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Los Alamos National Laboratory
Environmental Restoration

A Department of Energy environmental clean-up program

SOLID WASTE MANAGEMENT UNITS

REPORT

Los Alamos Environmental Rest
Records Processing



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Los Alamos National Laboratory

Revised November 1990

VOL IV of IV
(TA-51 through TA-74)

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LIST OF ACRONYMS

AEC	Atomic Energy Commission
ASL	Above Sea Level
BTX	Benzene, Toluene, Xylene
CEARP	Comprehensive Environmental Assessment and Response Program
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CMP	Corrugated Metal Pipe
CMR	Chemical Metallurgical Research (Building)
D&D	Decontamination and Decommissioning
DOE	U.S. Department of Energy
dU	Depleted Uranium
EETF	Experimental Engineering Test Facility (Building)
EID	New Mexico Environmental Improvement Division
EM	Electromagnetic
EPA	U.S. Environmental Protection Agency
EP TOXIC	Extraction Procedure Toxicity
ER	Environmental Restoration
FP	Fission Products
HE	High Explosive
HEPA	High Efficiency Purified Air (Filter)
HSE	LANL Health, Safety, and Environment Division
HSWA	Hazardous and Solid Waste Amendment to RCRA
IWMP	Interim Waste Management Program (DOE's Department of Defense Waste and Transportation Management)
LAO	U.S. Department of Energy Los Alamos Area Office
LAMPF	Los Alamos Meson Physics Facility
LAMPRE	Los Alamos Molten Plutonium Reactor Experiment
LANL	Los Alamos National Laboratory
LAPRE	Los Alamos Power Reactor Experiment
LASCP	Los Alamos Site Characterization Program
LASL	Los Alamos Scientific Laboratory
LL	Low Level (Radioactive Waste)
MAP	Mixed Activation Products
MDA	Material Disposal Area
MEGAS	Multiple Energy Gamma Assay Spectrometer
MFP	Mixed Fission Products
N.C.	Non-Compactible (Radioactive Waste)
NMEID	New Mexico Environmental Improvement Division
NPDES	National Pollution Discharge Elimination System
O.D.	Outside Diameter
OWR	Omega West Reactor
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyls
PHERMEX	Pulsed High-Energy Radiographic Machine Emitting X-rays
P.N.	Property Numbers
PPB	Parts Per Billion
PPM	Parts Per Million
RCRA	Resource Conservation and Recovery Act
RH	Remote Handled (Radioactive Waste)
SARA	Superfund Amendments and Reauthorization Act
SRF	Size Reduction Facility

LIST OF ACRONYMS
(Continued)

SWMU	Solid Waste Management Unit
TA	Technical Area
TCE	Trichloroethylene
TRU	Transuranic
Tsk	Task
TSTA	Tritium Systems Test Assembly (Building)
UST	Underground Storage Tank
WIPP	Waste Isolation Pilot Plant

TA-51

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 51 is being used for environmental studies of waste isolation in semi-arid environments to determine rates and mechanisms of surface and subsurface transport of contaminants associated with radioactive and hazardous waste. These studies focus on hydrologic processes as they mediate waste transport (DOE, 1987a). TA-51 will be further developed as the focus of environmental science.

TA-51 lies at elevations between 6,900 and 7,060 feet asl. It is located on Mesita del Buey, bounded on the north by Canyon Canada del Buey and on the south by Pajarito Canyon. The technical area extends north to the Laboratory boundary with Sandoval County. Canyon walls are steep slopes or cliffs in this area. TA-51 lies on welded Bandelier Tuff, in the Pinon-Juniper and Ponderosa Pine/Pinon-Juniper overstory vegetation zones. Soil types in the area include Hackroy sandy loam, Totavi gravelly loamy sand, and rock outcrop (Nyhan et al., 1978).

At TA-51, the potentiometric surface of the main aquifer in the Los Alamos region lies at about 5,880 to 5,920 feet asl. Over 1,000 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-51

51-001
51-002

SEPTIC SYSTEM
ENVIRONMENTAL RESEARCH SITE

SUMMARY

LOCATION : TA-51
 TYPE OF UNIT(S) : SEPTIC SYSTEM
 UNIT USE : TREATMENT/DISPOSAL
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1984 - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SANITARY WASTE
 SOLID WASTE

UNIT INFORMATION

A 1000-gallon septic tank serves TA-51-30 and discharges to seepage pit TA-51-31. Its EID Registration Number is LA-53.

WASTE INFORMATION

The septic system generally handles sanitary waste. No toxic or radioactive material is documented as being discharged to this unit.

RELEASE INFORMATION

It is unknown whether hazardous waste has been released to the environment.

NOTES

SWMU Nos. 51-001(a) and (b) are now in TA-54; see 54-007(d) and (e). SWMU No. 51-001(d) (seepage pit TA-51-31) has been deleted as a sub-unit because it is part of septic system 51-001.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
51-001	TA51-2-ST-A-HW			TA-51-30, -31

SUMMARY

LOCATION : TA-51
 TYPE OF UNIT(s) : CAISSON
 UNIT USE : RESEARCH
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : 1982 - 1986
 HAZARDOUS RELEASE : SUSPECTED
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SUSPECTED HAZARDOUS WASTE

UNIT INFORMATION

The Experimental Engineering Test Facility (EETF) at TA-51 is used for research to develop effective isolation techniques for buried waste materials in semi-arid climates. This unit includes subsurface caissons that are used in experiments on subsurface water mass balance and solute transport and soil used in experiments to evaluate biological intrusion of plants and animals into trench caps. Several subsurface open caissons, TA-51-38 and -39 [51-002(a) and (b)], are in an area that is fenced and posted with signs. The caissons are sometimes pumped to remove experimental liquid. On occasion, the liquid contains small quantities of tracers such as stable strontium. The water is discharged to Canada del Buey. Soil is stored in drums at the experimental complex. The soil contains stable cesium tracers that are used in biological intrusion experiments.

WASTE INFORMATION

Small quantities of chemicals such as stable strontium, cesium, and cobalt are used as tracers in the caissons. The soil in the drums contains stable cesium tracer material.

RELEASE INFORMATION

The infrequent caisson pumpings released to the canyon from experiments do not contain radioactive or hazardous waste.

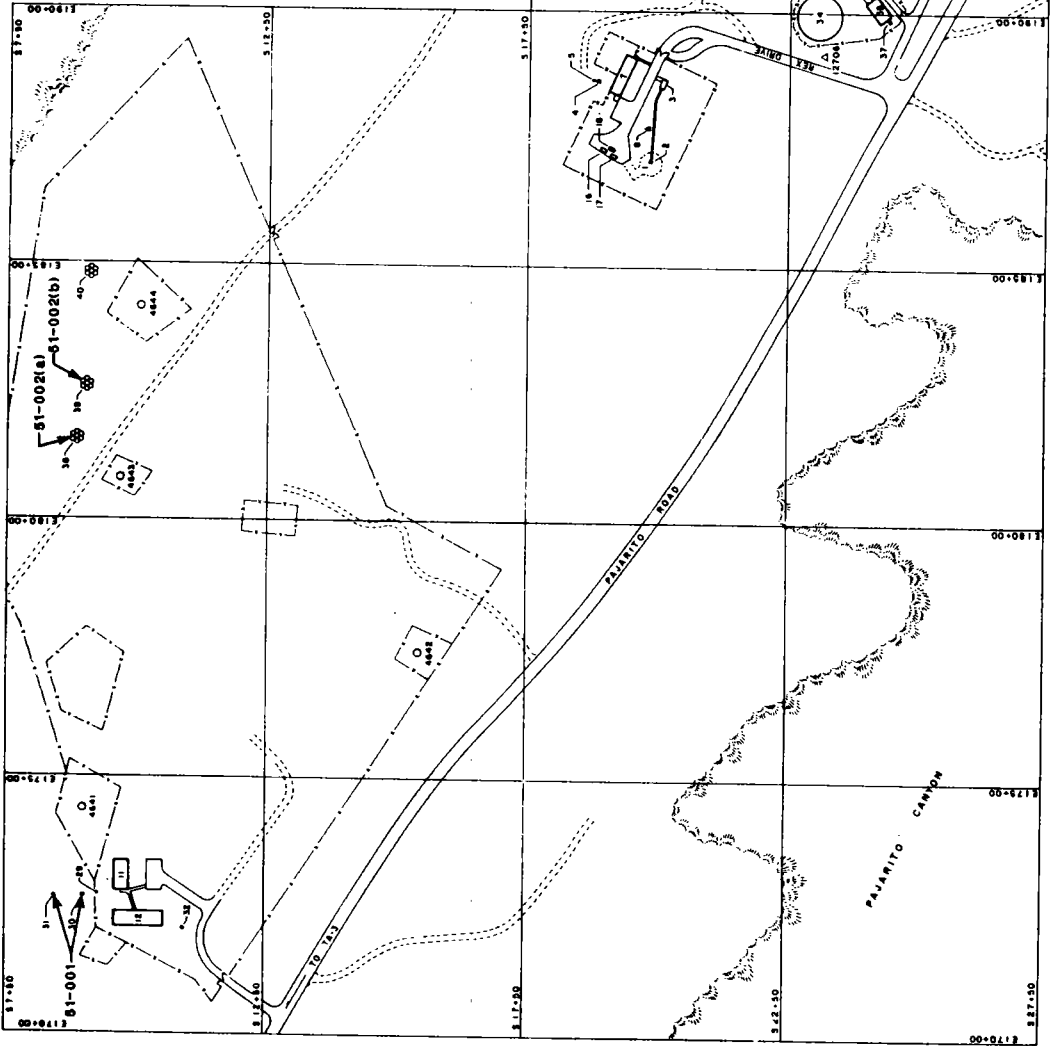
SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
51-002(a)	TA-51-3-S-A-HW			TA-51-38
51-002(b)	TA-51-3-S-A-HW			TA-51-39

**TA-51 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
51-001	51-1
51-002(a)	51-1, 51-2
51-002(b)	51-1, 51-2

NOTE: Some structure locations may contain more than one SWMU.



STRUCTURE NUMBER	STRUCTURE DESCRIPTION	STRUCTURE NOMENCLATURE	REMARKS	APPROXIMATE AREA (SQ FT)
TA-31-1	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-2	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-3	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-4	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-5	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-6	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-7	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-8	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-9	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-10	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-11	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-12	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-13	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-14	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-15	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-16	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-17	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-18	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-19	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-20	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-21	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-22	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-23	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-24	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-25	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-26	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-27	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-28	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-29	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-30	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-31	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-32	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-33	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-34	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-35	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-36	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-37	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-38	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-39	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-40	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-41	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-42	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-43	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-44	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-45	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-46	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-47	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-48	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-49	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)
TA-31-50	WASTE TREATMENT PLANT	WASTE TREATMENT PLANT	UNDERGROUND	17,750 (800-00)

UNCLASSIFIED

LEGEND: ARCHT. SITE STATUS
 Δ ESCAVATED
 ○ UNESCAVATED

EXPLANATION
 51-001 SWMU LOCATION

REV. 1 6/28/90

FIGURE 51-1
 SOLID WASTE MANAGEMENT UNITS
 (SWMUs) IN TA-51



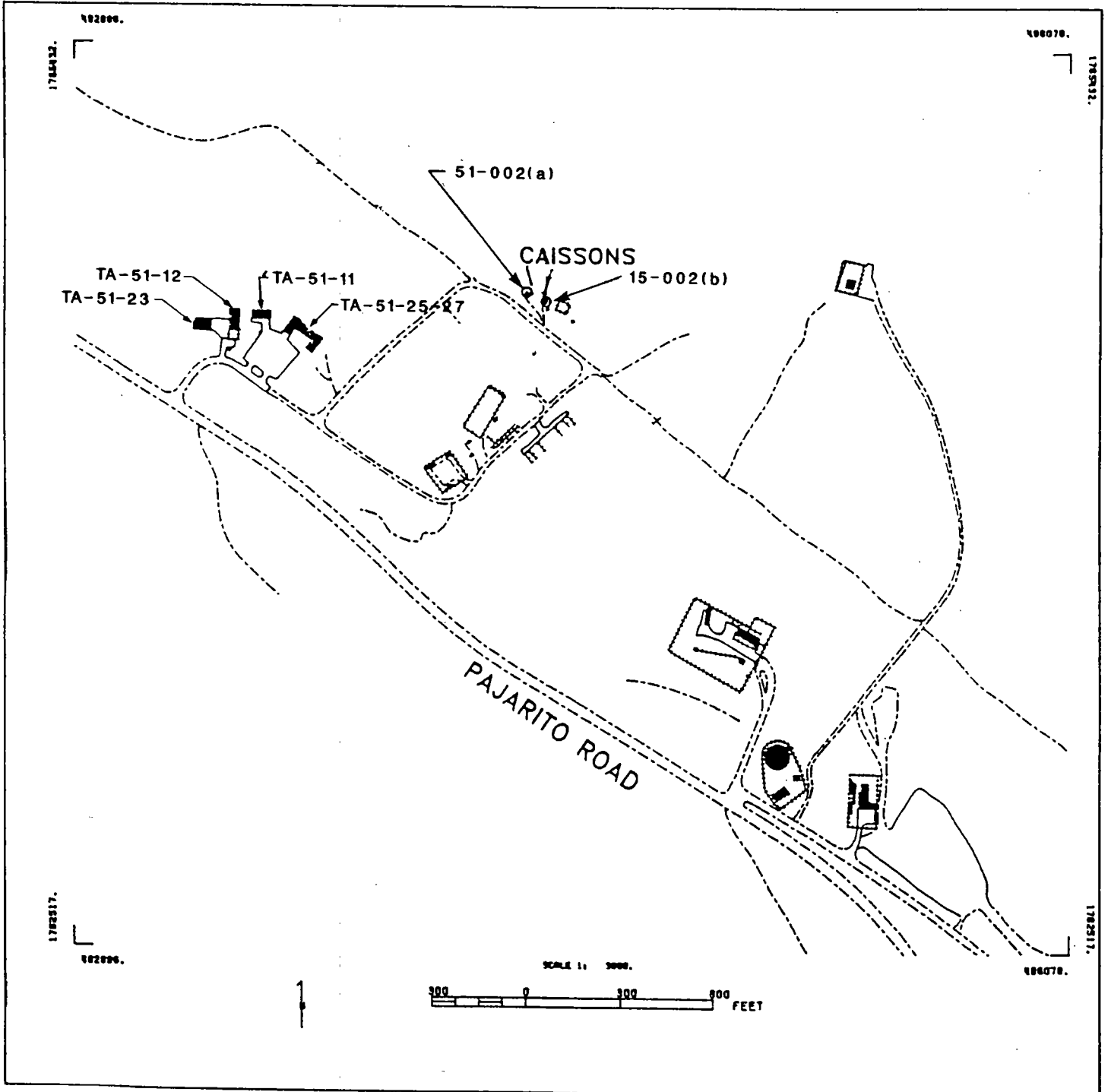
UNIVERSITY OF CALIFORNIA
Los Alamos 15150 HWY 66, LOS ALAMOS, NM 87545
 FACILITIES ENGINEERING DIVISION

DATE: 11-20-94
 BY: [Signature]
 CHECKED BY: [Signature]

PROJECT: TA-51 RADIATION EXPOSURE FACILITY

ENGINEER: [Signature]
 DRAWING NO.: ENG-R5128

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EXPLANATION

51-001 SWMU LOCATION

REV.1 6/28/90

FIGURE 51-2

SOLID WASTE MANAGEMENT UNITS
(SWMUs) IN TA-51

TA-52

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 52 houses safety assessment, safety code development, and reactor design and analysis groups that do not entail hazardous materials use. For about one year, TA-52 was the location of the Ultra-High-Temperature Experimental Reactor (DOE, 1987a). The fuel fragments which remained in the reactor vessel and reactor parts were removed in the summer of 1990. TA-52 also includes the eastern portion of former TA-4.

TA-52 lies at elevations between 7,140 and 7,200 feet asl. It is located on Mesita del Buey, bounded on the north by Ten Site Canyon (a tributary of Mortandad Canyon) and on the south by Canada del Buey. Canyon walls are steep slopes or cliffs in this area.

TA-52 lies on welded Bandelier Tuff, in the Ponderosa Pine/Pinon-Juniper and Shrub-Grass-Forb overstory vegetation zones. Soils in the technical area consist of Hackroy-Rock outcrop complex, Totavi gravelly loam sand, Nyjack loam, and rock outcrop (Nyhan et al., 1978).

At TA-52, the potentiometric surface of the main aquifer in the Los Alamos region lies at about 5,940 to 6,000 feet asl. Over 1,000 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-52

52-001	UHTREX WASTE TREATMENT
52-002	ACTIVE SEPTIC SYSTEMS
52-003	TREATMENT FACILITY
52-004	OUTFALL FROM HAMMER MILL BUILDING

SUMMARY

LOCATION	: TA-52	MATERIALS MANAGED	: RADIOACTIVE WASTE
TYPE OF UNIT(S)	: WASTE TREATMENT		SUSPECTED HAZARDOUS WASTE
UNIT USE	: TREATMENT		
OPERATIONAL STATUS	: INACTIVE/DECOMMISSIONED		
PERIOD OF USE	: 1965 - 1968		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

This unit consists of waste treatment equipment associated with the Ultra-High Temperature Reactor Experiment (UHTREX) (TA-52-1). Criticality of the reactor was achieved in 1967 and the reactor ran for one year on an experimental basis. The fuel from the reactor was removed in 1970. The liner of the reactor vessel was later removed. Included in this complex are the reactor building (TA-52-1), which contains a sump pump room, ducts, and hot cells, and separate buildings for a filter pit, a heat dump, and a heat dump pad. The UHTREX complex was actively used for reactor experiments from 1965 to 1968. The filter pit, TA-52-14 [52-001(a)], consists of HEPA and charcoal filter banks in a subsurface pit. The heat dump building is structure number TA-52-15 [52-001(b)]; the heat dump pad is TA-52-16 [52-001(c)]. The filter pit, heat dump, and heat dump pad were screened for radiation during the 1988 UHTREX radiological characterization, and measurements were found to be at background levels. The heat dump [52-001(b)] was also surveyed in 1989 by HSE-7 and radiological readings were above background. 52-001(a), (b), and (c) were removed in 1989. No information concerning their removal is available. The remainder of the units (sump pump room, ducts, and hot cells) are located within the UHTREX building, TA-52-1 [52-001(d)]. In addition to the reactor vessel, numerous large pieces of equipment such as heat exchangers, gas cleanup systems, pumps, filters, and a stack are located in TA-52-1. There is an inactive outfall associated with TA-52-1, but its exact location is uncertain. It is believed to have discharged noncontact cooling water. The EPA outfall number is 04A, and the NPDES serial number is 111. The UHTREX facility is currently being decontaminated and decommissioned.

WASTE INFORMATION

The filter pit [52-001(a)] was designed to filter radioactive liquid, uranium, and fission products. It is not known whether the filter pit was used. A filter was removed from TA-52-1 [52-001(d)] in 1971 that was contaminated with fission products and cobalt-60. No waste information is available for the heat pump [52-001(b)] or heat dump pad [52-001(c)].

RELEASE INFORMATION

Although the reactor housing and some of the equipment are radioactively contaminated and remain in place, there is no evidence that a hazardous release has occurred at 52-001(d). No release information is available for 52-001(a), (b), and (c).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
52-001(a)	TA52-1-CA-I-RW	52.001	Tsk 7 : 147	TA-52-14
52-001(b)	TA52-1-CA-I-RW		Tsk 7 : 149	TA-52-15
52-001(c)	TA52-1-CA-I-RW		Tsk 7 : 150	TA-52-16
52-001(d)	TA52-1-CA-I-RW	52.004	Tsk 7 : 148	TA-52-1

SUMMARY

LOCATION : TA-52
 TYPE OF UNIT(s) : SEPTIC SYSTEM
 UNIT USE : TREATMENT/DISPOSAL
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : SEE BELOW
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SANITARY WASTE
 SUSPECTED HAZARDOUS WASTE

UNIT INFORMATION

Several active septic systems are present at TA-52:

SUMU NO.	STRUCTURE NO.	PERIOD OF USE	CAPACITY	OVERFLOW	ASSOCIATED STRUCTURE
52-002(a)	TA-52-3	1963 - present	2,580 gal.	leach field/ drainline	Distribution Box TA-52-4
52-002(b)	TA-52-34(a)	1983 - present	2,000 gal.	seepage pit	Tanks TA-52-97 and -98
	TA-52-34(b)	1983 - present	2,000 gal.	seepage pit	Seepage pit received effluent from TA-52-34(a) and (b)
52-002(b)	TA-52-97	? - present	2,500 gal.	unknown	TA-52-34
52-002(b)	TA-52-98	? - present	1,000 gal.	unknown	TA-52-34
52-002(c)	TA-52-46	1984 - ?	500 gal.	unknown	
52-002(d)	TA-52-47	1984 - ?	500 gal.	unknown	
52-002(e)	TA-52-49	est. 1984 - present	1,000 gal.	seepage pit	Seepage Pit TA-52-50
52-002(f)	TA-52-99	? - present	2,500 gal.	seepage pit	
52-002(g)	TA-52-95	? - present	3,000 gal.	holding tank	

The overflow from tank TA-52-3 goes to a leach field located 230 ft north of TA-52-1. The field may be saturated, and the tank is routinely pumped. The 1987 EID "Registration of an Unpermitted Individual Liquid Waste System" indicates that a 300-ft long drainline has replaced the leach field. The EID Registration Number is LA-54. The seepage pit for both TA-52-34 tanks is not working (it may be overloaded) so that the TA-52-34 tanks are routinely pumped, and the tanks that discharge into TA-52-34 (TA-52-97 and -98) are occasionally pumped. Tanks TA-52-34(a) and (b) have EID Registration Numbers LA-57 and LA-58. Tanks TA-52-97 and -98 have EID Registration Numbers LA-55 and LA-56. Septic systems TA-52-46 and -47 are believed to be actively serving the TA-52 transportables. Septic tank TA-52-49 and seepage pit TA-52-50 serve maintenance shop TA-0-155. Sanitary septic system TA-52-97 is thought to serve TA-52-45, a transportable office building. It is frequently pumped and also believed to discharge into septic system TA-52-34. TA-52-98 is reportedly serving transportable office building TA-52-44. Septic tank system TA-52-99 served transportables TA-52-35 and -36. Septic system TA-52-99 has EID Registration Number LA-59. The 1988 ER Program radiation screening measurements taken in the general area of TA-52-3, -97, -98, and -99 were found to be at background levels. Engineering records indicated the placement of tanks TA-52-46 and -47, however, further information as to their locations is not available.

WASTE INFORMATION

The tanks presently handle only sanitary waste and the laboratory staff believe that it is unlikely the tanks (and associated seepage pits) have ever received radioactive material. Tanks TA-52-3 and -49, distribution box TA-52-4, and seepage pit TA-52-50 may be suspect for solvents and chemicals discharged in previous years from the UHTREX building, TA-52-1.

