely yours,

Jack Ditsworth

for Allyn M. Davis, Director
Hazardous Waste Management Division

Enclosure (1)

cc: Kathleen Sisneros, Director
Water and Waste Management Division
New Mexico Environment Department

Jorg Jansen, Program Manager
Environmental Restoration Program
Los Alamos National Laboratory, M992

cy: T. Glatzmaier
D. McInroy
G. Gould
RPF M707

List of Modifications
Operable Unit 1093

1. The final RFI reports for Operable Unit 1093 SWMUs listed in the HSWA portion of the RCRA permit are due as indicated below:

SWMU	RFI Report Due
27-001	1/30/95
27-003	1/30/95
18-001 (a-c)	1/30/95
18-007	1/30/95
all others	10/31/95

2. LANL shall request a Class III permit modification upon submittal of any voluntary corrective action plans to EPA.

3. NOD Response #3, Proposed Text Changes: LANL shall change the last sentence of their text (paragraph 1) to read: "Final investigations and permanent corrective actions (if required) for active PRSs will be addressed as required by EPA even if the unit has not become inactive". EPA may require corrective action prior to the site becoming inactive depending on the situation at the site and the schedule for deactivation.

4. NOD Response #6 - LANL may submit a proposal to EPA to defer full characterization of a septic system until the unit is deactivated; however, EPA may require characterization and remediation prior to deactivation depending on the situations of each site.

5. NOD Responses #11 and #12: LANL may not use axial slices of each core (either 3 foot or 5 foot) for a sample. If field screening or visual inspection does not indicate potential contamination then a specific interval from each core should be sampled.

file 1.4.2.6.1.15 1.2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

NOV 0 1 1995

CERTIFIED MAIL: RETURN RECEIPT REQUESTED

Mr. Theodore J. Taylor
Program Manager
Department of Energy
Los Alamos National Laboratory
Los Alamos, NM 87544

RE: Notice of Deficiency, Addendum 1 To Work Plan For Operable Unit (OU) 1114, Los Alamos National Laboratory (NM0890010515)

Dear Mr. Taylor:

The Environmental Protection Agency has reviewed the RCRA Facility Investigation Workplan, Addendum 1, for OU 1114, dated July 18, 1995, and have found the Report to be deficient. Los Alamos National Laboratory has 60 days from the receipt of this letter to address the enclosed list of deficiencies.

If you have any questions or need additional information, please contact Ms. Barbara Driscoll at (214) 665-7441 or Mr. Richard Mayer at (214) 665-7442.

Sincerely yours,

David W. Neleigh, Chief
New Mexico - Federal
Facilities Section

Enclosure

cc: Mr. Benito Garcia
New Mexico Environment Department
Mr. Jorg Jansen
Los Alamos National Laboratory, MS M992

List of Deficiencies
Operable Unit 1114 Addendum 1
Los Alamos National Laboratory

General Comments:

1. LANL did not include a schedule in the RFI workplan. The schedule should include a timeframe of the activities to be performed and the date that the RFI report will be submitted to EPA.

2. LANL must ensure that all soil borings are logged with the appropriate soil descriptions and that all olfactory or visual contamination be identified in the log. Also, the boring logs should also indicate the PID/FID readings at various locations vertically in the boring.

3. In some PRS discussions in Chapter 6 of the workplan, LANL states that a particular PRS has never handled/received hazardous waste, therefore, no further action on this PRS is recommended. This is not correct. If a PRS never received RCRA hazardous constituents, then a no further action recommendation would be correct.

4. For each SWMU or PRS, a second soil sampling interval will be taken approximately 2 feet below the surface soil sample. If this sampling interval is contaminated, then LANL must continue to define the vertical extent of soil contamination. Also, LANL should have a contingency in their soil sampling plan that allows for continued sampling of contaminated zones.

Specific Comments:

1. 5.13.3 Sample Locations and Methods, p. 5-13-5 - LANL shall take one sample closer to the outfall. Also, LANL shall explain why sediment/soil samples in sediment catchment basin number two were taken near the exiting pipe. It appears to EPA that at least one soil/sediment sample should be taken at the start of catchment basin number two.