RELEASE INFORMATION

It is unknown whether hazardous releases have occurred from these septic systems.

NOTES

The TA-52-3 septic system includes TA-53-4 distribution box, which was formerly 52-002(b). The tank and distribution box are combined as a single unit, 52-002(a). Septic system TA-52-34 consists of 4 septic tanks [TA-52-34(a), (b), TA-52-97, and TA-52-98], a seepage pit, and an outfall. All of these have been combined into one unit: 52-002(b). Septic tank TA-52-154 is now in TA-63; see 63-001(b).

(continued)

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
52-002(a)	TA52-2-CA/S/UST/ST-I/A-HW/RW	? 52.002	Tsk 7 : 136	TA-52-3, -4
52-002(b)	TA52-2-CA/S/UST/ST-I/A-HW/RW		Tsk 7 : 144 138 139	TA-52-34, -97, -98
52-002(c)	TA52-2-CA/S/UST/ST-I/A-HW/RW		Tsk 7 : 141	TA-52-46
52-002(d)	TA52-2-CA/S/UST/ST-I/A-HW/RW		Tsk 7 : 142	TA-52-47
52-002(e)	TA52-2-CA/S/UST/ST-I/A-HW/RW		Tsk 7 : 143	TA-52-49, -50
52-002(f)	TA52-2-CA/S/UST/ST-I/A-HW/RW		Tsk 7 : 140	TA-52-99
52-002(g)	**			TA-52-95 TA-0-462

? Indicates uncertainty with RFA Unit correlation.

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-52	MATERIALS MANAGED	: RADIOACTIVE WASTE
TYPE OF UNIT(s)	: TREATMENT FACILITY		SUSPECTED HAZARDOUS WASTE
UNIT USE	: STORAGE/TREATMENT		
OPERATIONAL STATUS	: DECOMMISSIONED		
PERIOD OF USE	: 1965 - 1968		
HAZARDOUS RELEASE	: NONE		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

TA-52-2 is the neutralizing facility and pumping station for the liquid wastes from TA-52-1, which was active from 1965 to 1968. There are two underground storage tanks in back of TA-52-2 with a capacity of 5000 gallons each. There are two underground tanks in the basement of TA-52-2. The size of one of these concrete tanks is unknown and the other tank is a mixing basin of less than 50 gallon capacity used to neutralize caustics. There is a 150 gallon tank on the first floor. TA-52-2 was removed in 1988 or 1989. The 1988 UHTREX radiological characterization of the general site area found measurements to be at background levels. This neutralizing and pumping station also includes the 3-in acid waste lines (lines 65 and 66) that exited the north end of TA-52-1, passed through TA-52-2, and then ran west along the canyon edge behind the north fence line of MDA-C in TA-50. The waste line was sampled in 1988 by HSE-8 for radioactivity. Alpha and beta were found to be below detection limits of 25 pCi/g. Gross gamma analyses were no greater than 1 pCi/g. The waste lines were removed in late 1988 and early 1989. The RFA notes an outfall at TA-52-2, but no other sources confirm this information.

WASTE INFORMATION

Radionuclides and chemicals are suspected to have been in the liquid wastes from building TA-52-1 (UHTREX). Sodium hydroxide is stored in the 150-gallon tank.

RELEASE INFORMATION

There have been no known hazardous releases from any of the tanks. No information is available on releases from the waste lines. Analyses for contaminants other than radionuclides were not conducted.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
52-003	TA52-2-CA/S/UST/ST-1/A-HW/RW	52.003	Tsk 7 : 137 146	TA-52-2

SUMMARY

LOCATION : TA-52
 TYPE OF UNIT(s) : OUTFALL
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1965 - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SOLID WASTE

UNIT INFORMATION

TA-52-11 is the Mechanical Assembly building. No information is available on the exact operations conducted here from 1965 to approximately late 1970, when engineering drawings were completed for the installation of a hammer mill. The hammer mill is used to destroy documents and film. The CEARP notes that the Q-6 group also used TA-52-11 facilities as a wind tunnel, and conducted experiments in which water was run over simulated fuel rods and discharged as non-contact cooling water to an outside ditch. This discharge point is located southeast of TA-52-11; it is inactive and has EPA outfall number 04A, and NPDES serial number 112. A 1988 E.R. Program site reconnaissance found radioactive measurements in the area of TA-52-11 to be at background levels.

WASTE INFORMATION

No was information is available for activities in the Mechanical Assembly building in its early years, or for the wind tunnel or simulated fuel rod activities. The hammer mill activities involve paper and film waste.

RELEASE INFORMATION

There have been no known hazardous releases from this unit.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
52-004	TA52-4-0-I-RW		Tsk 7 : 135	TA-52-11

**TA-52 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
52-001(a)	52-1
52-001(b)	52-1
52-001(c)	52-1
52-001(d)	52-1
52-002(a)	52-1
52-002(b)	52-1
52-002(c)	Not shown
52-002(d)	Not shown
52-002(e)	52-1
52-002(f)	52-1
52-002(g)	Not shown
52-003	52-1
52-004	52-1

NOTE: Some structure locations may contain more than one SWMU.

Rev. 1, 4/3/90

STRUCTURE NUMBER	STRUCTURE DESCRIPTION	STRUCTURE HOME INCLATURE	REMARKS	APPROXIMATE GRID LOCATION
TA-0-01	CONCRETE WALL			TA-0-01 000-00
TA-0-02	CONCRETE WALL			TA-0-02 000-00
TA-0-03	CONCRETE WALL			TA-0-03 000-00
TA-0-04	CONCRETE WALL			TA-0-04 000-00
TA-0-05	CONCRETE WALL			TA-0-05 000-00
TA-0-06	CONCRETE WALL			TA-0-06 000-00
TA-0-07	CONCRETE WALL			TA-0-07 000-00
TA-0-08	CONCRETE WALL			TA-0-08 000-00
TA-0-09	CONCRETE WALL			TA-0-09 000-00
TA-0-10	CONCRETE WALL			TA-0-10 000-00
TA-0-11	CONCRETE WALL			TA-0-11 000-00
TA-0-12	CONCRETE WALL			TA-0-12 000-00
TA-0-13	CONCRETE WALL			TA-0-13 000-00
TA-0-14	CONCRETE WALL			TA-0-14 000-00
TA-0-15	CONCRETE WALL			TA-0-15 000-00
TA-0-16	CONCRETE WALL			TA-0-16 000-00
TA-0-17	CONCRETE WALL			TA-0-17 000-00
TA-0-18	CONCRETE WALL			TA-0-18 000-00
TA-0-19	CONCRETE WALL			TA-0-19 000-00
TA-0-20	CONCRETE WALL			TA-0-20 000-00
TA-0-21	CONCRETE WALL			TA-0-21 000-00
TA-0-22	CONCRETE WALL			TA-0-22 000-00
TA-0-23	CONCRETE WALL			TA-0-23 000-00
TA-0-24	CONCRETE WALL			TA-0-24 000-00
TA-0-25	CONCRETE WALL			TA-0-25 000-00
TA-0-26	CONCRETE WALL			TA-0-26 000-00
TA-0-27	CONCRETE WALL			TA-0-27 000-00
TA-0-28	CONCRETE WALL			TA-0-28 000-00
TA-0-29	CONCRETE WALL			TA-0-29 000-00
TA-0-30	CONCRETE WALL			TA-0-30 000-00
TA-0-31	CONCRETE WALL			TA-0-31 000-00
TA-0-32	CONCRETE WALL			TA-0-32 000-00
TA-0-33	CONCRETE WALL			TA-0-33 000-00
TA-0-34	CONCRETE WALL			TA-0-34 000-00
TA-0-35	CONCRETE WALL			TA-0-35 000-00
TA-0-36	CONCRETE WALL			TA-0-36 000-00
TA-0-37	CONCRETE WALL			TA-0-37 000-00
TA-0-38	CONCRETE WALL			TA-0-38 000-00
TA-0-39	CONCRETE WALL			TA-0-39 000-00
TA-0-40	CONCRETE WALL			TA-0-40 000-00
TA-0-41	CONCRETE WALL			TA-0-41 000-00
TA-0-42	CONCRETE WALL			TA-0-42 000-00
TA-0-43	CONCRETE WALL			TA-0-43 000-00
TA-0-44	CONCRETE WALL			TA-0-44 000-00
TA-0-45	CONCRETE WALL			TA-0-45 000-00
TA-0-46	CONCRETE WALL			TA-0-46 000-00
TA-0-47	CONCRETE WALL			TA-0-47 000-00
TA-0-48	CONCRETE WALL			TA-0-48 000-00
TA-0-49	CONCRETE WALL			TA-0-49 000-00
TA-0-50	CONCRETE WALL			TA-0-50 000-00
TA-0-51	CONCRETE WALL			TA-0-51 000-00
TA-0-52	CONCRETE WALL			TA-0-52 000-00
TA-0-53	CONCRETE WALL			TA-0-53 000-00
TA-0-54	CONCRETE WALL			TA-0-54 000-00
TA-0-55	CONCRETE WALL			TA-0-55 000-00
TA-0-56	CONCRETE WALL			TA-0-56 000-00
TA-0-57	CONCRETE WALL			TA-0-57 000-00
TA-0-58	CONCRETE WALL			TA-0-58 000-00
TA-0-59	CONCRETE WALL			TA-0-59 000-00
TA-0-60	CONCRETE WALL			TA-0-60 000-00
TA-0-61	CONCRETE WALL			TA-0-61 000-00
TA-0-62	CONCRETE WALL			TA-0-62 000-00
TA-0-63	CONCRETE WALL			TA-0-63 000-00
TA-0-64	CONCRETE WALL			TA-0-64 000-00
TA-0-65	CONCRETE WALL			TA-0-65 000-00
TA-0-66	CONCRETE WALL			TA-0-66 000-00
TA-0-67	CONCRETE WALL			TA-0-67 000-00
TA-0-68	CONCRETE WALL			TA-0-68 000-00
TA-0-69	CONCRETE WALL			TA-0-69 000-00
TA-0-70	CONCRETE WALL			TA-0-70 000-00
TA-0-71	CONCRETE WALL			TA-0-71 000-00
TA-0-72	CONCRETE WALL			TA-0-72 000-00
TA-0-73	CONCRETE WALL			TA-0-73 000-00
TA-0-74	CONCRETE WALL			TA-0-74 000-00
TA-0-75	CONCRETE WALL			TA-0-75 000-00
TA-0-76	CONCRETE WALL			TA-0-76 000-00
TA-0-77	CONCRETE WALL			TA-0-77 000-00
TA-0-78	CONCRETE WALL			TA-0-78 000-00
TA-0-79	CONCRETE WALL			TA-0-79 000-00
TA-0-80	CONCRETE WALL			TA-0-80 000-00
TA-0-81	CONCRETE WALL			TA-0-81 000-00
TA-0-82	CONCRETE WALL			TA-0-82 000-00
TA-0-83	CONCRETE WALL			TA-0-83 000-00
TA-0-84	CONCRETE WALL			TA-0-84 000-00
TA-0-85	CONCRETE WALL			TA-0-85 000-00
TA-0-86	CONCRETE WALL			TA-0-86 000-00
TA-0-87	CONCRETE WALL			TA-0-87 000-00
TA-0-88	CONCRETE WALL			TA-0-88 000-00
TA-0-89	CONCRETE WALL			TA-0-89 000-00
TA-0-90	CONCRETE WALL			TA-0-90 000-00
TA-0-91	CONCRETE WALL			TA-0-91 000-00
TA-0-92	CONCRETE WALL			TA-0-92 000-00
TA-0-93	CONCRETE WALL			TA-0-93 000-00
TA-0-94	CONCRETE WALL			TA-0-94 000-00
TA-0-95	CONCRETE WALL			TA-0-95 000-00
TA-0-96	CONCRETE WALL			TA-0-96 000-00
TA-0-97	CONCRETE WALL			TA-0-97 000-00
TA-0-98	CONCRETE WALL			TA-0-98 000-00
TA-0-99	CONCRETE WALL			TA-0-99 000-00
TA-0-100	CONCRETE WALL			TA-0-100 000-00

STRUCTURE NUMBER	STRUCTURE DESCRIPTION	STRUCTURE HOME INCLATURE	REMARKS	APPROXIMATE GRID LOCATION
TA-0-101	CONCRETE WALL			TA-0-101 000-00
TA-0-102	CONCRETE WALL			TA-0-102 000-00
TA-0-103	CONCRETE WALL			TA-0-103 000-00
TA-0-104	CONCRETE WALL			TA-0-104 000-00
TA-0-105	CONCRETE WALL			TA-0-105 000-00
TA-0-106	CONCRETE WALL			TA-0-106 000-00
TA-0-107	CONCRETE WALL			TA-0-107 000-00
TA-0-108	CONCRETE WALL			TA-0-108 000-00
TA-0-109	CONCRETE WALL			TA-0-109 000-00
TA-0-110	CONCRETE WALL			TA-0-110 000-00
TA-0-111	CONCRETE WALL			TA-0-111 000-00
TA-0-112	CONCRETE WALL			TA-0-112 000-00
TA-0-113	CONCRETE WALL			TA-0-113 000-00
TA-0-114	CONCRETE WALL			TA-0-114 000-00
TA-0-115	CONCRETE WALL			TA-0-115 000-00
TA-0-116	CONCRETE WALL			TA-0-116 000-00
TA-0-117	CONCRETE WALL			TA-0-117 000-00
TA-0-118	CONCRETE WALL			TA-0-118 000-00
TA-0-119	CONCRETE WALL			TA-0-119 000-00
TA-0-120	CONCRETE WALL			TA-0-120 000-00
TA-0-121	CONCRETE WALL			TA-0-121 000-00
TA-0-122	CONCRETE WALL			TA-0-122 000-00
TA-0-123	CONCRETE WALL			TA-0-123 000-00
TA-0-124	CONCRETE WALL			TA-0-124 000-00
TA-0-125	CONCRETE WALL			TA-0-125 000-00
TA-0-126	CONCRETE WALL			TA-0-126 000-00
TA-0-127	CONCRETE WALL			TA-0-127 000-00
TA-0-128	CONCRETE WALL			TA-0-128 000-00
TA-0-129	CONCRETE WALL			TA-0-129 000-00
TA-0-130	CONCRETE WALL			TA-0-130 000-00
TA-0-131	CONCRETE WALL			TA-0-131 000-00
TA-0-132	CONCRETE WALL			TA-0-132 000-00
TA-0-133	CONCRETE WALL			TA-0-133 000-00
TA-0-134	CONCRETE WALL			TA-0-134 000-00
TA-0-135	CONCRETE WALL			TA-0-135 000-00
TA-0-136	CONCRETE WALL			TA-0-136 000-00
TA-0-137	CONCRETE WALL			TA-0-137 000-00
TA-0-138	CONCRETE WALL			TA-0-138 000-00
TA-0-139	CONCRETE WALL			TA-0-139 000-00
TA-0-140	CONCRETE WALL			TA-0-140 000-00
TA-0-141	CONCRETE WALL			TA-0-141 000-00
TA-0-142	CONCRETE WALL			TA-0-142 000-00
TA-0-143	CONCRETE WALL			TA-0-143 000-00
TA-0-144	CONCRETE WALL			TA-0-144 000-00
TA-0-145	CONCRETE WALL			TA-0-145 000-00
TA-0-146	CONCRETE WALL			TA-0-146 000-00
TA-0-147	CONCRETE WALL			TA-0-147 000-00
TA-0-148	CONCRETE WALL			TA-0-148 000-00
TA-0-149	CONCRETE WALL			TA-0-149 000-00
TA-0-150	CONCRETE WALL			TA-0-150 000-00

STRUCTURE NUMBER	STRUCTURE DESCRIPTION	STRUCTURE HOME INCLATURE	REMARKS	APPROXIMATE GRID LOCATION
TA-0-151	CONCRETE WALL			TA-0-151 000-00
TA-0-152	CONCRETE WALL			TA-0-152 000-00
TA-0-153	CONCRETE WALL			TA-0-153 000-00
TA-0-154	CONCRETE WALL			TA-0-154 000-00
TA-0-155	CONCRETE WALL			TA-0-155 000-00
TA-0-156	CONCRETE WALL			TA-0-156 000-00
TA-0-157	CONCRETE WALL			TA-0-157 000-00
TA-0-158	CONCRETE WALL			TA-0-158 000-00
TA-0-159	CONCRETE WALL			TA-0-159 000-00
TA-0-160	CONCRETE WALL			TA-0-160 000-00
TA-0-161	CONCRETE WALL			TA-0-161 000-00
TA-0-162	CONCRETE WALL			TA-0-162 000-00
TA-0-163	CONCRETE WALL			TA-0-163 000-00
TA-0-164	CONCRETE WALL			TA-0-164 000-00
TA-0-165	CONCRETE WALL			TA-0-165 000-00
TA-0-166	CONCRETE WALL			TA-0-166 000-00
TA-0-167	CONCRETE WALL			TA-0-167 000-00
TA-0-168	CONCRETE WALL			TA-0-168 000-00
TA-0-169	CONCRETE WALL			TA-0-169 000-00
TA-0-170	CONCRETE WALL			TA-0-170 000-00
TA-0-171	CONCRETE WALL			TA-0-171 000-00
TA-0-172	CONCRETE WALL			TA-0-172 000-00
TA-0-173	CONCRETE WALL			TA-0-173 000-00
TA-0-174	CONCRETE WALL			TA-0-174 000-00
TA-0-175	CONCRETE WALL			TA-0-175 000-00
TA-0-176	CONCRETE WALL			TA-0-176 000-00
TA-0-177	CONCRETE WALL			TA-0-177 000-00
TA-0-178	CONCRETE WALL			TA-0-178 000-00
TA-0-179	CONCRETE WALL			TA-0-179 000-00
TA-0-180	CONCRETE WALL			TA-0-180 000-00
TA-0-181	CONCRETE WALL			TA-0-181 000-00
TA-0-182	CONCRETE WALL			TA-0-182 000-00
TA-0-183	CONCRETE WALL			TA-0-183 000-00
TA-0-184	CONCRETE WALL			TA-0-184 000-00
TA-0-185	CONCRETE WALL			TA-0-185 000-00
TA-0-186	CONCRETE WALL			TA-0-186 000-00
TA-0-187	CONCRETE WALL			TA-0-187 000-00
TA-0-188	CONCRETE WALL			TA-0-188 000-00
TA-0-189	CONCRETE WALL			TA-0-189 000-00
TA-0-190	CONCRETE WALL			TA-0-190 000-00
TA-0-191	CONCRETE WALL			TA-0-191 000-00
TA-0-192	CONCRETE WALL			TA-0-192 000-00
TA-0-193	CONCRETE WALL			TA-0-193 000-00
TA-0-194	CONCRETE WALL			TA-0-194 000-00
TA-0-195	CONCRETE WALL			TA-0-195 000-00
TA-0-196	CONCRETE WALL			TA-0-196 000-00
TA-0-197	CONCRETE WALL			TA-0-197 000-00
TA-0-198	CONCRETE WALL			TA-0-198 000-00
TA-0-199	CONCRETE WALL			TA-0-199 000-00
TA-0-200	CONCRETE WALL			TA-0-200 000-00

UNCLASSIFIED
 TA-52 STRUCTURE LOCATION INDEX
 FIGURE 52-2

UNCLASSIFIED RELEASE UNDER EXECUTIVE ORDER

UNIVERSITY OF CALIFORNIA
Los Alamos
 Los Alamos National Laboratory
 Los Alamos, New Mexico 87545

FACILITIES ENGINEERING DIVISION

INDEX SHEET
 STRUCTURE LOCATION PLAN
 TA-52 REACTOR DEVELOPMENT SITE

DATE: 1-11-63
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 SCALE: AS SHOWN
 SHEET NO. 1 OF 1
 ENG-R-5128

TA-53

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 53, the Los Alamos Meson Physics Facility (LAMPF) is a proton accelerator. The subatomic particles produced are used in basic research, isotope production, radiochemistry, solid-state physics research, and accelerator technology. Support units such as shops, warehouses, trailers for instruments and data logging, offices, and facilities for accelerator technology research also exist on-site (DOE, 1987a). The technical area also includes the location of a portion of former TA-20. The Southern end of TA-53 has been developed for use by the Strategic Defense Initiative.

TA-53 lies at elevations between about 6,600 and 7,140 feet asl. A portion of the technical area extends east into Santa Fe County. Structures are located on Mesita de Los Alamos, which is bounded on the north by Los Alamos Canyon and on the south by Sandia Canyon. Canyon walls are steep slopes or cliffs in this area. TA-53 lies on welded Bandelier Tuff, in the Pinon-Juniper and Ponderosa Pine/Pinon-Juniper overstory vegetation zones. Soil consists of Hackroy sandy loam, fine-loamy Typic Eutroboralfs, Nyjack loam, Hackroy-Rock outcrop complex, Totavi gravelly loamy sand, and rock outcrop (Nyhan et al., 1978).

At TA-53, the potentiometric surface of the main aquifer in the Los Alamos region lies at about 5,820 to 5,980 feet asl. Over 1,000 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-53

53-001	WASTE STORAGE AREAS
53-002	LAGOON SYSTEM
53-003	HOLDING TANK
53-004	BEAD BLASTER
53-005	DISPOSAL PIT
53-006	UNDERGROUND STORAGE TANKS
53-007	ABOVEGROUND STORAGE TANKS AND SUMPS
53-008	BONEYARD
53-009	BERMS
53-010	SOIL CONTAMINATION
53-011	LEAKING PCB TRANSFORMERS
53-012	DRAINS AND OUTFALLS

SUMMARY

LOCATION	: TA-53	MATERIALS MANAGED	: HAZARDOUS WASTE
TYPE OF UNIT(s)	: CONTAINER STORAGE AREA		RADIOACTIVE WASTE
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: ACTIVE/INACTIVE		
PERIOD OF USE	: 1970s - PRESENT		
HAZARDOUS RELEASE	: SUSPECTED		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

The RFA and the CEARP note a storage area at TA-53-2 [53-001(a)] that consists of a 55 gallon steel drum on a concrete and asphalt pad. The RFA also notes another storage area used for temporary (<90 day) storage [53-001(b)]. The CEARP also notes spent oil storage areas and a storage yard southeast of TA-53-16 [53-001(c)]. Additional storage was observed at TA-53-14 [53-001(d)]. The following are satellite storage areas cited by the 4/90 LANL Active Container Storage Area database:

SWMU NO.	STRUCTURE	LOCATION	MATERIALS STORED
53-001(c)	TA-53-16	south side of building	solvents on rags
53-001(d)	TA-53-14	outside, southwest side of bldg	solvent rags, acetone, ethanol, trichloroethane, freon
53-001(e)	TA-53-25	east side of shop	solvents, freon, vacuum pump oil
53-001(f)	TA-53-18	1st floor; center aisle	solvents, freon, epoxy, resins
53-001(g)	TA-53-1031	inside, NE corner	solvents, lead sheets, lead bricks, cadmium sheets, gasoline, waste oil
53-001(h)	TA-53-365	- 1st floor, east end of high bay (2) - east end of beam tunnel - mezzanine - Room 302	freon, ethanol, acetone, trichloroethane, solvent rags
53-001(i)	TA-53-15	- west side of building - Room 103 - Room 105	solvents, empty reagent bottles, organics, solvent rags waste solvents, solvents rags, organics waste solvents, solvents rags
53-001(j)	TA-53-30	SE corner	solvents on rags
53-001(k)	TA-53-7	north side, middle of road	solvents on rags
53-001(l)	TA-53-26	outside, north wall	solvents on rags, freon on rags
53-001(m)	TA-53-17	Room 103	acetone/ethanol on kimwipes/rags
53-001(n)	TA-53-19	inside, west end of building	solvent rags, acetone, ethanol, trichloroethane, freon
53-001(o)	TA-53-622	Room 317	photo chemicals

WASTE INFORMATION

According to the RFA and the CEARP, the temporary storage area at TA-53-2 was used for spent solvents and acids. Currently, LANL notes only solvents and miscellaneous storage at TA-53-2. The CEARP stated that drums of ethylene glycol, organic solvents, and epoxy resins were stored in the storage yard southeast of TA-53-16. TA-53-16 contains organic solvents. The storage area at TA-53-14 is used to store solvents (acetone, alcohols, toluene, trichloroethane), contaminated oils, freon, and organics. The satellite storage areas store solvents, organics, freon, low level radioactive waste, photo chemicals, and some solid wastes. Vacuum pump oil contaminated with radionuclides was mixed with vermiculite, and uncontaminated oil was kept in small drums at TA-53. Many of the storage areas are located on concrete pads with curbing.

RELEASE INFORMATION

Stains on the underlying asphalt pad at TA-53-2 were observed during the VSI. There are no new stains. There was evidence of leaking epoxy resin in the old yard southeast of TA-53-16. It is unknown whether a release has occurred from the storage area at TA-53-14 or from other storage areas. However, past operations at most container storage areas have resulted in systematic releases of solid wastes, including RCRA-regulated constituents.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-001(a)	TA53-5-CA-A-HW/RW	53.001		TA-53-2

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-001(b)	**	53.007		
53-001(c)	TAS3-S-CA-A-HW/RW			TA-53-16
53-001(d)	**			TA-53-14
53-001(e)	**			TA-53-25
53-001(f)	**			TA-53-18
53-001(g)	**			TA-53-1031
53-001(h)	**			TA-53-365
53-001(i)	**			TA-53-15
53-001(j)	**			TA-53-30
53-001(k)	**			TA-53-7
53-001(l)	**			TA-53-26
53-001(m)	**			TA-53-17
53-001(n)	**			TA-53-19
53-001(o)	**			TA-53-622

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-53	MATERIALS MANAGED :	SANITARY WASTE
TYPE OF UNIT(s)	: LAGOON		SUSPECTED HAZARDOUS WASTE
UNIT USE	: TREATMENT		RADIOACTIVE WASTE
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: 1960s - PRESENT		
HAZARDOUS RELEASE	: SUSPECTED		
RADIOACTIVE RELEASE	: KNOWN		

UNIT INFORMATION

Before 1986, only two clay-lined lagoons, TA-53-166 [53-002(a)], were in use at TA-53. The lagoons are 210' x 210' x 6' with capacity of 1,511,952 gallons and were constructed to treat TA-53 waste. The lagoons were operated in series and then discharged to a nearby canyon. In 1986, a third pond [53-002(b)] approximately 1.3 times larger than either of the other two was constructed with a plastic liner underlain by Gunitite. The outfall from the new lagoon is at the same location as the outfall from previously described lagoons. A sprinkler system was installed in the third pond to aerate the effluent to cause it to evaporate and eliminate discharge into the canyon. Freeboard in the lagoons is dependent on time of year and scheduling of experiments. The sludge within these lagoons has never been removed. In 1989, segregation of the lagoons was performed to separate radioactive liquid from sanitary waste. The third pond [53-002(b)] now receives the radioactive waste liquids. Piping from the buildings that discharge to this lagoon is double-walled with a leak monitoring system. The two other lagoons [53-002(a)] now receive only sanitary waste. The radioactive lagoon is managed by evaporation and has no outfall. The sanitary lagoons outfall to an NPDES-permitted outfall.

WASTE INFORMATION

The liquid waste consists of domestic sewage, cooling water from the experimental area of the linear accelerator, leaks in the accelerator system, and other industrial waste including liquid from the janitors' sinks and chemical drains. Radioactive constituents include tritium, beryllium-7, cesium-134, sodium-22, cobalt-57, and other radionuclides. Sludge in the lagoons contains radionuclides and possibly chemical contaminants.

RELEASE INFORMATION

The lagoons have discharged to Los Alamos Canyon. The outfall from the sanitary lagoons is under a NPDES permit, serial number 095 (see Appendix A). The TA-53 lagoons were investigated as Environmental Problem 13 in the DOE Environmental Survey. Six samples of sludge were collected and the following radionuclides were detected in all six samples: beryllium-7, sodium-22, manganese-54, cobalt-56, -57, -58, -60, zinc-65, selenium-75, rubidium-83, yttrium-88, and cesium-134. In addition, scandium-46 and zirconium-88 were detected in 3 samples. Silver-110m was detected in 2 samples and cadmium-109 was present in one sample.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-002(a)	TA53-2-0/S1/CA-A-HW/RW	53.002- 53.004		TA-53-166
53-002(b)	TA53-2-0/S1/CA-A-HW/RW	53.002- 53.004		TA-53-166

SUMMARY

LOCATION : TA-53
 TYPE OF UNIT(S) : SEPTIC SYSTEM
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1967 - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SANITARY WASTE

UNIT INFORMATION

A holding tank, TA-53-1016, (also known as TA-0-190) serves two offices and a trailer. It is a metal tank 4'4" in diameter, 5' long, has a capacity of 500 gallons, and serves approximately 4 people. The tank has no overflow system and is pumped on a regular schedule. This was the first septic system at the site.

WASTE INFORMATION

The tank presently manages sanitary waste, and there are no known industrial contaminants discharged to the tank.

RELEASE INFORMATION

There are no known hazardous releases associated with the holding tank.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-003	**			TA-53-1016

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-53
 TYPE OF UNIT(s) : BUILDING/STRUCTURE
 UNIT USE : TREATMENT
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1970s - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : RADIOACTIVE WASTE

UNIT INFORMATION

The unit is a facility referred to as a "bead blaster". It is used for cleaning ion pump parts. The bead blaster is an enclosed facility with structure number TA-53-56.

WASTE INFORMATION

The waste consists of spent beads and residues removed from the ion pump parts undergoing cleaning. The beads and residues may be contaminated with radionuclides.

RELEASE INFORMATION

At periodic intervals the spent beads and residues are removed from the bead blaster and taken to TA-54 for burial in MDA-G. There have been no known releases.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-004	**			TA-53-56

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-53
 TYPE OF UNIT(s) : PIT
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : DECOMMISSIONED
 PERIOD OF USE : EST. 1969 - 1986
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SOLID WASTE
 PCBs

UNIT INFORMATION

According to the CEARP, this disposal pit was associated with operations at a shop, TA-53-2. This pit was unlined and originally contained an oil and water mixture covered by a steel grate. The disposal pit was approximately 4' x 6' x 6' deep. This pit was removed in 1986. Liquid in the pit was sucked out, sampled, and drummed. The pit sides were scraped out and also drummed. The drummed waste was picked up by HSE-7. Drain lines are currently served by a sewage system.

WASTE INFORMATION

The pit contents included waste oils.

RELEASE INFORMATION

The pit was removed in 1986. Analytical results from the soil taken from the pit were negative for hazardous and radioactive constituents. The liquid portion showed 4-5 ppb PCBs.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-005	**			NEAR TA-53-2

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-53
 TYPE OF UNIT(S) : UNDERGROUND TANK
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE/INACTIVE
 PERIOD OF USE : SEE BELOW
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : RADIOACTIVE WASTE
 SUSPECTED MIXED WASTE

UNIT INFORMATION

There are five active and one inactive underground storage tanks at TA-53. The tanks are described in the following table.

SWMU NO.	STRUCTURE	DIMENSIONS	MATERIAL	USE PERIOD	CAPACITY
53-006(a)	TA-53-59	28" dia. / 65' high	unknown	1974 - 1980s (est.)	unknown
53-006(b)	TA-53-68	6' dia. / 18' long	steel	1973 - present	2,500 gal.
53-006(c)	TA-53-69	6' dia. / 18' long	steel	1973 - present	2,500 gal.
53-006(d)	TA-53-144	8' x 8' x 10' deep	concrete	1977 - present	4,000 gal.
53-006(e)	TA-53-145	8' x 8' x 10' deep	concrete	1977 - present	4,000 gal.
53-006(f)	TA-53-1	unknown	concrete	1972 - present	3,000 gal.

TA-53-59 may have discharged to the lagoons (53-002). Liquids in tanks TA-53-68, -69, -144, and -145 are monitored; if the liquids fall below a standard activity, they are discharged to the radioactive lagoon [53-002(b)]. If the liquids are above the standard activity, they are pumped out and taken to TA-50 Wastewater Treatment Plant for treatment. Prior to 1989, the liquids were held in the tanks until short-lived radionuclides decayed. Tank TA-53-1 liquids are picked up and sampled prior to treatment at TA-50 Wastewater Treatment Plant. If organics or solvents are present, the waste is drummed and stored for eventual disposal.

WASTE INFORMATION

TA-53-59: The tank stored waste consisting of spent resin containing radionuclides removed from circulating water from the Meson Facility.

TA-53-68 and -69: The tanks are used for the storage of cooling water from experimental areas and other radioactively contaminated water from other operations in the accelerator building. The water contains activation products. In past years, solvents and chemicals may have been stored.

TA-53-144 and -145: The tanks store water containing activation products and serve the WNR facility. In past years, the liquids may have contained small amounts of solvents and other chemicals.

TA-53-1: This tank stores radioactive waste. According to the LANL Active Container Storage Area database, TA-53-1 holds organics and acidic wastes.

RELEASE INFORMATION

To date, the liquids in tanks TA-53-68, -69, -144, and -145 have always been discharged to the lagoons. There have been no known releases from any of the tanks. However, past operations at most container storage areas have resulted in systematic releases of solid wastes, including RCRA-regulated constituents.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CEARP IDENTIFICATION NUMBER(S)	RFA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
53-006(a)	TA53-4-SST/UST-A-HW/RW	53.006		TA-53-59
53-006(b)	TA53-4-SST/UST-A-HW/RW	53.006		TA-53-68
53-006(c)	TA53-4-SST/UST-A-HW/RW	53.006		TA-53-69
53-006(d)	TA53-4-SST/UST-A-HW/RW	53.006		TA-53-144
53-006(e)	TA53-4-SST/UST-A-HW/RW	53.006		TA-53-145
53-006(f)	**			TA-53-1

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-53
 TYPE OF UNIT(s) : ABOVEGROUND TANK
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1970s - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : MIXED WASTE

UNIT INFORMATION

There are three aboveground waste storage tanks at TA-53. One of the tanks has an associated sump. The tanks and sump are described in the following table.

SWMU NO.	STRUCTURE	STRUCTURE TYPE	DIMENSIONS	MATERIAL	BUILT	OVERFLOW
53-007(a)	TA-53-1	tank	2' dia. / 2' high	unknown	1973	sump
53-007(a)	TA-53-1	sump	8' x 8' x 6'	unknown	1973	pick up HSE-7
53-007(b)	TA-53-3	tank	4' dia. / 4' high	stainless steel	1974	pick up HSE-7
53-007(b)	TA-53-3	tank	unknown	fiberglass	1974	not used

The tank in TA-53-1 is used for neutralization. The two tanks in TA-53-3 are located below the hot cell in the experimental hall area.

WASTE INFORMATION

The tanks contain radioactive-mixed waste except for the fiberglass tank which is believed to have never been used. According to the 4/90 LANL Active Container Storage Area database, the TA-53-3 tanks contain solvents, organics, and carcinogens.

RELEASE INFORMATION

There have been no known hazardous releases from these tanks.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-007(a)	TA53-4-SST/UST-A-HW/RW	53.006		TA-53-1
53-007(b)	**	53.006		TA-53-3

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-53	MATERIALS MANAGED :	SOLID WASTE
TYPE OF UNIT(s)	: BONEYARD		SUSPECTED HAZARDOUS WASTE
UNIT USE	: STORAGE		RADIOACTIVE WASTE
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: EST. 1960 - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

The RFA states that a boneyard located near the lagoons (see 53-002) covers 3 to 4 acres and is underlain by soil. The boneyard contains several locked trailers, the contents of which are unknown. Several drums of unknown contents are also present. The CEARP identifies three main boneyard areas containing material of various shapes and descriptions including steel shielding blocks, concrete, radioactively contaminated or activated equipment and general debris. In 1990, an effort was made to clean up the boneyard.

WASTE INFORMATION

The RFA states that no hazardous constituents were identified during the VSI. Other material is radioactively contaminated.

RELEASE INFORMATION

It is unknown whether any past or current hazardous releases have occurred.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-008	TA53-5-CA-A-HW/RW	53.009		

SUMMARY

LOCATION : TA-53
TYPE OF UNIT(S) : BERMED AREA
UNIT USE : CONTAINMENT
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : 1980s - PRESENT
HAZARDOUS RELEASE : NONE
RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

Three aboveground tanks that store liquid scintillation fluid are located to the north of the lagoons. These tanks are surrounded by an earthen berm that would contain liquids in the event of a spill.

WASTE INFORMATION

The waste would consist of spilled scintillation fluid.

RELEASE INFORMATION

There have been no known releases.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-009	**			TA-53-166

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-53
 TYPE OF UNIT(S) : BERMED AREA
 UNIT USE : STORAGE
 OPERATIONAL STATUS : DECOMMISSIONED
 PERIOD OF USE : 1989 - 1990
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SOLID WASTE

UNIT INFORMATION

Two large (3,000 gallon) tanks and eighteen 55-gallon drums labeled "Mineral Oil Based Liquid Scintillator" were noted during a 1989 RCRA audit. The tanks and drums were stored in a plastic lined, soil bermed area southeast of TA-53-30. The drums and tanks of oil have since been moved into secondary containment prior to reuse. Two small areas of oil-stained soil were noted before removal of the tanks and drums. This soil was disposed of in TA-54, Area G.

WASTE INFORMATION

The oil, used in a beam line experiment in the spring of 1989, consists of mineral oil and a small percentage of pseudocumin. It contains no hazardous constituents.

RELEASE INFORMATION

A small area (less than a cubic foot) of oil-stained soil was created near one of the tanks when a spigot dripped. LANL personnel also noted a few instances of soil contamination beneath drums in the drum storage area. The contamination was less than two inches deep. This soil has been excavated and disposed of in TA-54, Area G.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-010	**			TA-53-384

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-53
 TYPE OF UNIT(S) : SOIL CONTAMINATION
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : ? - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE
 PCBs

UNIT INFORMATION

Transformers reported, during a transformer assessment survey, to have had moderate leaks requiring a drip pan include:

SWMU NO.	STRUCTURE	LOCATION	PCB ID NO.	ASSESSMENT DATE
53-011(a)	TA-53-67		5036	
53-011(b)	TA-53-196		5043	
53-011(c)	TA-53-184		5054	
53-011(d)	TA-53-71	north of Sector A	5034	9/21/85

Transformer TA-53-67 is between 16 and 20 years old. TA-53-71 has a capacity of 205 gallons and dimensions of 6'10" x 4'5" x 5'11" deep. It has been suggested that the leak in TA-53-71 can be controlled by means of a drip pan. According to engineering records, there is a leaking transformer at TA-53-123 [53-011(e)].

WASTE INFORMATION

The transformers were leaking oil containing PCBs. Other potentially hazardous constituents are suspected.

RELEASE INFORMATION

Transformer TA-53-71 was dripping into a porous concrete block. The extent to which the other transformers released to the environment is unknown.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-011(a)	**			TA-53-67
53-011(b)	**			TA-53-196
53-011(c)	**			TA-53-184
53-011(d)	**			TA-53-71

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-53
 TYPE OF UNIT(S) : OUTFALL
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 7 - PRESENT
 HAZARDOUS RELEASE : SUSPECTED
 RADIOACTIVE RELEASE : KNOWN

MATERIALS MANAGED : RADIOACTIVE WASTE
 HAZARDOUS WASTE

UNIT INFORMATION

The following are drainlines and outfalls in TA-53:

SWMU NO.	STRUCTURE SERVED	USE	NPDES NO.	OUTFALL LOCATION
53-012(a)	TA-53-60	cooling tower of injector	047	Los Alamos Canyon
53-012(b)	TA-53-62	cooling tower of acceleration area	048	Los Alamos Canyon
53-012(c)	TA-53-64	cooling tower of beam stop	049	Los Alamos Canyon
53-012(d)	TA-53-7	weapons neutron research facility	125	Sandia Canyon
53-012(e)	TA-53-2	equipment test laboratory	114	Sandia Canyon
53-012(f)	TA-53-293	cooling tower	113	Sandia Canyon
53-012(g)	TA-53-274	cooling tower	113	Sandia Canyon
53-012(h)	TA-53-19	accelerator technical labs	none	Sandia Canyon

WASTE INFORMATION

It is not known whether the cooling tower water could be contaminated with radionuclides because of leaks in the heat exchangers. Various scale and corrosion control compounds, as well as chemical cleaners, have been added to the water.

RELEASE INFORMATION

140,000 gallons per day of water is discharged into Los Alamos Canyon by TA-53-60, -62, -64. The extent of hazardous or radioactive releases is unknown.

SWMU CROSS-REFERENCE LIST

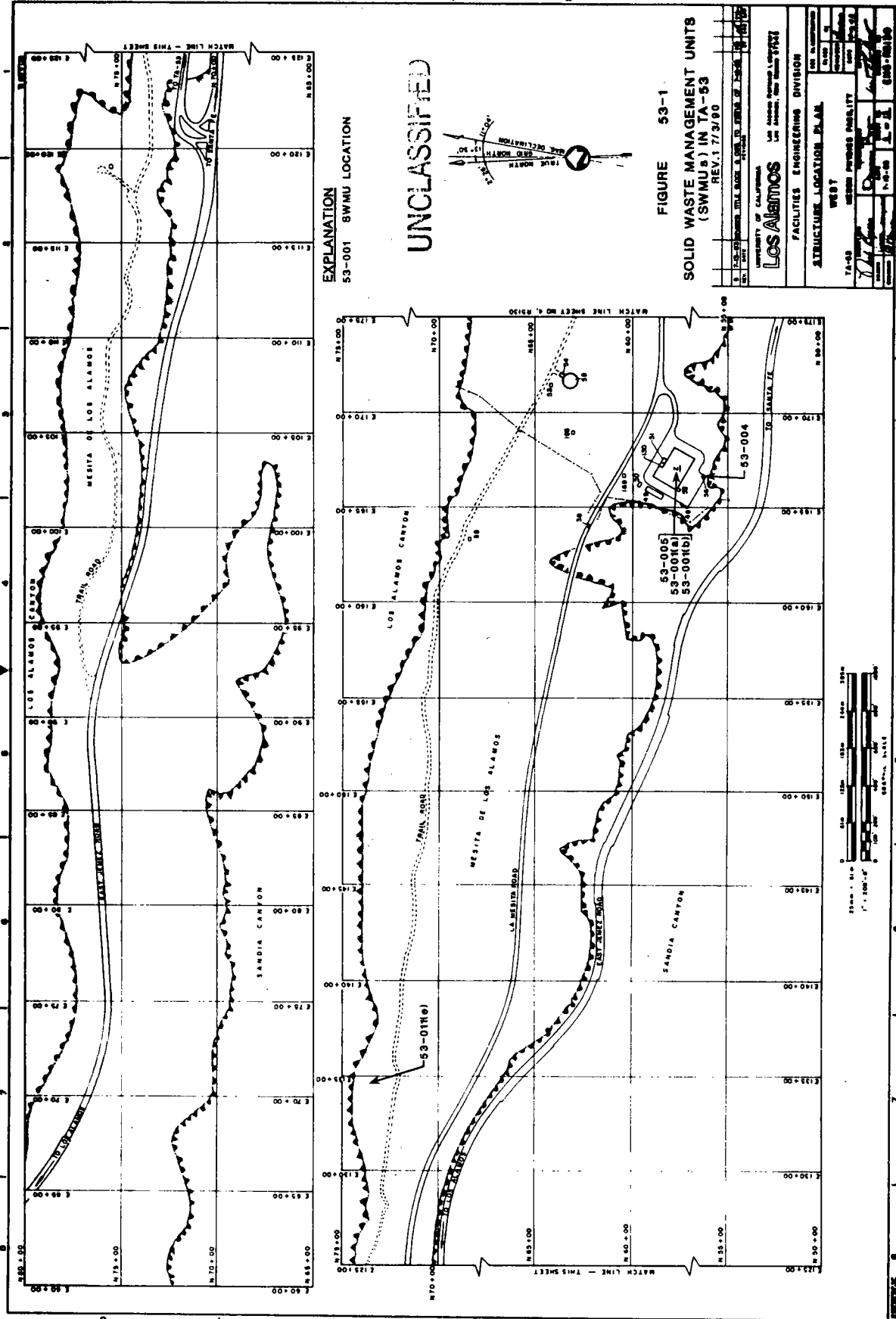
<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
53-012(a)	**			TA-53-60
53-012(b)	**			TA-53-62
53-012(c)	**			TA-53-64
53-012(d)	**			TA-53-7
53-012(e)	**			TA-53-2
53-012(f)	**			TA-53-293
53-012(g)	**			TA-53-294

** No corresponding E. R. Program unit.

**TA-53 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
53-001(a)	53-1
53-001(b)	53-1
53-001(c)	53-2
53-001(d)	53-2
53-001(e)	53-2
53-001(f)	53-2
53-001(g)	53-2
53-001(h)	53-2
53-001(i)	53-2
53-001(j)	53-2
53-001(k)	53-2
53-001(l)	53-2
53-001(m)	53-2
53-001(n)	53-2
53-001(o)	Not Shown
53-002(a)	53-2, 53-5, 53-6
53-002(b)	53-6
53-003	53-3
53-004	53-1
53-005	53-1
53-006(a)	53-2
53-006(b)	53-2
53-006(c)	53-2
53-006(d)	53-2
53-006(e)	53-2
53-006(f)	53-2
53-007(a)	53-2
53-007(b)	53-2
53-008	Not Shown
53-009	Not Shown
53-010	53-5
53-011(a)	53-2
53-011(b)	53-2
53-011(c)	53-2
53-011(d)	53-2
53-011(e)	53-1
53-012(a)	53-2
53-012(b)	53-2
53-012(c)	53-2
53-012(d)	53-2
53-012(e)	53-3
53-012(f)	53-2
53-012(g)	53-2
53-012(h)	53-2

NOTE: Some structure locations contain more than one SWMU.