2. 5.14.3 Sample Locations and Methods, p. 5-14-5 - It appears that LANL is compositing samples by homogenizing the three biased samples collected prior to laboratory analysis. LANL should submit the samples individually. In addition, LANL should be collecting samples at deeper intervals than one-foot interval below the fill-soil interface. Two additional samples should be collected and submitted for analysis at the five-foot depth below the fill-soil interface.

3. 5.16.2 Investigation Approach and Objectives, p. 5-16-5 - LANL shall sample and conduct analysis for trichloroethane and trichloroethene, as the concentration of these constituents was high enough to be detected in the outfall/cattails area or the area before the willows. LANL shall revise the workplan.

4. 5.16.3 Sample Locations and Methods, p. 5-16-7 - EPA feels that there should be two vertical soil sampling intervals at the outfall area (See General Comment #4). LANL shall revise the work plan accordingly.

5. 5.17.3 Sample Locations, p.5-17-4 -

   a. LANL shall submit all samples for fixed laboratory analysis of metals and SVOCs. LANL needs to submit 20% of the VOC samples collected for fixed laboratory analysis. Use of an XRF is appropriate for biasing screening locations and for supplemental use after the types of hazardous constituents are known at a site. In addition, XRF data is generally not acceptable for a risk assessment.

   b. If contamination is found at the 12-24 inch depth than LANL shall continue to sample on 2 foot intervals up to 10 feet and then on 5 foot intervals until the extent of contamination is delineated vertically.

6. 5.19.4.2 SWMU 3-059, p. 5-19-8 - How are the asphalt samples being taken?

7. 5.19.4.3 SWMU 3-003(n), p. 5-19-9 - LANL shall explain why the soil samples are not being analyzed for SVOCs.

8. 5.19.4.2 SWMU 3-059, p. 5-19-8 - What is LANL's logic in taking samples from the asphalt? Is the asphalt going to be removed?

9. 5.20.2 Investigation and Approach , p. 5-20-4 - LANL shall include SVOCs since they have not documented that the oils do not contain SVOCs.

10. 5.21.3 Sample Locations and Methods, p. 5-21-7, second paragraph - What does LANL mean by the samples will be collected and homogenized prior to submittal for analysis? Are these samples being composited? This is not appropriate, and the samples should be submitted individually for analysis.

11. 5.24.2 Investigation Summary, p. 5-24-2 - LANL shall indicate the date and the report that SWMU 3-053 will be found in. Also, please include a map or figure in the revised workplan locating the SWMU. Also, since this investigation work was not approved by EPA, there is possibility that additional sampling may be required if not deemed acceptable.

    This comment also pertains to the following SWMUs, and the requested information indicated above should also be provided for these SWMUs:

    3-052(f)
    3-042
    3-045(b) and (c)

Chapter 6: PRSs Recommended for No Further Action: EPA agrees with no further action for the PRSs contained in this Chapter except for the PRSs commented on below; the PCB Transformer and Capacitor PRSs; and, the VCA PRSs.

12. Page 6-17; Heading: This heading is not correct. Asphalt emulsion does contain hazardous constituents.

13. Page 6-4; SWMU 3-011: Please describe what a carboy is in the revised report.

14. Page 6-11; Rationale for Recommendation, SWMU 3-056(1): EPA disagrees with LANL in the statement that beryllium is not hazardous constituent. How long was this SWMU in operation?

15. Page 6-17; C-3-022: Is the gravity feed line considered a SWMU?

16. Page 6-18: SWMU 3-043(a): EPA disagrees with the no further action decision. Just because there is no record of a release does not mean that a release has or is occurring.