EXPLANATION
53-001 SWMU LOCATION

UNCLASSIFIED

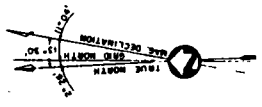
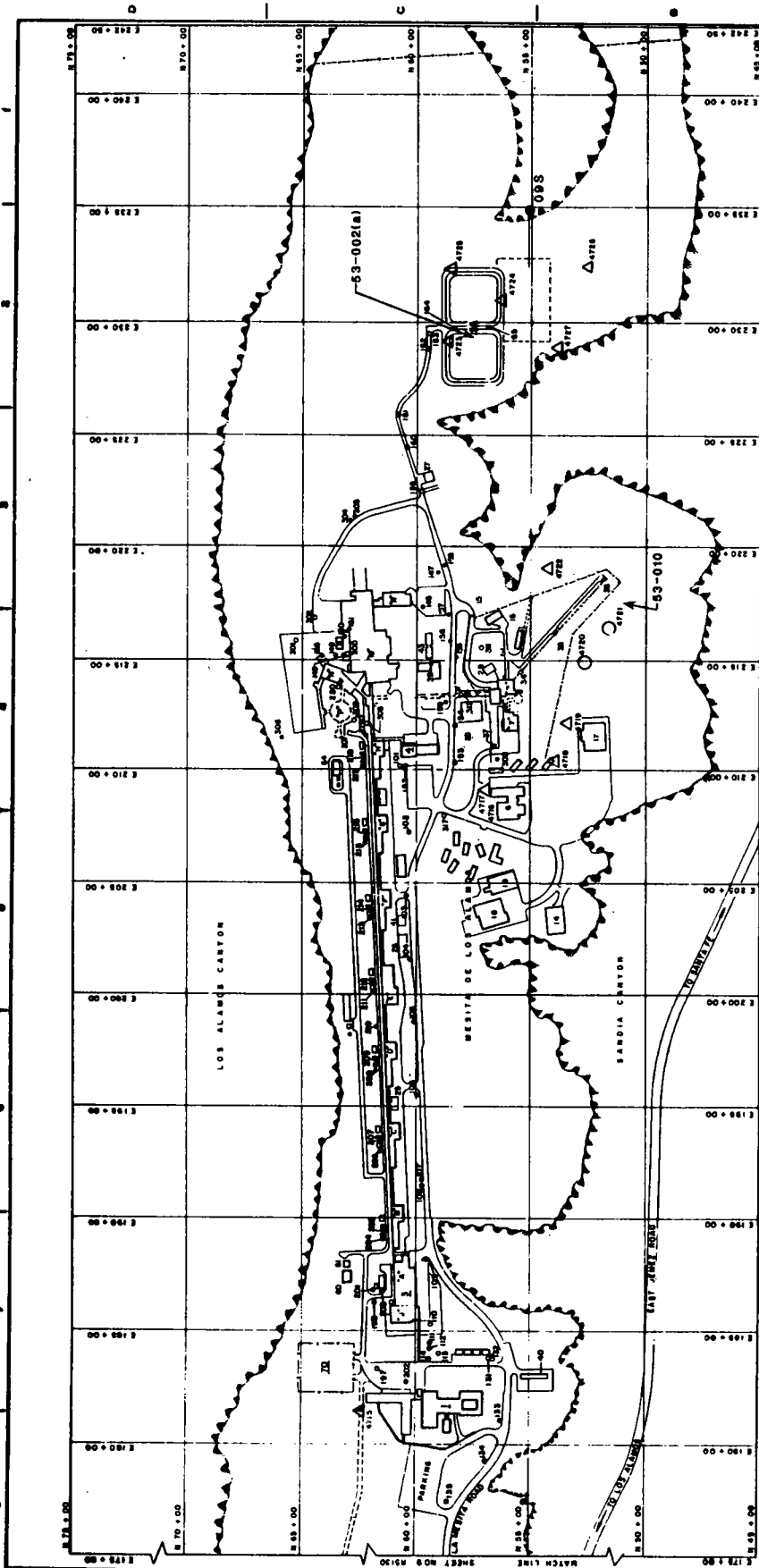


FIGURE 53-1
SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-53
REV. 17/3/90

UNIVERSITY OF CALIFORNIA	
LOS ALAMOS	
LOS ALAMOS ENGINEERING CENTER	
FACILITIES ENGINEERING DIVISION	
STRUCTURE LOCATION PLAN	
WEST	
TA-53	GENERAL PURPOSE FACILITY
DATE	BY
17/3/90	W. J. ...
17/3/90	...



REV. 17/3/90
FIGURE 53-5
SOLID WASTE MANAGEMENT UNITS (SWMU) IN TA-53

UNIVERSITY OF CALIFORNIA	Los Alamos National Laboratory
Los Alamos	Los Alamos, New Mexico 87545
Los Alamos	
FACILITIES ENGINEERING DIVISION	
STRUCTURE LOCATION PLAN	
TA-53	NEON PHYSICS FACILITY
DATE	1/18/90
BY	J. J. J.
CHECKED BY	J. J. J.
APPROVED BY	J. J. J.
SCALE	ENG-10130

LEGEND - ARCH. SITE STATUS

- △ EXCAVATED
- ▲ PARTIALLY EXCAVATED
- UNEXCAVATED

EXPLANATION

- 010 LOCATION OF OUTFALL INDICATING ASSOCIATED PIPING AND NPDES SERIAL NUMBERS (SEE APPENDIX A)

53-001 SWMU LOCATION

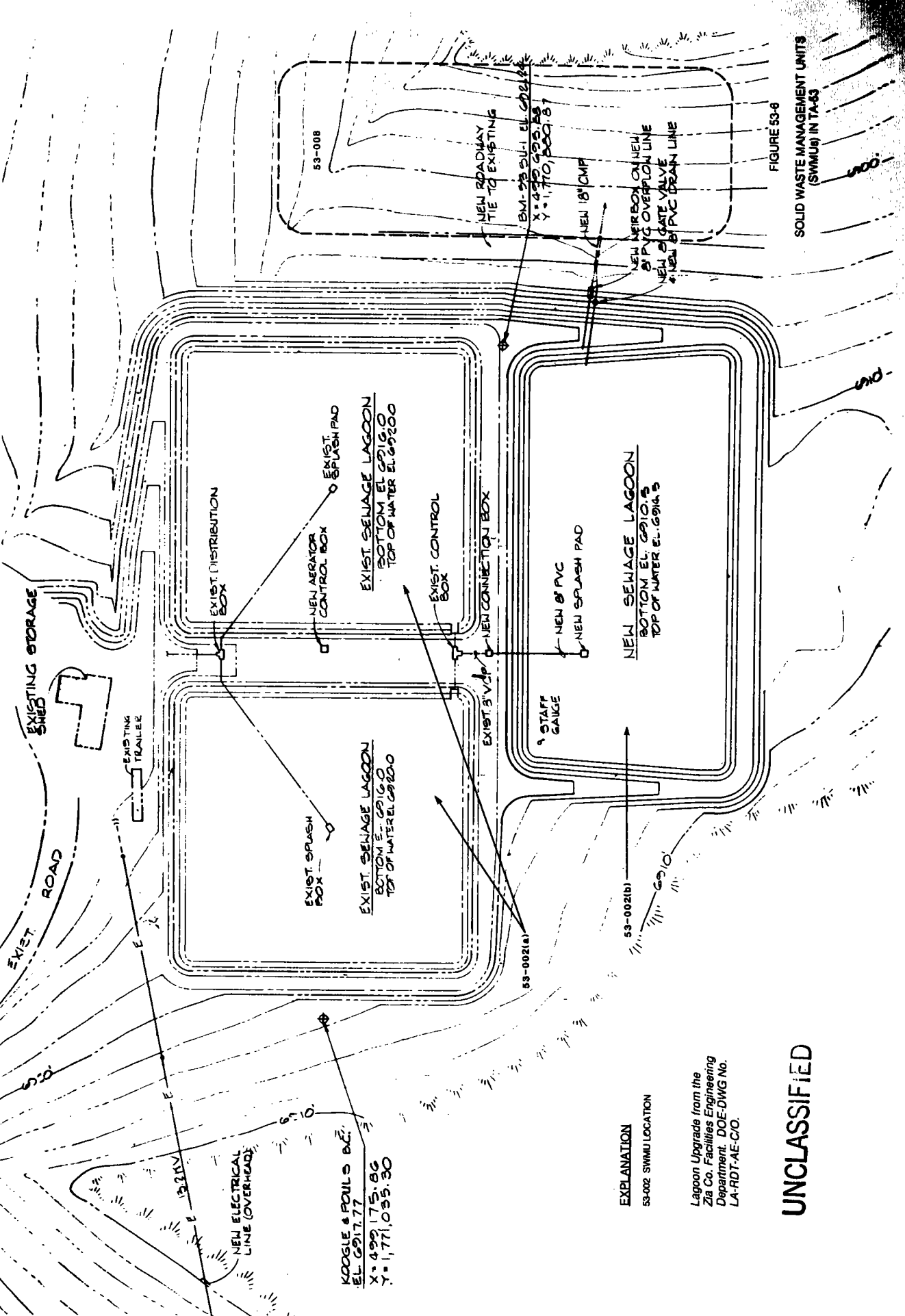
010

20mm = 50 ft
 1" = 500'-0"

GRAPHIC SCALE

0 100 200 300 400 500 600 700 800 900 1000

UNCLASSIFIED



EXIST. STORAGE SHED

EXIST. ROAD

EXIST. TRAILER

EXIST. DISTRIBUTION BOX

NEW AERATOR CONTROL BOX

EXIST. SEWAGE LAGOON
BOTTOM EL. 6916.0
TOP OF WATER EL. 6920.0

EXIST. CONTROL BOX

EXIST. S.V.P. NEW CONNECTION BOX

EXIST. SPLASH PAD

EXIST. SEWAGE LAGOON
BOTTOM EL. 6916.0
TOP OF WATER EL. 6920.0

9" STAFF GAUGE

NEW 8" PVC
NEW SPLASH PAD

NEW SEWAGE LAGOON
BOTTOM EL. 6916.5
TOP OF WATER EL. 6919.5

53-008

NEW ROADWAY TIE TO EXISTING

B.M. 53-55 S.U. 1. EL. 6921.4
X=499,055.33
Y=1,771,055.30

NEW 18" CMP

NEW AIR BOX ON NEW 8" PVC OVERFLOW LINE
NEW 2" GATE VALVE
NEW 8" PVC DRAIN LINE

FIGURE 53-6

SOLID WASTE MANAGEMENT UNITS
(SWMU) IN TA-83

NEW ELECTRICAL LINE (OVERHEAD)

KOOGLE & POULS P.C.
EL. 6917.77
X=499,175.86
Y=1,771,055.30

EXPLANATION
53-002 SWMU LOCATION

Lagoon Upgrade from the
Zia Co. Facilities Engineering
Department, DOE-DWG No.
LA-RDT-AE-C/O.

UNCLASSIFIED

STRUCTURE NUMBER	STRUCTURE IDENTIFICATION	STRUCTURAL MEMORANDUM	REMARKS	APPROXIMATE GRID LOCATION	STRUCTURE NUMBER	STRUCTURE IDENTIFICATION	STRUCTURAL MEMORANDUM	REMARKS	APPROXIMATE GRID LOCATION	STRUCTURE NUMBER	STRUCTURE IDENTIFICATION	STRUCTURAL MEMORANDUM	REMARKS	APPROXIMATE GRID LOCATION
TA-53-602	REF-602				TA-53-602	REF-602				TA-53-602	REF-602			
TA-53-603	REF-603				TA-53-603	REF-603				TA-53-603	REF-603			
TA-53-604	REF-604				TA-53-604	REF-604				TA-53-604	REF-604			
TA-53-605	REF-605				TA-53-605	REF-605				TA-53-605	REF-605			
TA-53-606	REF-606				TA-53-606	REF-606				TA-53-606	REF-606			
TA-53-607	REF-607				TA-53-607	REF-607				TA-53-607	REF-607			
TA-53-608	REF-608				TA-53-608	REF-608				TA-53-608	REF-608			
TA-53-609	REF-609				TA-53-609	REF-609				TA-53-609	REF-609			
TA-53-610	REF-610				TA-53-610	REF-610				TA-53-610	REF-610			
TA-53-611	REF-611				TA-53-611	REF-611				TA-53-611	REF-611			
TA-53-612	REF-612				TA-53-612	REF-612				TA-53-612	REF-612			
TA-53-613	REF-613				TA-53-613	REF-613				TA-53-613	REF-613			
TA-53-614	REF-614				TA-53-614	REF-614				TA-53-614	REF-614			
TA-53-615	REF-615				TA-53-615	REF-615				TA-53-615	REF-615			
TA-53-616	REF-616				TA-53-616	REF-616				TA-53-616	REF-616			
TA-53-617	REF-617				TA-53-617	REF-617				TA-53-617	REF-617			
TA-53-618	REF-618				TA-53-618	REF-618				TA-53-618	REF-618			
TA-53-619	REF-619				TA-53-619	REF-619				TA-53-619	REF-619			
TA-53-620	REF-620				TA-53-620	REF-620				TA-53-620	REF-620			
TA-53-621	REF-621				TA-53-621	REF-621				TA-53-621	REF-621			
TA-53-622	REF-622				TA-53-622	REF-622				TA-53-622	REF-622			
TA-53-623	REF-623				TA-53-623	REF-623				TA-53-623	REF-623			
TA-53-624	REF-624				TA-53-624	REF-624				TA-53-624	REF-624			
TA-53-625	REF-625				TA-53-625	REF-625				TA-53-625	REF-625			
TA-53-626	REF-626				TA-53-626	REF-626				TA-53-626	REF-626			
TA-53-627	REF-627				TA-53-627	REF-627				TA-53-627	REF-627			
TA-53-628	REF-628				TA-53-628	REF-628				TA-53-628	REF-628			
TA-53-629	REF-629				TA-53-629	REF-629				TA-53-629	REF-629			
TA-53-630	REF-630				TA-53-630	REF-630				TA-53-630	REF-630			
TA-53-631	REF-631				TA-53-631	REF-631				TA-53-631	REF-631			
TA-53-632	REF-632				TA-53-632	REF-632				TA-53-632	REF-632			
TA-53-633	REF-633				TA-53-633	REF-633				TA-53-633	REF-633			
TA-53-634	REF-634				TA-53-634	REF-634				TA-53-634	REF-634			
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TA-53-667	REF-667				TA-53-667	REF-667				TA-53-667	REF-667			
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TA-53-669	REF-669				TA-53-669	REF-669				TA-53-669	REF-669			
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TA-53-672	REF-672				TA-53-672	REF-672				TA-53-672	REF-672			
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TA-53-677	REF-677				TA-53-677	REF-677				TA-53-677	REF-677			
TA-53-678	REF-678				TA-53-678	REF-678				TA-53-678	REF-678			

UNCLASSIFIED

FIGURE 53-7
TA-53 STRUCTURE LOCATION INDEX
(4 OF 5)

UNIVERSITY OF CALIFORNIA
LOS ANGELES
FACILITIES ENGINEERING DIVISION
INTEGRATED FACILITIES
TA-53 STRUCTURE LOCATION INDEX

TA-54

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 54 contains four waste handling/disposal areas (G, H, J, and L) and supporting office space. The main function of the site is solid radioactive and hazardous waste management (DOE, 1987a).

TA-54 lies at elevations between about 6,400 feet asl near its eastern edge and 6,920 feet asl near its western edge. The technical area extends in an northwest-southeast direction along the Laboratory boundary with Sandoval and Santa Fe counties. The structures and waste handling areas are located on Mesita del Buey, a finger mesa that is bounded by Canada del Buey Canyon on the north and by Pajarito Canyon on the south. TA-54 lies on welded Bandelier Tuff, in the Pinon-Juniper, Ponderosa Pine/Pinon-Juniper and Shrub-Grass-Forb overstory vegetation zones. Soil types in the area include Hackroy sandy loam, Totavi gravelly loamy sand, Nyjack loam, Hackroy-Rock outcrop complex, Servilleta loam, Penistaja sandy loam, Prieta silt loam, and rock outcrop (Nyhan et al., 1978).

At TA-54, the potentiometric surface of the main aquifer in the Los Alamos region lies at about 5,680 to 5,880 feet asl. Over 700 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

The floor of Pajarito Canyon south of TA-54 is underlain by alluvial silt, sand, and gravel, and the underlying bedrock is welded and non-welded Bandelier Tuff. Drill-holes in the canyon encountered 8 to 11 feet of alluvium in the center of the channel, thinning toward the canyon walls. Perched ground water occurs in the alluvium of Pajarito Canyon south of TA-54, but it is not connected hydraulically with the main aquifer. The saturated thickness of the alluvium in Pajarito Canyon varies, but average 10.01 feet in a monitoring well closest to TA-54. Seasonal fluctuations are noted in the saturated thickness of the alluvium, with the highest water levels occurring in the summer. The range in flow rate of this perched ground water is 8 to 23 feet per day (IT, 1987a). A perched water table was not found in Canada del Buey.

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-54

54-001	HAZARDOUS WASTE CONTAINER STORAGE IN AREAS G & L
54-002	COMPRESSED GAS STORAGE IN AREA L
54-003	MATERIAL DISPOSAL AREA G (renumbered)
54-004	MATERIAL DISPOSAL AREA H
54-005	MATERIAL DISPOSAL AREA J
54-006	MATERIAL DISPOSAL AREA L
54-007	SEPTIC SYSTEMS IN AREA L AND TA-54 WEST
54-008	SEWAGE TANK IN AREA L
54-009	TREATMENT TANKS IN AREA L
54-010	UNDERGROUND TANK IN AREA G
54-011	TRU WASTE PACKAGING (renumbered)
54-012	COMPACTORS IN AREAS G AND L
54-013	TRUCK WASHING PITS AND OPERATIONAL RELEASES
54-014	RADIOACTIVE WASTE STORAGE SHAFTS AND PITS
54-015	SURFACE STORAGE OF RADIOACTIVE WASTE
54-016	SUMPS IN AREA G AND TA-54 WEST
54-017	MDA-G DISPOSAL PITS ACTIVE BEFORE 11/19/1980
54-018	MDA-G DISPOSAL PITS ACTIVE AFTER 11/19/1980
54-019	MDA-G DISPOSAL SHAFTS ACTIVE BEFORE 11/19/1980
54-020	MDA-G DISPOSAL SHAFTS ACTIVE AFTER 11/19/1980
54-021	WASTE OIL STORAGE TANKS IN AREA G
54-022	LEAKAGE FROM PCB TRANSFORMER

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED :	HAZARDOUS WASTE
TYPE OF UNIT(s)	: CONTAINER STORAGE AREA		PCBs
UNIT USE	: STORAGE		MIXED WASTE
OPERATIONAL STATUS	: ACTIVE		HAZARDOUS MATERIALS
PERIOD OF USE	: 1963 - PRESENT		
HAZARDOUS RELEASE	: SUSPECTED		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

Several container storage areas for hazardous waste are present in TA-54: 1) A site in Area L contains a bermed storage area for pails and drums [54-001(a)]. This site is constructed over an old lab burial site [pit A, see 54-006(a)] which was in operation from 1964 to 1975. The area is permitted for storage of hazardous waste. 2) There is a site in Area L where chemical waste containers are accumulated for packaging and storing at TA-54-31 [54-001(b)]. 3) A bermed asphalt pad area stores waste oil and hazardous materials at Area L [54-001(c)]. 4) PCB building, TA-54-39 [54-001(d)], is used to store PCB waste in Area L. The building's dimensions are 40' x 40'. 5) Another permitted storage area in Area L, TA-54-32 [54-001(e)], is a concrete pad divided into six cells, each with a collection sump. The area is roofed and the drums are stored on grating and pallets. 6) East of TRU storage pads 1-4 in Area G, there is a storage area for equipment such as empty drums [54-001(f)].

WASTE INFORMATION

Most hazardous waste types are managed at these locations. This includes the storage of solvents, oils, gas cylinders, mixed waste, miscellaneous chemicals, and coolants. The packaging site [54-001(b)] manages primarily lab pack quantities of hazardous waste. The bermed asphalt pad [54-001(c)] stores containers of waste oil that could contain metals and solvents but is primarily used for hazardous material storage. No waste information is available on 54-001(f).

RELEASE INFORMATION

LANL employees state that a spill has occurred in the Area L storage area [54-001(a)]. No evidence of release was observed at the packaging facility [54-001(b)] during the VSI. Oil staining on the asphalt at 54-001(c) was observed during the VSI.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-001(a)	**	? 54.007	Tsk 46 : 39	ABOVE PIT A, AREA L
		? 54.056		
54-001(b)	**	? 54.055	Tsk 46 : 32	TA-54-31, AREA L
54-001(c)	**	54.047	Tsk 46 : 41	AREA L
		? 54.056		
54-001(d)	**		Tsk 46 : 99	TA-54-39, AREA L
54-001(e)	**	54.002	Tsk 46 : 25	TA-54-32, AREA L
54-001(f)	**		Tsk 46 : 37	EAST OF TRU PADS, AREA G

? Indicates uncertainty with RFA Unit correlation.

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-54
TYPE OF UNIT(s) : COMPRESSED GAS STORAGE
UNIT USE : STORAGE
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : ? - PRESENT
HAZARDOUS RELEASE : KNOWN
RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : HAZARDOUS WASTE
MIXED WASTE

UNIT INFORMATION

The compressed gas cylinders are stored at various locations throughout Area L. The cylinders contain hazardous and mixed waste. They are stored at these locations until detonated by LANL.

WASTE INFORMATION

Cylinders containing various types of compressed gases are stored in these areas.

RELEASE INFORMATION

Some of the cylinders may be leaking their contents to the air when they are brought to the area.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-002	**	54.045	Tsk 46 : 42	AREA L

** No corresponding E. R. Program unit.

NOTES

SWMU No. 54-003(a) has been deleted because MDA-G is addressed in SWMU Nos. 54-014, 54-017, 54-018, and 54-019. SWMU No. 54-003(b) has been renumbered to SWMU No. 54-015(h).

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED :	SOLID WASTE
TYPE OF UNIT(S)	: SHAFT		RADIOACTIVE WASTE
UNIT USE	: DISPOSAL		HAZARDOUS WASTE
OPERATIONAL STATUS	: INACTIVE		HE
PERIOD OF USE	: 1961 - 1986		MIXED WASTE
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: KNOWN		

UNIT INFORMATION

Material Disposal Area H (MDA-H) consists of nine 6-ft diameter shafts with depths up to 60 feet. Shafts 1-8 were used for disposal of waste prior to implementation of RCRA regulations on November 19, 1980. Shafts 1-8 are apparently capped with soil to an unknown depth. Shaft 9 was used for disposal of waste before and after November 19, 1980. It was used from July 1980 to 1986; no radioactive or RCRA-regulated waste has been placed in Shaft 9 since 1984. A closure plan was submitted for MDA-H under RCRA regulations and it is no longer used. The period of use for all MDA-H shafts is as follows:

SHAFT NO.	PERIOD OF USE
1	1961
2	1961-1963
3	1963-1964
4	1964-1966
5	1966-1967
6	1967-1969
7	1967-1971
8	1971-1979
9	July 1980-1986

There are no shafts or pits in MDA-H that are used for waste storage.

WASTE INFORMATION

Materials that were not radioactively contaminated were intended for MDA-H. However, it is known that parts contaminated with or containing depleted uranium have been placed in MDA-H and there is a possibility that some transuranic-contaminated parts were placed in Shafts 1-8. Tritium, beryllium, lithium, and HE-contaminated items were also placed in Shafts 1-8. Two containers with 15 lbs of solid lithium hydride were placed in Shaft 9 in 1981. Other material in Shaft 9 includes beryllium, magnesium, depleted uranium, tritium, and various foams.

RELEASE INFORMATION

Tritium at trace levels was detected in subsurface samples taken near one of the shafts.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-004	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 85	SHAFT 1, MDA-H
	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 86	SHAFT 2, MDA-H
	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 87	SHAFT 3, MDA-H
	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 88	SHAFT 4, MDA-H
	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 89	SHAFT 5, MDA-H
	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 90	SHAFT 6, MDA-H
	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 91	SHAFT 7, MDA-H

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-004	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 92	SHAFT 8, MDA-H
	TA54-1-L-A-HW/RW MDA-H	54.005	Tsk 46 : 93	SHAFT 9, MDA-H

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED	: SOLID WASTE
TYPE OF UNIT(s)	: LANDFILL		HAZARDOUS WASTE
UNIT USE	: DISPOSAL		SUSPECTED RADIOACTIVE WASTE
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: PRE 1966 - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

Material Disposal Area J (MDA-J) is a 2.65-acre site that is used for disposal of wastes over which LANL wishes to maintain administrative control. Pit 1, located outside the intrusion fence, was used for waste disposal until 1966. Pits 2-4 and Shafts 1-2 were used for disposal of waste after implementation of RCRA regulations on November 19, 1980. These 3 pits and 2 shafts are located inside the intrusion fence. The shafts are 6 ft in diameter; Shaft 1 is 65 ft deep. During the VSI, drums of ammonium bifluoride were observed in Pit 3 prior to the drums being covered with soil. The period of disposal for each pit and shaft are as follows:

UNIT	PERIOD OF USE
Pit 1	? - 1966
Pit 2	1966 - 1984
Pit 3	1984 - 1989
Pit 4	1989 - present
Shaft 1	1984 - present
Shaft 2	1984 - present

There are no pits or shafts in MDA-J that are used for waste storage.

WASTE INFORMATION

MDA-J received equipment wastes that were possibly contaminated with HE. All wastes currently buried at MDA-J must be certified to be free of detonatable quantities of HE. Other wastes include asbestos and possibly hazardous and low-level radioactive waste.

RELEASE INFORMATION

It is unknown whether hazardous or radioactive releases have occurred from MDA-J.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-005	TA54-1-L-A-HW/RW	54.050-	Tsk 46 : 94	PIT 1, MDA-J
	MDA-J	54.052		
	TA54-1-L-A-HW/RW	? 54.050-	Tsk 46 : 95	PIT 2, MDA-J
	MDA-J	54.052		
	TA54-1-L-A-HW/RW	54.006	Tsk 46 : 43 96	PIT 3, MDA-J
	MDA-J	? 54.048		
		? 54.049		
		? 54.050-		
		54.052		
	TA54-1-L-A-HW/RW	54.048		PIT 4, MDA-J
	MDA-J	54.049		
	TA54-1-L-A-HW/RW	54.053	Tsk 46 : 97	SHAFT 1, MDA-J
	MDA-J	54.054		
	TA54-1-L-A-HW/RW	54.053		SHAFT 2, MDA-J
MDA-J	54.054			

? Indicates uncertainty with RFA Unit correlation.

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(s) : LANDFILL
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : 1964 - 1986
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE
 RADIOACTIVE WASTE
 HE

UNIT INFORMATION

Material Disposal Area L (MDA-L) is a 2-acre site that was the principal chemical waste disposal area for LANL from 1964 to 1985. The area consists of one pit, three surface impoundments, and 34 shafts. The pit was used for all wastes from 1964 to 1975. From 1975 to 1985, the waste was placed in shafts that range from 2 to 8 feet in diameter and up to 65 feet deep. The waste was segregated into different shafts (organics, inorganics, oils, acids, bases, reactive metals) to assure that incompatible chemicals did not mix. The shafts have been filled and capped with concrete. The surface impoundments were used to dispose of bulk quantities of treated aqueous waste. The water evaporated and left a salt cake in the bottom of the pit. When a salt cake reached 1 yard from the top of the impoundment, the pit was backfilled. Use of all three surface impoundments was discontinued in 1984, and they have all been backfilled. Pit A only received waste prior to implementation of the RCRA regulations on November 19, 1980; surface impoundments and shafts received waste after November 19, 1980. The period of disposal for each pit, impoundment, and shaft is as follows:

UNIT	PERIOD OF DISPOSAL
Pit A	1964 - 1975
Surface Impoundment B	1964 - 1984
Surface Impoundment C	1964 - 1984
Surface Impoundment D	1964 - 1984
Shaft 1	1975 - 1986
Shaft 2	1975 - 1986
Shaft 3	1975 - 1986
Shaft 4	1975 - 1986
Shaft 5	1975 - 1986
Shaft 6	1975 - 1986
Shaft 7	1975 - 1986
Shaft 8	1975 - 1986
Shaft 9	1975 - 1986
Shaft 10	1975 - 1986
Shaft 11	1975 - 1986
Shaft 12	1975 - 1986
Shaft 13	1975 - 1986
Shaft 14	1975 - 1986
Shaft 15	1975 - 1986
Shaft 16	1975 - 1986
Shaft 17	1975 - 1986
Shaft 18	1975 - 1986
Shaft 19	1975 - 1986
Shaft 20	1975 - 1986
Shaft 21	1975 - 1986
Shaft 22	1975 - 1986
Shaft 23	1982 - 1985
Shaft 24	1982 - 1985
Shaft 25	1982 - 1985
Shaft 26	1982 - 1985
Shaft 27	1982 - 1985
Shaft 28	1982 - 1985
Shaft 29	1983 - 1985
Shaft 30	1983 - 1985
Shaft 31	1983 - 1985
Shaft 32	1983 - 1985
Shaft 33	1983 - 1985
Shaft 34	1983 - 1985

Pit A was about 200' x 12' x 12' deep. The surface impoundments were each about 20' x 10' x 10' deep. The disposal shafts were 3 to 8 ft in diameter, and up to 60 ft deep. Some shafts in Area L were used for waste storage and are addressed in 54-014.

(continued)

Page 2

WASTE INFORMATION

MDA-L received chemical wastes, including liquids, which were not contaminated with radionuclides. Pesticides, asbestos, and HE may have been disposed of in shafts 23-28. "Normal uranium powders" (presumably meaning natural uranium) were also disposed of in Pit A.

RELEASE INFORMATION

DOE is conducting a Vadose zone characterization program to comply with the NMEID interim-status groundwater waiver application compliance order. The study shows an organic vapor plume (solvents) extending past the east and west borders of MDA-L. The exact plume size and location are still being determined.

NOTES

The drum crusher has been renumbered to SWMU No. 54-012.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-006	TA54-1-L-A-HW/RW	54.008-	Tsk 46 : 80	PIT A
	MDA-L	54.011		
	TA54-1-L-A-HW/RW	54.008-	Tsk 46 : 8	SURFACE IMPOUNDMENT B
	MDA-L	54.011		
	TA54-1-L-A-HW/RW	54.008-	Tsk 46 : 9	SURFACE IMPOUNDMENT C
	MDA-L	54.011		
	TA54-1-L-A-HW/RW	54.008-	Tsk 46 : 10	SURFACE IMPOUNDMENT D
	MDA-L	54.011		
	TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 1, AREA L
	MDA-L	54.012- 54.038		
	TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 2, AREA L
	MDA-L	54.012- 54.038		
	TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 3, AREA L
	MDA-L	54.012- 54.038		
	TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 4, AREA L
	MDA-L	54.012- 54.038		
	TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 5, AREA L
	MDA-L	54.012- 54.038		
	TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 6, AREA L
	MDA-L	54.012- 54.038		
	TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 7, AREA L
	MDA-L	54.012- 54.038		
	TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 8, AREA L
	MDA-L	54.012- 54.038		
TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 9, AREA L	
MDA-L	54.012- 54.038			
TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 10, AREA L	
MDA-L	54.012- 54.038			
TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 11, AREA L	
MDA-L	54.012- 54.038			
TA54-1-L-A-HW/RW	54.056	Tsk 46 : 81	SHAFT 12, AREA L	
MDA-L	54.012- 54.038			

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>	
54-006	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 13, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 14, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 15, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 16, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 17, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 18, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 19, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 20, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 21, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 81	SHAFT 22, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 82	SHAFT 23, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 82	SHAFT 24, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 82	SHAFT 25, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 82	SHAFT 26, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 82	SHAFT 27, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 82	SHAFT 28, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 83	SHAFT 29, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 83	SHAFT 30, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 83	SHAFT 31, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 83	SHAFT 32, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 83	SHAFT 33, AREA L	
	TA54-1-L-A-HW/RW MDA-L	54.056 54.012- 54.038	Tsk 46 : 83	SHAFT 34, AREA L	
				Tsk 46 : 17 18 84	

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED	: SANITARY WASTE
TYPE OF UNIT(s)	: SEPTIC SYSTEM		SUSPECTED HAZARDOUS WASTE
UNIT USE	: TREATMENT/DISPOSAL		SUSPECTED MIXED WASTE
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: ? - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

Five septic systems are present in TA-54.

SWMU NO.	STRUCTURE	CAPACITY	OVERFLOW	EID NO.
54-007(a)	TA-54-16	1000 gal.	900 sq ft leach field	LA-60
54-007(b)	TA-54-28	750 gal.	seepage pit	LA-61
54-007(c)	TA-54-West	2000 gal.	1820 sq ft septic system and evapotranspiration bed	?
54-007(d)	TA-54-4	972 gal.	leach field	LA-51
54-007(e)	TA-54-9	1500 gal.	leach field	LA-52

TA-54-16 serves one person and TA-54-28 serves 13 people, both systems appear to be operating adequately. TA-54-16 and TA-54-28 are both in Area G. TA-54-16 serves the compactor building, TA-54-2, and the waste management control facility, TA-54-11. TA-54-28 serves office building TA-54-22. The new septic system and evapotranspiration bed are located in TA-54-West. Their EID licence number and certification for an Individual Liquid Waste System is 026795. This septic system serves office building TA-54-34 and TRU drum assay building TA-54-38.

WASTE INFORMATION

These systems generally receive sanitary waste; however, because they are located in hazardous, mixed and transuranic waste handling areas, they may contain hazardous constituents. TA-54-4 and TA-54-9 have received animal waste and sanitary waste.

RELEASE INFORMATION

It is unknown whether there have been hazardous releases beyond the boundaries of the overflow areas for these systems.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-007(a)	TA54-2-ST-A-HW/RW		Tsk 46 : 2	TA-54-16
54-007(b)	TA54-2-ST-A-HW/RW			TA-54-28
54-007(c)	**		Tsk 46 : 5	SERVES TA-54-34, -38
54-007(d)	TA54-2-ST-A-HW			TA-54-4
54-007(e)	TA54-2-ST-A-HW			TA-54-9
54-007(misc)			Tsk 46 : 7	

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED	: SANITARY WASTE
TYPE OF UNIT(s)	: UNDERGROUND TANK		UNKNOWN
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: 1988 - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

According to engineering records TA-54-43 is a 1700-gallon sewage tank located northwest of TA-54-39 in Area L. This tank is believed to have been built in 1988. The sewage tank is used as a holding tank and has no seepage trenches or beds. It serves a trailer building and the PCB Waste Storage Facility, TA-54-39. The EID Licence Number and Certification for an Individual Liquid Waste System is 027797.

WASTE INFORMATION

The waste is sanitary waste. Because of its location, however, hazardous or radioactive contamination may be possible.

RELEASE INFORMATION

There is no information on releases from this unit. It is unknown whether hazardous constituents are present or whether they might have been released.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-008	**		Tsk 46 : 4	TA-54-43

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(s) : ABOVEGROUND TANK
 UNIT USE : STORAGE/TREATMENT
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1984 - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : HAZARDOUS WASTE
 MIXED WASTE

UNIT INFORMATION

Four treatment tanks (TA-54-35) are present in Material Disposal Area L. The tanks are 1,665 gallons each and are constructed of carbon steel and lined with plastic. One mixing tank is also present. It has a 210 gallon capacity and is constructed of stainless steel. The tanks are located on a bermed concrete pad.

WASTE INFORMATION

These tanks treat ammonium bifluoride solutions and lithium hydride solutions that were used to clean cooling towers. Other wastes are barium sand and radioactively contaminated lithium hydride.

RELEASE INFORMATION

No hazardous releases are known to have occurred.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-009	**	54.040- 54.044	Tsk 46 : 11 12	TA-54-35, AREA L

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(S) : UNDERGROUND TANK
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1978 - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : SUSPECTED MIXED WASTE

UNIT INFORMATION

TA-54-17 is a steel, 600-gallon underground storage tank in Area G. The tank is used to hold washwater from decontamination in TA-54-2 of items from waste compaction operations, and shower water from the Waste Management Control Facility, TA-54-11. This tank has no release controls, however the liquid in the tank is picked up for transport to TA-50.

WASTE INFORMATION

The wastes consist of washwater that may contain mixed waste.

RELEASE INFORMATION

It is unknown whether there have been hazardous releases from this tank.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-010	**	54.057	Tsk 46 : 3 28	TA-54-17, AREA G

** No corresponding E. R. Program unit.

NOTES

SWMU No. 54-011 has been renumbered to SWMU No. 54-015(h).

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED	: MIXED WASTE
TYPE OF UNIT(S)	: COMPACTOR		RADIOACTIVE WASTE
UNIT USE	: TREATMENT		HAZARDOUS WASTE
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: ? - PRESENT		
HAZARDOUS RELEASE	: NONE		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

A compactor [54-012(a)] used to compact radioactive solid waste is located at Area G, inside operations building TA-54-2. A drum crusher [54-012(b)] is designed to crush 55-gallon drums. During the VSI, the drum crusher was located on bare soil. The crusher is presently located on a shallow (approx. 6"-deep) concrete containment area that retains any liquids that may leak from drums during crushing.

WASTE INFORMATION

The wastes compacted by 54-012(a) contain radionuclides. In previous years, hazardous wastes may also have been present. Waste drums crushed by 54-012(b) contained chemicals, including liquids, which were not contaminated with radionuclides.

RELEASE INFORMATION

There have been no known hazardous releases from the compactor. The RFA noted a lack of release controls and stains on the soil below the drum crusher. The crusher is now in a containment area and stained soil has been removed. It is not known whether hazardous constituents have been released by the crusher.

NOTES

SWMU No. 54-012(b) was formerly addressed under 54-006.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-012(a)	TA54-3-CA-A-HW/RW		Tsk 46 : 26	IN TA-54-2, AREA G
54-012(b)	**	54.039		AREA L

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(S) : PIT/OPERATIONAL RELEASE
 UNIT USE : TREATMENT/DISPOSAL
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : ? - PRESENT
 HAZARDOUS RELEASE : SUSPECTED
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : RADIOACTIVE WASTE
 SOLID WASTE
 SUSPECTED MIXED WASTE

UNIT INFORMATION

Trucks carrying equipment and TRU waste drums are washed in a decontamination pit [54-013(a)] in TA-54-West to remove small amounts of radionuclides. The liquid from the washing operation is discharged to the ground. The exact location of the decontamination pit is not known. A second truck monitoring/washing facility [54-013(b)] is located at the east edge of MDA-G.

WASTE INFORMATION

The wastes consist of washwater with low levels of radioactivity. The washwater may also contain oil and grease.

RELEASE INFORMATION

The extent of releases of hazardous constituents is unknown.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-013(a)	**		Tsk 46 : 35	IN TA-54 WEST
54-013(b)	**		Tsk 46 : 19	AREA G

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED	: RADIOACTIVE WASTE
TYPE OF UNIT(s)	: PIT/SHAFT		MIXED WASTE
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: 1974 - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

Lead stringers are stored in two shafts [54-014(a)] at the southwest corner of Area L. The RFA indicates that one shaft is 30 ft deep, and has a metal liner and a concrete bottom. The lead stringers are steel rods filled with lead shot, and are noted to be "very hot 40 R/L". The two shafts are capped with concrete. Storage pit 9 in Area G [54-014(b)] first received retrievable TRU/mixed waste in 1974 and is now full. Its dimensions are 30' x 400' x 20' deep. All other pits in TA-54 are used for disposal and are discussed in 54-004, 54-005, 54-006, 54-017, and 54-018. Storage shafts 200-233 [54-014(c)] are located in Area G and contain TRU waste. Each is 1 ft in diameter, 18 ft deep, and is lined with concrete. Waste was received for storage as follows:

SWMU NO.	UNIT	DATES WASTE RECEIVED	WASTE DESCRIPTION
54-014(c)	Shaft 200	1981	hot cell wastes, trash, trash cans
54-014(c)	Shaft 201	1978	hot cell wastes, trash, trash cans
54-014(c)	Shaft 202	1980	hot cell wastes
54-014(c)	Shaft 203	1980	hot cell wastes
54-014(c)	Shaft 204	1978-1979	hot cell wastes, fuel cans
54-014(c)	Shaft 205	1980	hot cell wastes, trash, fuel cans
54-014(c)	Shaft 206	1980	cell trash and fuel sample
54-014(c)	Shaft 207	1981	cell trash, fuel cells
54-014(c)	Shaft 208	1981	hot cell trash, waste
54-014(c)	Shaft 209	1981	hot cell paint, trash
54-014(c)	Shaft 210	1981	hot cell trash
54-014(c)	Shaft 211	1981	hot cell trash
54-014(c)	Shaft 212	1980	LAMPF fuel vessel
54-014(c)	Shaft 213	1981	hot cell wastes, trash
54-014(c)	Shaft 214	closed 1982	hot cell wastes
54-014(c)	Shaft 215	1982	hot cell trash
54-014(c)	Shaft 216	1982	hot cell wastes
54-014(c)	Shaft 217	1982	hot cell wastes
54-014(c)	Shaft 218	1982	hot cell wastes
54-014(c)	Shaft 219	1982	hot cell wastes
54-014(c)	Shaft 220	1982	hot cell wastes
54-014(c)	Shaft 221	1982-1983	hot cell wastes
54-014(c)	Shaft 222	closed 1983	hot cell wastes
54-014(c)	Shaft 223	closed 1983	hot cell wastes
54-014(c)	Shaft 224	closed 1983	hot cell wastes
54-014(c)	Shaft 225	1984	hot cell wastes
54-014(c)	Shaft 226	1984	hot cell wastes
54-014(c)	Shaft 227	1984	hot cell wastes
54-014(c)	Shaft 228	no dates	hot cell wastes
54-014(c)	Shaft 229	1984	hot cell wastes
54-014(c)	Shaft 230	1984-1985	hot cell wastes
54-014(c)	Shaft 231	1985	hot cell wastes
54-014(c)	Shaft 232	1987	hot cell wastes
54-014(c)	Shaft 233	no dates	hot cell wastes

All others shafts in TA-54 are used for disposal, and are covered in 54-004, 54-005, 54-006, 54-019, and 54-020. Storage trenches A-D in Area G [54-014(d)] contain TRU waste. Waste was received for storage as follows:

SWMU NO.	UNIT	DATES WASTE RECEIVED	SIZE	BACKFILLED
54-014(d)	Trench A	1974	262.5' x 13' x 6' deep	yes
54-014(d)	Trench B	1974-1976	218.75' x 13' x 6' deep	yes
54-014(d)	Trench C	?	218.75' x 13' x 8' deep	yes
54-014(d)	Trench D	?	60' x 13' x 6' (est)	no

Trenches E, F, G, and H are noted on some maps, but have never been excavated.

(continued)

WASTE INFORMATION

Waste at 54-014(a) consists of radioactively contaminated lead. Storage pit 9 [54-014(b)] contains 55-gallon drums and fiberglass crates containing retrievable TRU wastes (>nCi/g Pu-239 or U-233 or >100 nCi/g Pu-238). The activity levels are >10 nCi/g Pu-239 or U-233 and >100 nCi/g Pu-238. Shafts 200-233 [54-014(c)] contain hot cell waste and trash. The LAMPRE reactor is stored in Shaft 212. Trenches A-D [54-014(d)] contain retrievable heat source Pu-238 TRU waste. Each trench holds a single layer of concrete casks, each containing 2 30-gallon drums. Trench A has 120 casks averaging 18 g Pu-238; Trenches B and C are each storing 100 casks.