17. Page 6-18; SWMU 3-043(b): Please include the soil sampling analytical results in the revised workplan.

18. Page 6-19; SWMU 3-043(f) & 3-036(c): Please include the soil sampling analytical results in the revised workplan.

19. Page 6-19; SWMU 3-043(g) & 3-036(d): Please include the soil sampling analytical results in the revised workplan.

20. Page 6-19; SWMU 3-043(d,h) & 3-036(a): Please include the soil sampling analytical results in the revised workplan.

21. Page 6-23; Rationale for Recommendation: LANL's justification for no further action is incorrect when stating that the sheds were never used for the storage of hazardous constituents. The appropriate justification is that the sheds held small quantities of substances that contained hazardous constituents but that there were no releases to the environment.

22. Page 6-23; SWMU 3-029: Is the landfill comprised of several pits? Please provide a map showing all the pits. EPA is also concerned with the possible vertical migration of constituents from these pits since they received tar and liquid wastes and have not been removed. Please clarify the outfall.

23. Page 6-25; SWMU 3-045(g): Please include a map of this SWMU in the revised workplan. EPA disagrees with no further action on this SWMU since soil sampling has never been performed.

24. Page 6-26; C-3-016: It appears to EPA that this unit needs to be re-designed so that contamination is prevented. Currently it appears that LANL is continuing to contaminate the soils/area around this unit. EPA believes that some initial soil sampling needs to be done to determine the extent of soil contamination. EPA disagrees with no further action.

25. Page 6-27: SWMU 3-036: Please provide a map of this SWMU which includes the metal catch basin.

26. Page 6-38; SWMU 3-008(a): Is LANL saying that this SWMU is located in another location. The explanation and reasoning for no further action on this SWMU is weak, and additional information needs to be provided.

27. Page 6-39; SWMU 3-055(c): Please include the sampling results in the revised workplan.

28. Page 6-42; Rationale for Recommendation: LANL states that the flow through all industrial lines can be measured and leaks anywhere in the lines can be detected. Please explain this further in the revised workplan.

29. Page 6-42; SWMU 3-025(c): EPA has required the investigation of oil/water separators at all Air Force Bases in the Region. LANL will not be exempted either. EPA disagrees with the NFA.

30. Page 6-43; Rationale for Recommendations: Please clarify whether this water contains hazardous constituents from the cooling towers.

31. Page 6-44; SWMU 3-034(b): Is this sump located inside or outside of the building?

32. Page 6-45; SWMU 3-038(d): LANL should provide the results of the removal of the industrial waste line.

33. Page 6-45; SWMU 3-041: Was the unit checked to ensure that it had never been used?

34. Page 6-46; SWMU 3-047(g): Does the concrete have significant cracks or does it have expansion joints?

35. Page 6-48; SWMU 3-056(d): How long has the storage area been asphalted? Also, did the lubricating oil contain any hazardous constituents?

36. Page 6-54; SWMU 3-027: Do the sumps have cracks?

37. Page 6-56; SWMU 3-047(i): LANL shall provide the period of usage for this SWMU.

38. General Comment: LANL mentions several cooling towers that were used in the 50's and 60's that had no history of chromate use. Please explain indicate how this information was determined?

39. Page 6-59; Rationale for Recommendation: Did the UST program approve this closure. LANL shall provide the soil sampling results.

40. Page 6-61; SWMU 3-046: Is the concrete containment cover the whole area underneath the tank?

41. Pages 6-63 through 6-71; PCB Transformers and Capacitors: Has EPA approved of the PCB soil removals and floor cleanups? EPA will give this information to the Region 6 PCB coordinator, Lou Roberts, to see if remediation was acceptable.

42. Page 6-71; SWMU 3-054(c): Include the two sampling reports along with locations sampled in the revised RFI workplan.

43. Page 6-72; SWMU 3-038(c): Please include a map or drawing showing the layout of drain pipe. How far did the drain pipe extend from the building to the industrial wasteline? EPA disagrees that this unit was covered by EPA regulations over its active life because the unit begin operating in the 1960's. Furthermore, the regulation that LANL quoted was promulgated in 1974. LANL states that the unit ceased operations in the early 1970's, which is before the regulation was effective.

44. Page 6-80: Voluntary Corrective Action/Expedited Cleanup: EPA will not approve a NFA decision on a VCA until the final results are reviewed and found acceptable.