RELEASE INFORMATION

The extent of releases is unknown.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-014(a)	**	54.046	Tsk 46 : 108	SW CORNER OF AREA L
54-014(b)	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 102	PIT 9, AREA G
54-014(c)	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 200, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 201, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 202, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 203, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 204, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 205, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 206, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 207, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 208, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 209, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 210, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 211, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 212, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 213, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 214, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 215, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 216, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 217, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 218, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 219, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 220, AREA G
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 103	SHAFT 221, AREA G

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>	
54-014(c)	TA54-1-L-A-HW/RW		Tsk 46 : 103	SHAFT 222, AREA G	
	MDA-G				
	TA54-1-L-A-HW/RW		Tsk 46 : 103	SHAFT 223, AREA G	
	MDA-G				
	TA54-1-L-A-HW/RW		Tsk 46 : 103	SHAFT 224, AREA G	
	MDA-G				
	TA54-1-L-A-HW/RW		Tsk 46 : 103	SHAFT 225, AREA G	
	MDA-G				
	TA54-1-L-A-HW/RW		Tsk 46 : 103	SHAFT 226, AREA G	
	MDA-G				
	TA54-1-L-A-HW/RW		Tsk 46 : 103	SHAFT 227, AREA G	
	MDA-G				
	TA54-1-L-A-HW/RW		Tsk 46 : 103	SHAFT 228, AREA G	
	MDA-G				
	TA54-1-L-A-HW/RW		Tsk 46 : 103	SHAFT 229, AREA G	
MDA-G					
54-014(d)	TA54-1-L-A-HW/RW	54.059-	Tsk 46 : 104	TRENCH A, AREA G	
	MDA-G	54.066			
	TA54-1-L-A-HW/RW	54.059-	Tsk 46 : 105	TRENCH B, AREA G	
	MDA-G	54.066			
	TA54-1-L-A-HW/RW	54.059-	Tsk 46 : 106	TRENCH C, AREA G	
	MDA-G	54.066			
	TA54-1-L-A-HW/RW	54.059-	Tsk 46 : 107	TRENCH D, AREA G	
	MDA-G	54.066			
	54-014(misc)			Tsk 46 : 15	

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED	: MIXED WASTE
TYPE OF UNIT(S)	: STORAGE		RADIOACTIVE WASTE
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: ? - PRESENT		
HAZARDOUS RELEASE	: SUSPECTED		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

Several areas used for the surface storage of TRU waste are present in TA-54 West and in Areas L and G. There is a TRU drum storage area [54-015(a)] at TA-54-8 where drums are stored on plywood inside a 15' x 40' x 12' high metal shed prior to being sprayed with a corrosion inhibitor. There is also a site [54-015(b)] 100 ft southwest of TA-54-11 in Area G where TRU waste is stored in 20-year retrievable containers and low-level radioactive waste is stored in dumpsters. TRU waste storage pads 1-4 [54-015(c) through (f)] are located at the northwest corner of Area G. Pads 1 [54-015(c)], 2 [15-015(d)], and 4 [15-015(f)] each contain six levels of retrievable contact-handled TRU waste in 55-gallon drums. Pad 2 is completely filled and covered over with tuff; pads 1 and 4 are partially filled and partially covered; pad 3 [15-015(e)] is covered by a temporary dome structure (TA-54-48), will be permitted for mixed waste storage, and will also be used for contact-handled TRU waste storage. Storage began on pads 1-4 in 1974. Pads 1-4 overlie disposal pits 2, 4, and 5, which are addressed in 54-017. On the east side of Area L, uranium-contaminated lead casks [54-015(g)] are being stored on the surface near disposal shaft 4, and are covered by plywood. TRU waste is prepared for shipment off-site at TA-54-38 in TA-54 West [54-015(h)]. A radioactively-contaminated forklift battery is stored just north of the lead stringer shafts in Area L [54-015(i)]. A temporary dome structure (TA-54-49) [54-015(j)] is located on pit 32 in Area G for storage of mixed waste sludge. Above disposal pit 29 in MDA-G [addressed in 54-018(e)] and above grade, one layer of retrievable TRU waste has been stored and backfilled [54-015(k)]. The waste consists of 158 20-ft long by 2.5-ft dia cement-filled sections of corrugated pipe in 5 layers.

WASTE INFORMATION

Waste at TA-54-8 [54-015(a)] consists of TRU waste, oil, and grease. Stored waste near TA-54-11 [54-015(b)] contains TRU and low-level radioactive waste. Pads 1-4 [54-015(c) through (f)] store retrievable, contact-handled TRU waste. Lead contaminated by uranium is stored at 54-015(g). TA-54-38 [54-015(h)] waste consists of possible mixed waste constituents containing >100 nCi/g activity. The waste at 54-015(i) consists of a radioactively contaminated battery. Waste at 54-015(j) consists of mixed waste sludge.

RELEASE INFORMATION

Stains on the soil were noted at 54-015(a) during the VSI. No visible releases have been observed at the other sites.

NOTES

SWMU No. 54-015(a) was formerly SWMU No. 54-003(b).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-015(a)	TA54-1-2-A-HW/RW MDA-G	54.001	Tsk 46 : 27	TA-54-8, AREA G
54-015(b)	TA54-1-2-A-HW/RW MDA-G		Tsk 46 : 38	SOUTHWEST OF TA-54-11, AREA G
54-015(c)	TA54-1-2-A-HW/RW MDA-G	54.058	Tsk 46 : 20	TRU PAD 1
54-015(d)	TA54-1-2-A-HW/RW MDA-G		Tsk 46 : 21	TRU PAD 2
54-015(e)	TA54-1-2-A-HW/RW MDA-G		Tsk 46 : 22	TRU PAD 3, TA-54-48
54-015(f)	TA54-1-2-A-HW/RW MDA-G		Tsk 46 : 23	TRU PAD 4

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-015(g)	TA54-1-2-A-HW/RW MDA-G		Tsk 46 : 40	NEAR SHAFT 4, AREA L
54-015(h)	TA54-1-2-A-HW/RW MDA-G		Tsk 46 : 34	TA-54-38, TA-54 WEST
54-015(i)	TA54-1-2-A-HW/RW MDA-L		Tsk 46 : 108	SW CORNER OF AREA L
54-015(j)	**		Tsk 46 : 24	ABOVE PIT 32, AREA G, TA-54-49
54-015(k)	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 67	ABOVE PIT 29, AREA G

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(S) : SUMP
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1989 - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SUSPECTED RADIOACTIVE WASTE
 SUSPECTED MIXED WASTE

UNIT INFORMATION

A sump [54-016(a)] is located in the new TRU building, TA-54-38, in TA-54 West. The purpose of the sump is to receive any liquids that drain onto the floor at TA-54-38. The sump drain discharges to a canyon outfall on the north side of the building. There is also a sump [54-016(b)] that collects waste from the removal of the corrosion inhibitor (grease) that is sprayed on TRU waste drums. This sump is associated with TA-54-33 in Area G.

WASTE INFORMATION

The liquids at TA-54-38 are anticipated to be snow melt from trucks driving into the receiving area. However, if spills occur, the sump will also receive the spilled liquids. The sump at TA-54-33 collects waste from the removal of grease.

RELEASE INFORMATION

No release information is available.

NOTES

This SWMU was formerly SWMU No. 54-XXX.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-016(a)	**		Tsk 46 : 1 6	TA-54-38, IN TA-54 WEST
54-016(b)	**		Tsk 46 : 31	NEAR TA-54-33, AREA G

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(s) : PIT
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : 1959 - 1980
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : SUSPECTED

MATERIALS MANAGED : RADIOACTIVE WASTE
 SUSPECTED MIXED WASTE

UNIT INFORMATION

Material Disposal Area G (MDA-G) is the main radioactive waste disposal site for LANL. There are 19 disposal pits that received waste prior to implementation of RCRA regulations on November 19, 1980.

UNIT	PERIOD OF USE	FIELD MEAS. PIT VOLUME (CU. YD.)	VOLUME OF WASTE IN PIT (CU. YD.)	WASTE DESCRIPTION
Pit 1	1959 - 1961	37,080	5,529	wing tanks, dryboxes, "normal waste"
Pit 2	1961 - 1963	42,911	6,407	classified Bendix waste, 55-gal. drums, P.N.s, dU, hot dirt, misc. material
Pit 3	1963 - 1966	56,759	9,473	misc. material, lumber, pipe, 55-gal. drums, P.N.s, classified Bendix waste, dU, D & D
Pit 4	1966 - 1967	44,950	8,212	D & D, graphite, wooden boxes, dU, 55-gal. drums, classified Bendix waste, P.N.s
Pit 5	1967 - 1974	41,258	6,624	scrap material, D & D, graphite, 55-gal. sludge drums, P.N.s
Pit 6	1970 - 1972	43,933	6,696	misc. scrap, wood, D & D
Pit 7	1974 - 1975	17,101	4,343	low-level transuranic waste
Pit 8	1971 - 1974	6,528	2,311	55-gal. sludge drums, non-retrievable TRU waste
Pit 10	1979 - 3/80	15,549	4,016	building debris, lab wastes, sludge drums
Pit 12	1971 - 1975	7,303	2,363	non-retrievable TRU waste in 30 & 55-gal. drums
Pit 13	1976 - 1977	12,107	1,931	uranium, MFP, MAP
Pit 16	1971 - 1975	8,081	2,235	crates & drums with uranium-contaminated waste
Pit 17	1972 - 1974	17,399	4,962	misc. scrap wastes, crates, filter plenums, low-level Pu TRU (<10 mCi/g)
Pit 18	1978 - 1979	46,685	12,358	D & D, 55-gal. drums, lab waste, M.C. waste, contaminated dirt
Pit 19	1975 - 1979	1,371	?	asbestos and carcinogens (old decon pit)
Pit 20	1975 - 1977	37,454	14,889	lab waste, oil, sludge, trash, contaminated dirt
Pit 21	1972 - 1974	13,328	3,607	U, classified material, boxes, drums, scrap metal
Pit 22	1976 - 1978	17,690	3,744	filter plenum, sludge drums, lab waste, graphite fuel
Pit 24	1975 - 1976	23,388	7,327	rods, contaminated dirt
contaminated				U, graphite, lab wastes, 22 truckloads of soil

dU - depleted uranium
 D & D - decontamination and decommissioning
 P.N.s - property numbers
 N.C. - non-compactable
 MFP - mixed fission products
 MAP - mixed activation products

Pit 1 was used in 1957-58 to burn combustibles. The surfaces above Pits 2, 4, and 5 are now occupied by TRU storage pads 1-4 [see 54-015(c) through (f)]. Pits 6 and 7 had topsoil applied in 1976 that was contaminated with plutonium. Pit 16 had topsoil applied in 1975. Pit 19 was used for truck/dumpster decontamination from 1971-75. Pit 24 was used in 1974 to fire-test radioactive waste containers. All pits were backfilled with excavated tuff. Pit 9 is used for storage and is discussed in 54-014. Pits 25 to 37 received waste on or after November 19, 1980 and are discussed in 54-018. Pits 11, 14, 15, 23, 31, and 34 were never excavated.

(continued)

WASTE INFORMATION

As shown above, waste consists of radioactive, mixed and TRU waste (non-retrievable). It includes wing tanks, dryboxes, building debris, sludge drums, lab waste, hot dirt, decontamination and decommissioning waste, filter plenums, uranium, and other waste forms.

RELEASE INFORMATION

Surface soil contamination may have occurred around the pits and shafts of MDA-G as a result of fires caused by incompatible wastes, or from releases from vehicles hauling waste to the shafts and pits. Environmental monitoring of MDA-G has been conducted since 1970 and includes soil moisture measurements, vertical and horizontal drill holes, air sampling, surface sampling, and direct radiation measurements. The monitoring program results indicated that: 1) tritium is diffusing from its disposal location; 2) there is surface contamination and elevated local air Pu-239 concentrations; 3) Pu-238 and -239 are in near-surface soil; 4) stream sediments had 0.73 pCi/g of Pu-238 and 0.44 pCi/g of Pu-239 in 1984.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>	
54-017	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 44	PIT 1, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 45	PIT 2, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 46	PIT 3, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 47	PIT 4, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 48	PIT 5, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 49	PIT 6, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 50	PIT 7, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 51	PIT 8, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 52	PIT 10, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 53	PIT 12, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 54	PIT 13, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 55	PIT 16, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 56	PIT 17, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 57	PIT 18, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 58	PIT 19, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 59	PIT 20, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 60	PIT 21, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 61	PIT 22, AREA G	
	TA54-1-L-A-HW/RW MDA-G		Tsk 46 : 62	PIT 24, AREA G	
	54-017(misc)			Tsk 46 : 13 14 16	

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(s) : PIT
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1979 - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : SUSPECTED

MATERIALS MANAGED : RADIOACTIVE WASTE
 HAZARDOUS WASTE
 MIXED WASTE

UNIT INFORMATION

Material Disposal Area G (MDA-G) is the main radioactive waste disposal site for LANL. There are 11 disposal pits that received waste on or after implementation of RCRA regulations on November 19, 1980, and therefore may be subject to RCRA closure regulations.

UNIT	PERIOD OF USE	FIELD MEAS. PIT VOLUME (CU. YD.)	VOLUME OF WASTE IN PIT (CU. YD.)	WASTE DESCRIPTION
Pit 25	1979 - 1981	47,000	6,530	reactor control rods, D & D, scrap drums, lab wastes, test drums
Pit 26	1984 - 1985	22,209	4,312	building debris, TRU culverts, asbestos, alpha box soil, lumber
Pit 27	1981 - 1982	26,946	7,441	lab waste, contaminated soil and pipe, D & D
Pit 28	1981 - 1983	21,381	4,422	Ba nitrate, PCB soil, lab waste, P.N.s, transformers, clay pipes, building debris, soil sample
Pit 29	1984 - 1986	45,795	9,784	lab waste, glove boxes, plywood boxes, contaminated soil, D & D
Pit 30	1988 - present	?	?	currently in use
Pit 32	1985 - 1987	36,364	5,367	PCB asphalt, transformers, contaminated soil, glove boxes, plywood boxes, capacitors, building debris
Pit 33	1982 - 1984	59,930	7,776	mixed compactable and M.C. trash, P.N.s, Be stored in stainless steel, lab waste, building debris
Pit 35	1987 - 1988	20,957	3,361	compactable trash, plywood boxes, asbestos, lab waste
Pit 36	1988	28,057	4,491	plywood boxes, compactable and M.C. waste, rubble, building waste, beryllium, PCB soil (<200 ppm)
Pit 37	current	57,213	?	excavated; not yet in use

D & D - decontamination and decommissioning
 P.N.s - property numbers
 M.C. - non-compactable

The surface above Pit 29 is used to store retrievable TRU waste [see 15-015(k)]. The surface above Pit 32 is now occupied by temporary dome storage building TA-54-59 [see 54-015(j)]. Filled pits are backfilled with excavated tuff. Pits 1-24 received waste only prior to November 19, 1980, and are discussed in 54-017. Pit 9 is being used for storage and is discussed in 54-014. Pits 11, 14, 15, 23, 31 and 34 were never excavated.

WASTE INFORMATION

As noted above, waste consists of radioactive, mixed and TRU waste (mostly non-retrievable). It includes reactor control rods, wing tanks, decontamination and decommissioning waste, lab waste, building debris, PCBs, asbestos, glove boxes and other waste forms.

RELEASE INFORMATION

Surface soil contamination may have occurred around the pits and shafts of MDA-G as a result of fires caused by incompatible wastes, or from releases from vehicles hauling waste to the shafts and pits. Environmental monitoring of MDA-G has been conducted since 1970 and includes soil moisture measurements, vertical and horizontal drill holes, air sampling, surface sampling, and direct radiation measurements. The monitoring program results indicated that: 1) tritium is diffusing from its disposal location; 2) there is surface contamination and elevated local air Pu-239 concentrations; 3) Pu-238 and -239 are in near-surface soil; 4) stream sediments had 0.73 pCi/g of Pu-238 and 0.44 pCi/g of Pu-239 in 1984.

(continued)

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-018	TAS4-1-L-A-HW/RW MDA-G		Tsk 46 : 63	PIT 25, AREA G
	TAS4-1-L-A-HW/RW MDA-G		Tsk 46 : 64	PIT 26, AREA G
	TAS4-1-L-A-HW/RW MDA-G		Tsk 46 : 65	PIT 27, AREA G
	TAS4-1-L-A-HW/RW MDA-G		Tsk 46 : 66	PIT 28, AREA G
	TAS4-1-L-A-HW/RW MDA-G		Tsk 46 : 67	PIT 29, AREA G
	TAS4-1-L-A-HW/RW MDA-G		Tsk 46 : 68	PIT 30, AREA G
	TAS4-1-L-A-HW/RW MDA-G	54.003	Tsk 46 : 69	PIT 32, AREA G
	TAS4-1-L-A-HW/RW MDA-G	54.004		
	TAS4-1-L-A-HW/RW MDA-G	54.003	Tsk 46 : 70	PIT 33, AREA G
	TAS4-1-L-A-HW/RW MDA-G	54.004		
	TAS4-1-L-A-HW/RW MDA-G		Tsk 46 : 71	PIT 35, AREA G
	TAS4-1-L-A-HW/RW MDA-G		Tsk 46 : 72	PIT 36, AREA G
	TAS4-1-L-A-HW/RW MDA-G			PIT 37, AREA G
			Tsk 46 : 13 14 16	

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(s) : SHAFT
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : 1966 - 1980
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : SUSPECTED

MATERIALS MANAGED : RADIOACTIVE WASTE
 MIXED WASTE
 HAZARDOUS WASTE

UNIT INFORMATION

Material Disposal Area G (MDA-G) is the main radioactive waste disposal site for LANL. There are 91 disposal shafts that received waste prior to implementation of RCRA regulations on November 19, 1980. Shafts range in diameter from 1 to 6 ft, and are 25 to 60 ft in depth. Many shafts are of unknown size. Most shafts are unlined, with the remainder being cement lined; information of shaft lining is unavailable for several shafts. Shafts are separated by a minimum distance of 7.5 ft. Shafts are layered with 0.5 ft layers of crushed tuff between waste layers, filled to within 3 ft of the surface, and capped with 3 ft of clean concrete.

UNIT	PERIOD OF USE	DIAMETER / DEPTH (FEET)	LINING	WASTE VOLUME (CU. FT.)	WASTE DESCRIPTION
Shaft 1	1966 - 1967	2 / 25	u.l.	63	cell trash, irradiated metal, animal tissue
Shaft 2	1966 - 1967	2 / 25	u.l.	42	dU chips, animal tissue, irradiated Pu cell waste
Shaft 3	1966 - 1967	2 / 25	u.l.	35	Pu-contaminated Na & metal, neutron generators
Shaft 4	1967 - 1968	2 / 25	u.l.	44	U-contaminated metal, U-238 samples, dU
Shaft 5	1967 - 1968	2 / 25	u.l.	29	dU, tritium-contaminated materials, U-238 contaminated metal
Shaft 6	1967 - 1968	2 / 25	u.l.	21	tritium-contaminated materials, U-235
Shaft 7	1967 - 1968	2 / 25	u.l.	52	animal tissue, PTC waste, tritium, dU
Shaft 8	1968 - 1969	2 / 25	u.l.	NA	Pu cell waste, animal tissue, end boxes
Shaft 9	1968 - 1969	2 / 25	u.l.	70	hot cell waste, Pu cell waste, EBR-II waste, fuel elements
Shaft 10	1969	2 / 25	u.l.	54	animal tissue, Pu-239 waste, U-contaminated chemicals
Shaft 11	1967 - 1969	3 / 25	u.l.	72	Pee Wee waste & trash, U-235 cell waste, graphite
Shaft 12	1966 - 1970	3 / 25	u.l.	83	cell waste, Rover waste, tritium
Shaft 13	1966 - 1970	3 / 25	u.l.	122	animal tissue, EBR hardware, reactor parts
Shaft 14	1966 - 1969	1 / 25	c.l.	NA	U-235 vermiculite, neutrized solution HCL + U-235
Shaft 15	1969 - 1970	1 / 25	c.l.	8	tritium in H3PO4, hot cell waste
Shaft 16	1969	1 / 25	c.l.	4	tritium
Shaft 17	1970 - 1974	1 / 25	c.l.	NA	tritium pump, U-235 in Na
Shaft 18	1970 - 1973	1 / 25	c.l.	13	neutrized Na, Cs-137 + Ba-140
Shaft 19	1971 - 1974	1 / 25	c.l.	NA	Pu-239 solution, reacted Pu-239
Shaft 20	1974 - 1975	1 / 25	c.l.	8	sorbed Pu-239 solution
Shaft 24	1969 - 1970	2 / 25	u.l.	44	animal tissue, dU, unloaded fuel elements
Shaft 25	1969 - 1971	2 / 25	u.l.	45	dU, U-238 residue, U-238 contaminated metal
Shaft 26	1969 - 1970	2 / 25	u.l.	56	hot cell trash, fuel elements, dU-contaminated metal
Shaft 27	1970	2 / 25	u.l.	13	irradiated material, dU-contaminated metal
Shaft 28	1970	2 / 25	u.l.	14	LA notebooks, U-235 residues
Shaft 29	1970 - 1971	2 / 25	u.l.	24	thermocouple waste, U-235 residue
Shaft 30	1970 - 1971	2 / 25	u.l.	11	animal tissue, Pu-239 hot cell waste
Shaft 31	1970 - 1971	2 / 25	u.l.	47	dU
Shaft 32	1970 - 1971	2 / 25	u.l.	33	LAPRE-II lines and valves, animal tissue, irradiated stainless steel
Shaft 33	1970 - 1971	2 / 25	u.l.	15	Pu-239 hot cell waste
Shaft 34	1970 - 1972	6 / 60	?	932	U-contaminated oil
Shaft 38	1970 - 1974	3 / 40	u.l.	69	Rover reactor parts, LAMPRE-II tank
Shaft 39	1970 - 1973	6 / 60	?	537	tritium-contaminated equipment
Shaft 40	1971	2 / 25	u.l.	28	animal tissue
Shaft 41	1971 - 1972	2 / 25	u.l.	71	animal tissue, graphite
Shaft 42	1972	2 / 25	u.l.	56	animal tissue, U-contaminated metal
Shaft 43	1971 - 1972	2 / 25	u.l.	43	U-contaminated metal, dU
Shaft 44	1971 - 1972	2 / 25	u.l.	61	animal tissue, Pu-239 contaminated vermiculite, dU with graphite
Shaft 45	1971 - 1972	2 / 25	u.l.	70	Pu-contaminated steel, U-235 residues

(continued)

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UNIT INFORMATION, continued

UNIT	PERIOD OF USE	DIAMETER / DEPTH (FEET)	LINING	WASTE VOLUME (CU. FT.)	WASTE DESCRIPTION
Shaft 46	1972	2 / 25	u.l.	38	animal tissue, Pu-239 contaminated steel
Shaft 47	1972	2 / 25	u.l.	32	animal tissue, contaminated metal, fuel waste (no vol.)
Shaft 48	1972	2 / 25	u.l.	19	hot cell trash, fuel waste (no vol.)
Shaft 49	1972	2 / 25	u.l.	21	animal tissue
Shaft 50	1974 - 1976	6 / 60	?	581	tritium (1,110 Ci.)
Shaft 51	1975	2 / 25	u.l.	52	hot cell waste
Shaft 52	1975 - 1976	2 / 25	u.l.	6	Pu, U, MFP, MAP, hot cell wastes
Shaft 53	1975 - 1976	2 / 25	u.l.	560 (?)	MFP, cell wastes, Pu-239, U-235
Shaft 54	1976	2 / 25	u.l.	6	MFP, cell trash
Shaft 55	1976 - 1977	2 / 25	u.l.	20	hot cell trash
Shaft 56	1977	2 / 25	u.l.	11	cell waste, contaminated parts from SRL
Shaft 57	1977	2 / 25	u.l.	8	hot cell waste
Shaft 58	1972 - 1973	3 / 25	u.l.	88	hot cell waste, dU
Shaft 59	1973 - 1974	6 / 60	?	120	tritium-contaminated steel, tools, and wastes
Shaft 60	1972 - 1974	3 / 25	?	1165 (?)	oil contaminated with U-235, Pu-239
Shaft 61	1973 - 1974	3 / 25	u.l.	143	Be waste, U-238 contaminated metal, animal tissue
Shaft 62	1976	3 / 25	u.l.	141	animal tissue, Pu-238, P-32
Shaft 63	1976	3 / 25	u.l.	28	dU, residues
Shaft 64	1976 - 1977	3 / 25	u.l.	32	animal wastes, U-235
Shaft 65	1976 - 1977	3 / 25	u.l.	123	classified U wastes, targets, animal tissue
Shaft 66	1976 - 1979	3 / 25	u.l.	25	animal tissue
Shaft 67	1977	2 / 25	u.l.	48	targets, cell trash
Shaft 68	1977	2 / 25	u.l.	23	cell trash, classified notebooks
Shaft 69	1977	2 / 25	u.l.	NA	AC parts from recovery
Shaft 70	1975 - 1976	6 / 60	?	NA	contaminated oil
Shaft 72	1972 - 1973	2 / 25	u.l.	61	irradiated stainless steel, hot cell waste and trash
Shaft 73	1973	2 / 25	u.l.	43	hot cell, trash
Shaft 74	1973	2 / 25	u.l.	69	Pu-239 waste
Shaft 75	1973	2 / 25	u.l.	61	Pu-238 waste, cell trash
Shaft 76	1973 - 1974	2 / 25	u.l.	75	hot cell trash
Shaft 77	1974	2 / 25	u.l.	33	hot cell trash, Pu-239 hot cell trash
Shaft 78	1974 - 1975	2 / 25	u.l.	80 (?)	cell wastes, reactor wastes, irradiated box ends
Shaft 79	1974 - 1975	2 / 25	u.l.	46	hot cell waste, irradiated metal
Shaft 80	1975 - 1976	2 / 25	u.l.	25	sodalime, Ta-182 chips, animal tissue
Shaft 81	1976	2 / 25	u.l.	NA	animal tissue (12 boxes)
Shaft 82	1978	2 / 25	u.l.	1	trash, chemical wastes
Shaft 83	1978	2 / 25	u.l.	44	animal tissue, depleted U
Shaft 84	1978	2 / 25	u.l.	NA	trash from SRL, cell trash
Shaft 85	1978	2 / 25	u.l.	12	neutralized Na Dowanol, cell trash
Shaft 86	1977	2 / 25	u.l.	NA	spalation products, classified materials
Shaft 87	1977	2 / 25	u.l.	23	cell wastes
Shaft 88	1977 - 1978	2 / 25	u.l.	NA	cell wastes
Shaft 89	1977 - 1978	2 / 25	u.l.	12	animal tissue (5 boxes), cell wastes
Shaft 90	1978	2 / 25	u.l.	25	dU, hot cell trash
Shaft 91	1977 - 1978	3 / 50	u.l.	54	spalation products, animal waste, cell trash, trash cans
Shaft 92	1977 - 1978	3 / 50	u.l.	60	spalation products, uranyl-nitrate in HN03
Shaft 96	1977 - 1979	6 / 50	?	2155 (?)	U-contaminated oil, niobium, zirconium, chlorides, aluminum shell
Shaft 109	3/80 - 7/80	?	?	53	spalation products, trash cans
Shaft 110	1979	?	?	79	spalation products, animal tissue, mixed combustible trash
Shaft 111	1979 - 6/80	?	?	106	cell waste, spalation products, niobium and tantalum perchloride
Shaft 112	1978 / 1979	?	?	130	classified pieces, animal waste, cell waste, spalation products
Shaft 150	1976 - 1979	6 / 60	u.l.	86	low level tritium

dU - depleted uranium
 FP - fission products
 MFP - mixed fission products
 MAP - mixed activation products
 AC - [for definition, see lab notebooks]

SRL - Size Reduction Lab
 PN - Property Number
 NC - non-compactable
 PTC - [for definition, see lab notebooks]
 D&D - decontamination & decommissioning

(continued)

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UNIT INFORMATION, continued

No information is available for Shafts 71, 98, and 102, so it is assumed that they received waste on or after November 19, 1980. Shafts receiving waste for disposal on or after that date are covered in 54-020. Area G shafts used for storage are covered in 54-014. The following numbers were not assigned for shafts: 113, 116, 117, 161 to 188, and 193 to 195.

WASTE INFORMATION

These shafts contain radioactive, TRU, and mixed waste. The waste includes cell trash, solvents, animal tissue, fuel elements, waste contaminated with tritium, uranium-235 and -238, plutonium-239, cesium-137, barium-140, beryllium and other radionuclides, and a wide variety of other radioactive and mixed waste forms. Waste volume for each shaft is listed above; volume figures with (?) notation exceed the reported volume of the shaft, and are therefore suspect. Some waste volumes are not available and are indicated "NA". Information from different sources for shaft sizes are inconsistent in some cases.

RELEASE INFORMATION

Core samples from disposal shafts drilled in June, 1970 indicated significantly elevated levels of tritium that had migrated from previously used shafts in the disposal field containing Shafts 1-135. Tritium concentrations were also elevated in surface samples collected during environmental surveillance activities in 1985. Surface soil contamination may have occurred around the pits and shafts of MDA-G as a result of fires caused by incompatible wastes, or from releases from vehicles hauling waste to the shafts and pits. Environmental monitoring of MDA-G has been conducted since 1970 and includes soil moisture measurements, vertical and horizontal drill holes, air sampling, surface sampling, and direct radiation measurements. The monitoring program results indicated that: 1) tritium is diffusing from its disposal locations; 2) there is surface contamination and elevated local air Pu-239 concentrations; 3) Pu-238 and -239 are in near-surface soil; 4) stream sediments had 0.73 pCi/g of Pu-238 and 0.44 pCi/g of Pu-239 in 1984.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-019	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 1, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 2, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 3, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 4, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 5, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 6, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 7, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 8, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 9, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 10, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 11, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 12, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 13, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 14, AREA G

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-019	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 15, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 16, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 17, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 18, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 19, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 20, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 24, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 25, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 26, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 27, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 28, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 29, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 30, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 31, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 32, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 33, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 34, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 38, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 39, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 40, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 41, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 42, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 43, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 44, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 45, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 46, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 47, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 48, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 49, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 50, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 51, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 52, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 53, AREA G

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-019	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 54, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 55, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 56, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 57, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 58, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 59, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 60, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 61, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 62, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 63, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 64, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 65, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 66, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 67, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 68, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 69, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 70, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 72, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 73, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 74, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 75, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 76, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 77, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 78, AREA G
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 79, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 80, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 81, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 82, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 83, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 84, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 85, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 86, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 87, AREA G	
MDA-G	54.185			

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-019	TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 88, AREA G
	MDA-G	54.185		
	TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 89, AREA G
	MDA-G	54.185		
	TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 90, AREA G
	MDA-G	54.185		
	TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 91, AREA G
	MDA-G	54.185		
	TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 92, AREA G
	MDA-G	54.185		
	TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 96, AREA G
	MDA-G	54.185		
	TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 109, AREA G
	MDA-G	54.185		
	TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 110, AREA G
	MDA-G	54.185		
TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 111, AREA G	
MDA-G	54.185			
TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 112, AREA G	
MDA-G	54.185			
TAS4-1-L-A-HW/RW	? 54.067-	Tsk 46 : 75	SHAFT 150, AREA G	
MDA-G	54.185			
54-019(misc)		? 54.067-	Tsk 46 : 13 14 16 74	
		54.185		

? Indicates uncertainty with RFA Unit correlation.

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(S) : SHAFT
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1970 - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : SUSPECTED

MATERIALS MANAGED : RADIOACTIVE WASTE
 MIXED WASTE
 HAZARDOUS WASTE

UNIT INFORMATION

Material Disposal Area G (MDA-G) is the main radioactive waste disposal site for LANL. There are 89 or 90 disposal shafts known to have received waste on or after implementation of RCRA regulations on November 19, 1980 and therefore may be subject to RCRA closure regulations. The 89 or 90 shafts are associated with 84 designated shaft numbers; Shafts 189 and 192 are "triplet shafts" where 3 shafts are associated with one shaft number, and Shaft 191 (and possibly 190) is a "doublet shaft" where 2 shafts are associated with one shaft number. No information is available for Shafts 71, 98, and 102, so it is assumed that they received waste on or after November 19, 1980, because shafts in close sequential order with these were used in the late 1970s and 1980s. Shafts range in diameter from 1 to 8 ft, and are 25 to 65 ft in depth. Many shafts are of unknown size. Most shafts are unlined, although a few are lined with cement or corrugated metal pipe (CMP), or the lining method is unknown. Shafts are separated by a minimum distance of 7.5 ft (separation distance between doublet and triplet shafts is unavailable). Shafts are layered with 0.5 ft-thick layers of crushed tuff between waste layers, filled to within 3 ft of the surface, and capped with 3 ft of clean concrete. Shafts 142 to 149 are not yet in use.

UNIT	PERIOD OF USE	DIAMETER / DEPTH		WASTE VOLUME (CU. FT.)	WASTE DESCRIPTION
		(FEET)	LINING		
Shaft 21	? - present	1 / 25	c.l.	NA	no description
Shaft 22	1989 - present	1 / 25	c.l.	>1	no description
Shaft 23	? - present	1 / 25	c.l.	NA	no description
Shaft 35	1971 - 1985	3 / 40	u.l.	125	hot cell wastes, animal tissue, herbicide containers, FP
Shaft 36	1970 - 1985	3 / 40	u.l.	198	hot cell wastes, spallation products
Shaft 37	1970 - 1985	3 / 40	u.l.	198	animal and chemical wastes
Shaft 71	?	2 / 25	u.l.	NA	no description
Shaft 93	1978 - 1984	3 / 50	u.l.	139	spallation products, fuel elements, cell waste, animal tissue
Shaft 94	1978 - 1984	3 / 50	u.l.	29	hot cell waste, depleted U, control rods
Shaft 95	1984	3 / 50	u.l.	142	cell wastes, animal tissue
Shaft 97	1978 - 1984	?	?	81	U chips and turnings, vials, animal waste
Shaft 98	?	?	?	NA	no description
Shaft 99	1983 - 1984	?	?	189	hot cell waste, animal tissue, machine parts
Shaft 100	1983	?	?	3	hot cell waste, target and stinger
Shaft 101	1981	?	?	75	spallation products, hot cell waste
Shaft 102	?	?	?	NA	no description
Shaft 103	1981 - 1983	?	?	118	hot cell waste, spent fuel elements
Shaft 104	1982	?	?	10	U chips, scrap metal
Shaft 105	1982 - 1983	?	?	2	animal tissue
Shaft 106	1980 - 1981	?	?	69	spallation products, cell trash, animal tissue
Shaft 107	1978 - 1981	?	?	27	hot trash, animal tissue, chemical waste
Shaft 108	1980 - 1982	?	?	149	spallation products, solvent, animal tissue
Shaft 114	1979 - 1982	?	?	1253	shielding blocks, graphite design assembly
Shaft 115	1981 - 1982	?	?	>1	hot trash, tritium scrap
Shaft 118	1983 - 1984	8 / 65	u.l.	112	vials
Shaft 119	1983	8 / 63	u.l.	NA	dU chips, hydrocarbons, HF leach solids
Shaft 120	1983 - 1984	8 / 63	u.l.	357	shielding blocks, scrap metal
Shaft 121	1984 - 1985	?	u.l.	244	animal tissue, cell trash
Shaft 122	1984 - 1985	?	u.l.	295	hot cell waste, waste cans
Shaft 123	1984	6 / ?	u.l.	147	dU chips & turnings, firing residue
Shaft 124	1984 - 1987	6 / ?	u.l.	1	vials, organics
Shaft 125	1984	6 / 65	u.l.	275	dU chips & turnings
Shaft 126	1985 - 1987	6 / 65	u.l.	6905 (?)	meson and hot cell waste
Shaft 127	1985	6 / 65	u.l.	NA	dU chips & turnings, U3 O8 oil and wax
Shaft 128	1986	4 or 6/65	u.l.	391	animal tissue, mustargem
Shaft 129	1986	3 / 65	u.l.	132	mixed spallation products
Shaft 130	1986 - 1987	6 / 65	u.l.	793	dU chips, metal trash
Shaft 131	1987 - 1988	6 / 65	u.l.	160	activated shielding
Shaft 132	1987 - 1988	6 / 65	u.l.	115	classified material
Shaft 133	1986 - 1987	4 / 65	u.l.	24	spallation products, hot cell waste

(continued)

UNIT INFORMATION, continued

UNIT	PERIOD OF USE	DIAMETER / DEPTH (FEET)	LINING	WASTE VOLUME (CU. FT.)	WASTE DESCRIPTION
Shaft 134	1986	3 / ?	u.l.	NA	animal tissue
Shaft 135	1986 - 1987	3 / ?	u.l.	225	animal tissue
Shaft 136	1986 - 1987	6 / 65	u.l.	50	low level tritium
Shaft 137	1987 - ?	6 / 65	u.l.	1	low level tritium
Shaft 138	1987 - 1987	4 / ?	u.l.	119	animal tissue
Shaft 139	1987	4 / ?	u.l.	259	hot cell waste
Shaft 140	1987 - 1989	6 / 61	u.l.	569	animal tissue
Shaft 141	1988 - 1989	6 / 60	u.l.	42	hot cell waste, reactor parts
Shaft 142	unused	4 / 65	u.l.	0	empty
Shaft 143	unused	4 / 65	u.l.	0	empty
Shaft 144	unused	6 / 65	u.l.	0	empty
Shaft 145	unused	6 / 65	u.l.	0	empty
Shaft 146	unused	6 / 65	u.l.	0	empty
Shaft 147	unused	4 / 65	u.l.	0	empty
Shaft 148	unused	4 / 65	u.l.	0	empty
Shaft 149	unused	4 / 65	u.l.	0	empty
Shaft 151	1982 - 1986	?	u.l.	131	tritium
Shaft 152	1980 - 1983	?	CMP	NA	tritium scrap, tubing, hardware
Shaft 153	1983 - 1984	?	CMP	12	contaminated pump, P.N.s
Shaft 154	1984 - 1986	3/45 or 65	CMP	135	high level tritium, molecular sieves
Shaft 155	1988 - 1989	3/45 or 65	CMP	NA	high level tritium
Shaft 156	1987	3 / 45	CMP	NA	dry box trash, molecular sieve
Shaft 157	1987 - 1988	3 / 45	CMP	NA	tritium
Shaft 158	1989	3 / 45	CMP	NA	high level tritium
Shaft 159	1989	3 / 45	CMP	NA	high level tritium
Shaft 160	unused	3 / 45	CMP	0	empty
Shaft 189	1987 - 1988	?	u.l.	1743	LAMPF activated shielding (triple shaft)
Shaft 190	1983 - 1984	?	u.l.	1077	scrap metal
Shaft 191	1984 - 1986	8 / ?	u.l.	1470	LAMPF scrap metal, graphite target (double shaft)
Shaft 192	1987	8 / ?	u.l.	1537	LAMPF scrap metal (triple shaft)
Shaft 196	1989	6 / 56	u.l.	728	LAMPF inerts
Shaft C1	?	6 / 60	u.l.	NA	PCB oil
Shaft C2	?	6 / 60	u.l.	NA	PCB oil
Shaft C3	?	6 / 60	u.l.	NA	PCB oil
Shaft C4	?	6 / 60	u.l.	NA	PCB oil
Shaft C5	?	6 / 60	u.l.	NA	PCB oil
Shaft C6	?	6 / 60	u.l.	NA	PCB oil
Shaft C7	?	6 / 60	u.l.	NA	PCB oil
Shaft C8	?	6 / 60	u.l.	NA	PCB oil
Shaft C9	?	6 / 60	u.l.	NA	PCB oil
Shaft C10	?	6 / 60	u.l.	NA	PCB oil
Shaft C11	?	6 / 65	u.l.	NA	PCB oil
Shaft C12	1986 - 1987	6 / 65	u.l.	NA	PCB oil
Shaft C13	1987	6 / 65	u.l.	NA	PCB oil

dU - depleted uranium
 FP - fission products
 MFP - mixed fission products
 MAP - mixed activation products
 AC - [for definition, see lab notebooks]

SRL - Size Reduction Lab
 PN - Property Number
 NC - non-compactable
 PTC - [for definition, see lab notebooks]
 D&D - decontamination & decommissioning

Shafts receiving waste for disposal prior to November 19, 1980 are discussed in 54-019. Area G shafts used for storage are covered in 54-014. The following numbers have not been assigned to shafts: 113, 116, 117, 161 to 188, and 193 to 195.

(continued)

WASTE INFORMATION

These shafts contain radioactive, hazardous, and mixed waste. The waste includes hot cell waste, animal tissue, fuel elements, control rods, uranium chips and turnings, spallation products, low and high level tritium, reactor parts, PCB oil and a wide variety of other radioactive, hazardous, and mixed waste forms. Waste volume for each shaft is listed above; volume figures with (?) notations exceed the reported volume of the shaft, and are therefore suspect. Some waste volumes are not available and are indicated "NA". Information from different sources for shaft sizes are inconsistent in some cases.

RELEASE INFORMATION

Core samples from disposal shafts drilled in June, 1970 indicated significantly elevated levels of tritium that had migrated from previously used shafts in the disposal field containing Shafts 1-135. Tritium concentrations were also elevated in surface samples collected during environmental surveillance activities in 1985. Surface soil contamination may have occurred around the pits and shafts of MDA-G as a result of fires caused by incompatible wastes, or from releases from vehicles hauling waste to the shafts and pits. Environmental monitoring of MDA-G has been conducted since 1970 and includes soil moisture measurements, vertical and horizontal drill holes, air sampling, surface sampling, and direct radiation measurements. The monitoring program results indicated that: 1) tritium is diffusing from its disposal location; 2) there is surface contamination and elevated local air Pu-239 concentrations; 3) Pu-238 and -239 are in near-surface soil; 4) stream sediments had 0.73 pCi/g of Pu-238 and 0.44 pCi/g of Pu-239 in 1984.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-020	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 21, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 22, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 23, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 35, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 36, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 37, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 71, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 93, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 94, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 95, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 97, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 98, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 99, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 100, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 101, AREA G
	MDA-G	54.185		
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 102, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 103, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 73	SHAFT 104, AREA G	
MDA-G	54.185			

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-020	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 105, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 106, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 107, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 108, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 114, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 115, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 118, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 119, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 120, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 121, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 122, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 123, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 124, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 125, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 126, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 127, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 128, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 129, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 130, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 131, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 132, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 133, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 134, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 73	SHAFT 135, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 136, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 137, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 138, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 139, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 140, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 141, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 142, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 143, AREA G
	TA54-1-L-A-HW/RW MDA-G	? 54.067- 54.185	Tsk 46 : 79	SHAFT 144, AREA G

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-020	TA54-1-L-A-HW/RW	? 54.067-		SHAFT 145, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-		SHAFT 146, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-		SHAFT 147, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-		SHAFT 148, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-		SHAFT 149, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 75	SHAFT 151, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 152, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 153, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 154, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 155, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 156, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 157, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 158, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 159, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 76	SHAFT 160, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 77	SHAFT 189, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 77	SHAFT 190, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 77	SHAFT 191, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 77	SHAFT 192, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 77	SHAFT 196, AREA G
	MDA-G	54.185		
	TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C1, AREA G
	MDA-G	54.185		
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C2, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C3, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C4, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C5, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C6, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C7, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C8, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C9, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C10, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C11, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C12, AREA G	
MDA-G	54.185			
TA54-1-L-A-HW/RW	? 54.067-	Tsk 46 : 78	SHAFT C13, AREA G	
MDA-G	54.185			
			Tsk 46 : 13 14 16 74	

54-020(misc)

? Indicates uncertainty with RFA Unit correlation

SUMMARY

LOCATION : TA-54
 TYPE OF UNIT(S) : TANK
 UNIT USE : STORAGE
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : 1987 - 1988
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

Six empty tanks are currently in storage in Area G (in front of building TA-54-33) awaiting closure under RCRA.

DIMENSIONS	CAPACITY	NOTES
17.67' long, 7' dia.	5,086 gal.	stainless steel, truck mounted
21.58' x 7' x 5' deep	5,650 gal.	steel, rectangular
7' long, 4.33' dia	771 gal.	Fiberglass resin, saddle mounted, Tank 5
7' long, 4.33' dia	771 gal.	Fiberglass resin, saddle mounted, Tank 6
7' long, 4.33' dia	771 gal.	Fiberglass resin, saddle mounted, Tank 7
7' long, 4.33' dia	771 gal.	Fiberglass resin, saddle mounted, Tank 8

These tanks were used to composite and store waste oil from throughout the Laboratory prior to off-site recycling or disposal. While in service, the tanks were located in soil bermed areas in Area L, near TA-54-31 (see 54-001). In 1989, the tanks were emptied and moved to Area G. The tanks are scheduled for decontamination in FY 90.

WASTE INFORMATION

Material stored in the tanks consisted exclusively of waste oil. The 5,058 gallon tank contained EP Toxic concentrations of arsenic, chromium, and mercury. The 5,650 gallon tank and Tanks 5, 7, and 8 contained EP Toxic concentrations of lead, identifying the oil in these tanks as characteristic hazardous waste. All of the tanks contained PCB contaminated oil, although the 5,650 gallon tank contained less than 5 ppm PCBs. Although analyses are not available, it is likely that the tanks also contained solvent-contaminated oil. Radiological analyses have measured no detectable activity in any of the tanks.

RELEASE INFORMATION

There have been no known releases from the tanks during storage in Area G.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-021	TA54-1-L-HW/RW			TA-54-33

SUMMARY

LOCATION	: TA-54	MATERIALS MANAGED	: SOLID WASTE
TYPE OF UNIT(s)	: SOIL CONTAMINATION		PCBs
UNIT USE	: DISPOSAL		
OPERATIONAL STATUS	: DECOMMISSIONED		
PERIOD OF USE	: ? - 1989		
HAZARDOUS RELEASE	: KNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

A transformer located at the White Rock Pump Station, TA-54-75, is known to have leaked. The transformer, with a maximum capacity of 10 gallons of oil, was removed on October 1, 1989. All transformers removed since 1985 are visually inspected before removal. If stains are observed on the soil or concrete, the soil is analyzed for PCBs and appropriate cleanup procedures are implemented.

WASTE INFORMATION

The transformer contained oil contaminated with PCB concentrations of less than 634 ppm.

RELEASE INFORMATION

Cleanup operations have been implemented. It is unknown whether residual contamination remains.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
54-022	**		Tsk 27 : 1081	TA-54-75, formerly 00-1057
			**	No corresponding E. R. Program unit.

**TA-54 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
54-001(a)	54-1
54-001(b)	54-1
54-001(c)	54-1
54-001(d)	54-1, 54-5
54-001(e)	54-1
54-001(f)	54-2
54-002	54-1
54-004	54-1, 54-3
54-005	54-1, 54-4
54-006	54-1, 54-5
54-007(a)	54-1
54-007(b)	54-1
54-007(c)	54-1
54-007(d)	54-1
54-007(e)	54-1
54-008	54-1, 54-5
54-009	54-1, 54-5
54-010	54-1
54-012(a)	54-1
54-012(b)	54-1
54-013(a)	54-1
54-013(b)	54-1
54-014(a)	54-1, 54-5
54-014(b)-(d)	54-1, 54-2
54-015(a)	54-1, 54-2
54-015(b)	54-1, 54-2
54-015(c)	54-1, 54-2
54-015(d)	54-1, 54-2
54-015(e)	54-1, 54-2
54-015(f)	54-1, 54-2
54-015(g)	54-1, 54-5
54-015(h)	54-1
54-015(i)	54-1, 54-5
54-015(j)	54-1
54-015(k)	54-2
54-016(a)	54-1
54-016(b)	54-1, 54-2
54-017	54-2
54-018	54-2
54-019	54-1, 54-2

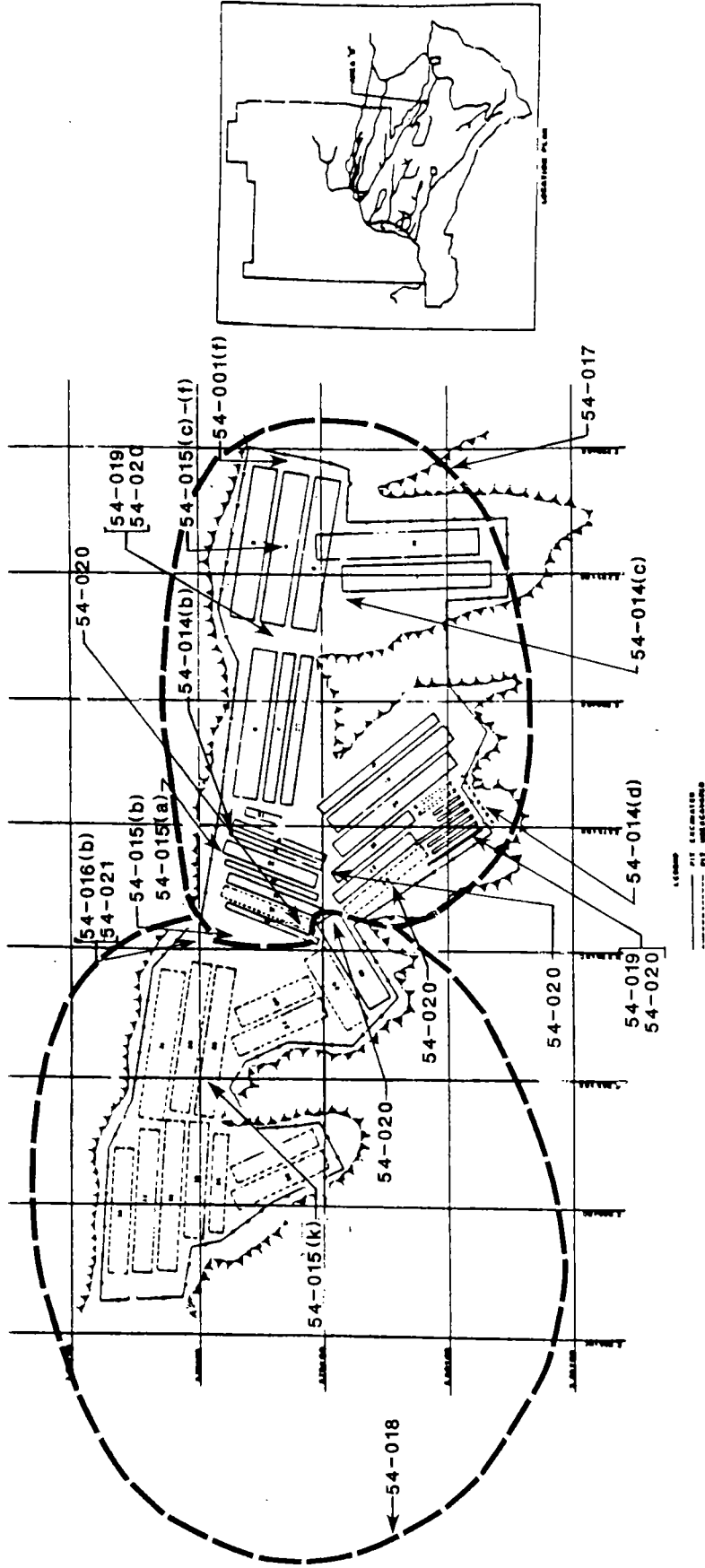
**TA-54 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX
(CONTINUED)**

SWMU	FIGURE NUMBER
54-020	54-1, 54-2
54-021	54-1, 54-2
54-022	Near White Rock, Not shown

NOTE: Some structure locations contain more than one SWMU.

Rev. 1, 6/18/90

UNCLASSIFIED



EXPLANATION
 54-001 SWMU LOCATION

REV.1 6/18/90

FIGURE 54-2
MATERIAL DISPOSAL AREA G,
TA-54

UNCLASSIFIED

301215 02 01 A21

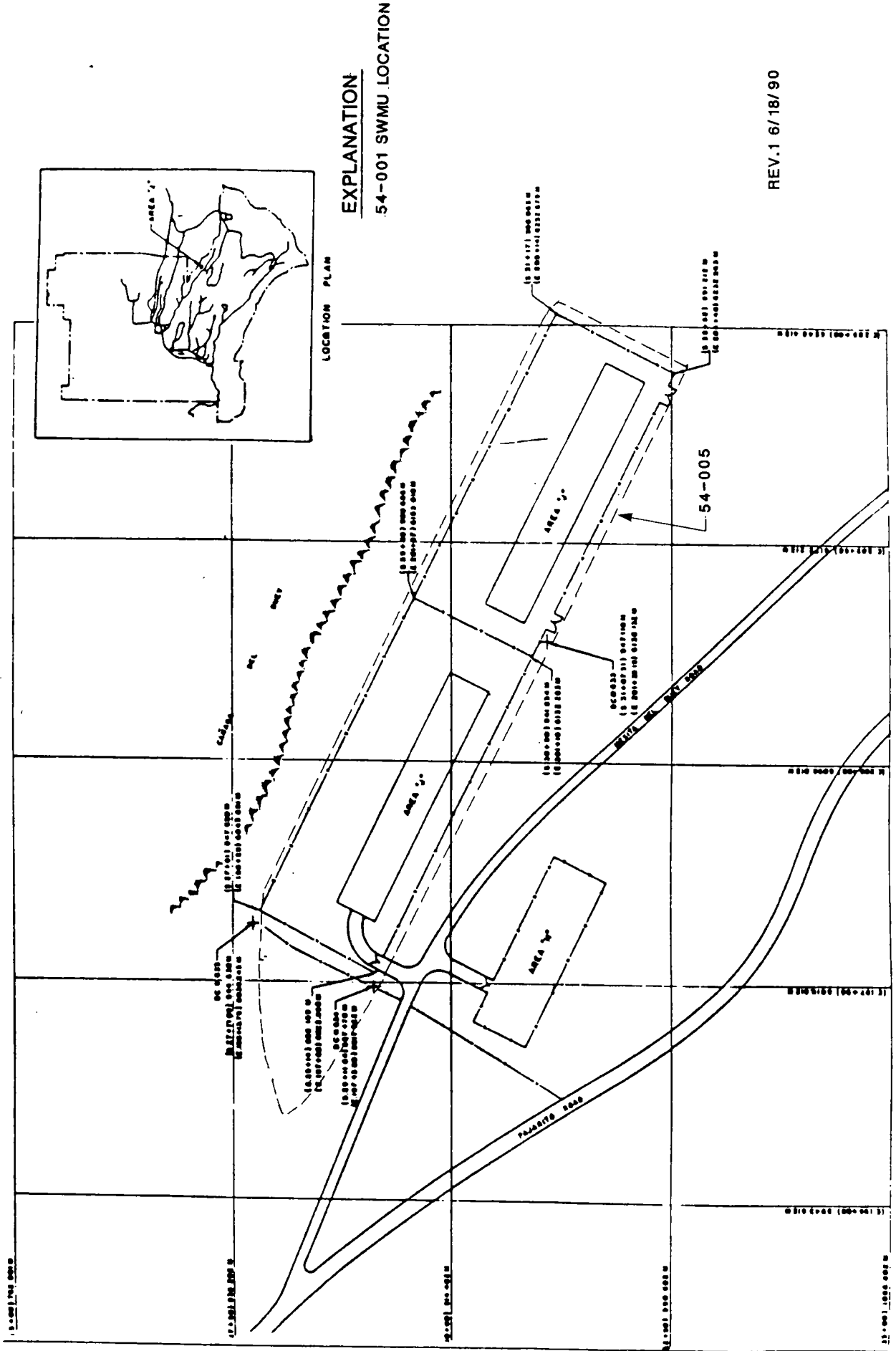
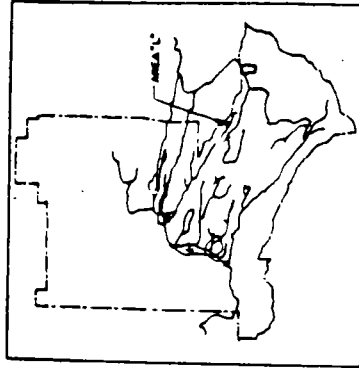
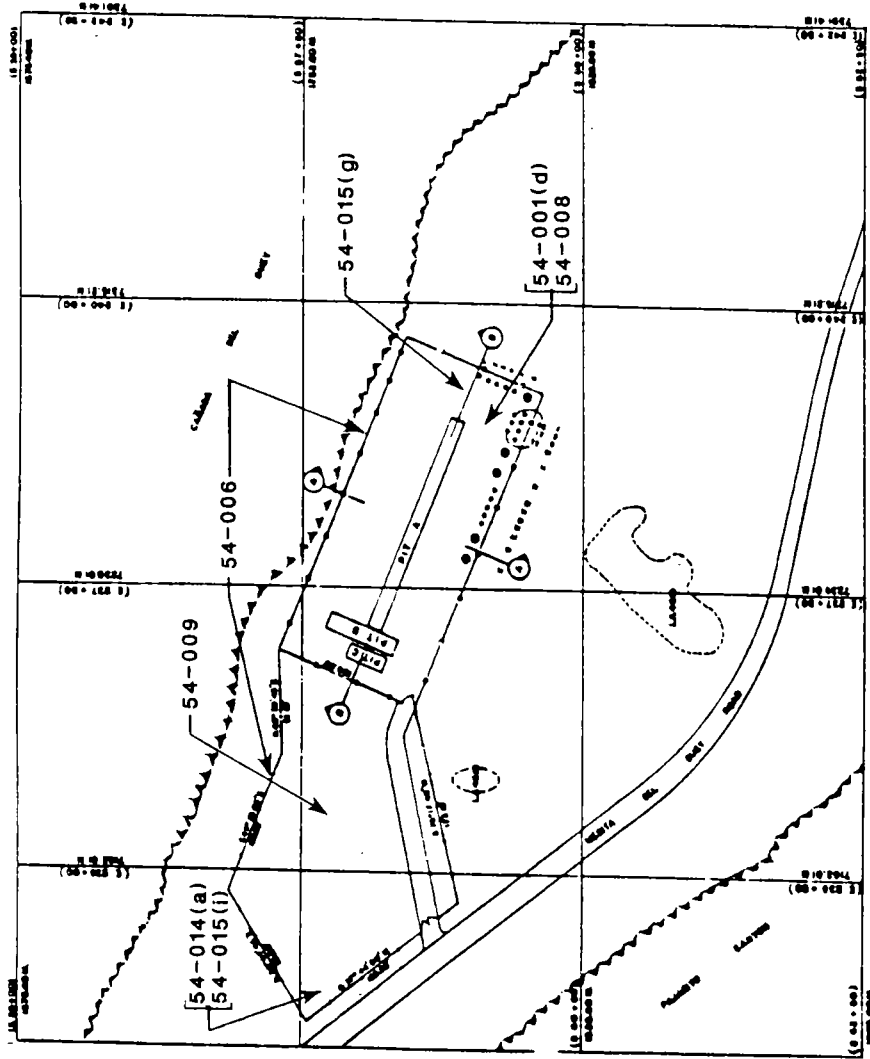


FIGURE 54-4
MATERIAL DISPOSAL AREA J,
TA-54

UNCLASSIFIED



REV.1 6/18/90

EXPLANATION
 54-001 SWMU LOCATION

FIGURE 54-5
 MATERIAL DISPOSAL AREA L,
 TA-54

TA-55 OPERATIONS AND ENVIRONMENTAL SETTING

Plutonium handling operations were consolidated into Technical Area (TA) 55 in the 1970s. Principal operations are fabrication of plutonium metal components and plutonium processing, including scrap reclamation and purification. Basic research on transuranic (TRU) materials is also conducted here (DOE, 1987a). TA-55 also includes the location of former TA-42.

TA-55 lies at elevations between about 7,100 and 7,300 feet asl. Structures are located on a narrow mesa formed between a branch of Mortandad Canyon on the north and Pajarito Canyon on the south. The technical area also includes the north wall of Pajarito Canyon. Canyon walls are steep slopes or cliffs in this area. TA-55 lies on welded Bandelier Tuff, in the Ponderosa Pine/Pinon-Juniper and Pinon-Juniper overstory vegetation zones. Soil types in the technical area include Carjo loam, Tocal very fine sandy loam, Pogna fine sandy loam, and rock outcrop (Nyhan et al., 1978).

At TA-55, the potentiometric surface of the main aquifer in the Los Alamos region lies at about 6,040 to 6,100 feet asl. Over 1,000 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-55

55-001	CEMENT PLANT
55-002	RADIOACTIVE WASTE CONTAINER STORAGE AREAS
55-003	CONTAINMENT AREA
55-004	EVAPORATOR
55-005	FILTRATION UNIT
55-006	GLASS BREAKER
55-007	INCINERATOR
55-008	SUMPS AND TANKS
55-009	SUMP
55-010	SOLVENT SPILLS
55-011	DRAINS AND OUTFALLS
55-012	INACTIVE HAZARDOUS WASTE CONTAINER STORAGE AREA
55-013	ACTIVE HAZARDOUS WASTE CONTAINER STORAGE AREAS

SUMMARY

LOCATION : TA-55 MATERIALS MANAGED : MIXED WASTE
 TYPE OF UNIT(S) : CEMENT PLANT
 UNIT USE : TREATMENT
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : EST. 1980 - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

UNIT INFORMATION

A cement silo, TA-55-53, is located near the southwest corner of TA-55-4 and near the cement plant (TA-55-4). The purpose of the cement plant is to place various types of mixed waste in cement. The cement paste is placed in 55-gallon drums and transported to TA-54 for storage. Eventually these drums may be emplaced in WIPP.

WASTE INFORMATION

The wastes used to make the cement slurry consist of TRU material containing: 1) acidic wastes from a filtration unit, 2) organic liquids, and 3) other liquids. The wastes placed in the cement slurry include 1) hydroxide cake, 2) non-recoverable incinerator ash, 3) plastic, 4) acidic filtrate salts, 5) pyrochemical salts, and 6) other TRU-containing particulate solids. Oils which have TRU material are placed in the cement through use of an emulsifier.

RELEASE INFORMATION

There have been no known hazardous releases from this unit.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-001	**			TA-55-53

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-55	MATERIALS MANAGED :	RADIOACTIVE WASTE
TYPE OF UNIT(S)	: CONTAINER STORAGE AREA		MIXED WASTE
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: ? - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

TA-55-4 [55-002(a)], the plutonium building, has several areas where radioactively contaminated waste is stored. Vacuum pump waste oil is stored in 55-gallon drums in Room 421. Several gloveboxes in Room 124 contain waste from a special project conducted with Hanford in 1988 on uranium oxide development. Low level waste is stored in basement room B38 prior to Multiple Energy Gamma Assay Spectrometer (MEGAS) surveying. If the waste has a count of greater than 5 milliRoentgens (mR), it is sent to Room 432 to repackaging. If the waste has a count of less than 5 mR, it is placed in dumpster dumpsters [55-002(b)] northeast of TA-55-4, adjacent to TA-5-8 and TA-55-18.

WASTE INFORMATION

The waste oil in Room 421 of TA-55-4 may be mixed with vermiculite and have <100 nanocuries per gram of TRU, or the waste may consist entirely of oil, probably contaminated with various radionuclides. The glovebox waste in Room 124 of TA-55-4 consists mostly of equipment contaminated with U-235. The waste in Rooms B38 and 432 of TA-55-4, and in dumpsters near TA-55-8 and -18 consists primarily of rags, plastic, paper, glassware, packaging material, and metal scraps contaminated with various radionuclides.

RELEASE INFORMATION

There have been no known hazardous releases from these units.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-002(a)	**			TA-55-4
55-002(b)	TA55-4-CA-A-HW/RW			NEAR TA-55-8 AND -18

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-55 MATERIALS MANAGED : HAZARDOUS WASTE
 TYPE OF UNIT(S) : CONTAINMENT AREA
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : EST. 1980s - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

UNIT INFORMATION

A nitric acid tank at TA-55 is surrounded by a bermed containment area. The containment area and tank are located south of Building 4.

WASTE INFORMATION

The containment area would store nitric acid if the tank leaked. The tank contains product.

RELEASE INFORMATION

There have been no known hazardous releases from the tank or the containment area.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-003	**			SOUTH OF TA-55-4

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-55
 TYPE OF UNIT(S) : EVAPORATOR
 UNIT USE : TREATMENT
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : EST. 1980s
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : MIXED WASTE

UNIT INFORMATION

Wastes from TA-55 are treated by a thermosyphon evaporator, located in Building TA-55-4, in batches of 600 liters. The waste liquids are distilled in the evaporator, and the liquid distillate goes to TA-50 for pretreatment. The bottoms go to cooling trays after which they are subjected to a filtration process. In the near future they will be fixed in cement (see 55-001). The filtered liquids go to the TA-55 cement plant. The solids are stored at TA-54 at present. The cooling water circulates in an enclosed loop unit. Should contamination of the cooling water occur, the water is treated in the evaporator.

WASTE INFORMATION

Wastes entering the evaporator are all acidic nitrate wastes generated at TA-55. After the distillation process, the distillate wastes are composed primarily of nitric acid (approximately 575 liters of the original 600 liters). The solids from the nitrate salt bottoms filtration process are above 100 nanocuries per gram TRU content.

RELEASE INFORMATION

Off-gases are released through a HEPA filtration system (see Appendix B).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-004	TA55-1-CA-A-HW/RW			IN TA-55-4

SUMMARY

LOCATION : TA-55
 TYPE OF UNIT(S) : FILTER
 UNIT USE : TREATMENT
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : EST. 1979 - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : MIXED WASTE

UNIT INFORMATION

Filtration units located in TA-55-4 treat caustic waste containing TRU material and acidic liquids from the evaporator (see 55-004). After the filtration process, the filtered caustic liquids go to TA-50 for treatment. The solids removed during filtration are usually subjected to a recovery process. If the TRU content is low, the solids are taken to the TA-55 cement plant (see 55-001). The filtration system is a closed loop system wherein all residuals are handled by other treatment units.

WASTE INFORMATION

The treated wastes consist of caustic wastes that contain TRU material and acidic bottoms from the evaporator (see 55-004).

RELEASE INFORMATION

There have been no known hazardous releases from this unit.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-005	TA55-1-CA-A-HW/RW			IN TA-55-4

SUMMARY

LOCATION : TA-55 MATERIALS MANAGED : MIXED WASTE
TYPE OF UNIT(S) : GLASS BREAKER
UNIT USE : TREATMENT
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : EST. 1980s - PRESENT
HAZARDOUS RELEASE : NONE
RADIOACTIVE RELEASE : NONE

UNIT INFORMATION

A breaker is used to break glassware and any other glass which has been contaminated with mixed waste. The broken glass is placed in containers for suitable disposal.

WASTE INFORMATION

The waste is broken glass which may be contaminated with mixed waste.

RELEASE INFORMATION

There have been no known hazardous releases from the glass breaker.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-006	**			IN TA-55-4

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-55
 TYPE OF UNIT(S) : INCINERATOR
 UNIT USE : TREATMENT
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : ? - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : MIXED WASTE

UNIT INFORMATION

A small incinerator in TA-55-4 is used to burn small quantities of combustible wastes. After incineration, the ashes are sent through a recovery process to recover the radionuclides if the TRU content is high. If the content is low, the ashes are sent to the cement plant (see 55-001). Incinerator gases are scrubbed before passing into the glovebox ventilation system. The scrubber solution goes to TA-50 for treatment.

WASTE INFORMATION

The combustible wastes contain chemicals such as nitric acid and small quantities of radionuclides.

RELEASE INFORMATION

Gases are treated to remove radionuclides before they are discharged.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-007	TA55-3-IN-A-HW/RW			IN TA-55-4

SUMMARY

LOCATION : TA-55
 TYPE OF UNIT(s) : SUMP
 UNIT USE : TREATMENT/STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : LATE 1970s - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : MIXED WASTE

UNIT INFORMATION

Sumps, tanks, and pumps in TA-55-4 include:

UNIT TYPE	# OF UNITS	DIMENSIONS	USE
sump/pump	6	3' x 3' x 3' deep	receive spills, mop water
condensate tank pump	4	8" dia x 4' long	receive condensate from cooling coils
blowdown tank	8	8" dia x 4' long	receive condensate from cooling coils

WASTE INFORMATION

The liquids discharged to these units may contain a small amount of mixed waste constituents.

RELEASE INFORMATION

There have been no known hazardous releases from these units.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-008	TA55-2-CA/S-A-HW/RW			IN TA-55-4

SUMMARY

LOCATION : TA-55
 TYPE OF UNIT(s) : SUMP
 UNIT USE : STORAGE
 OPERATIONAL STATUS : UNKNOWN
 PERIOD OF USE : 1976 - ?
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SUSPECTED MIXED WASTE

UNIT INFORMATION

TA-55-71 was a monitoring sump located northeast of TA-55-6. It was used to allow monitoring of TA-55 liquids prior to discharging them to the sewage treatment lagoons at TA-35. It is believed that this sump is no longer operational and may have been decommissioned. The sump is a concrete pit about 7' x 7' x 5'5" deep. It was connected to building TA-55-4 by approximately 250 ft of 6"-diameter vitrified clay pipe. The sump was connected, via the TA-50 and -35 sewer systems, to the TA-35 lagoons by approximately 4000 ft of 8"-diameter vitrified clay pipe.

WASTE INFORMATION

The wastes were liquids believed to be free of significant levels of radionuclides, but which may have contained small quantities of chemicals and solvents.

RELEASE INFORMATION

The liquids were discharged to the TA-35 lagoons.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-009	TA55-2-CA/S-A-HW/RW		Tsk 6 : 9	TA-55-71

SUMMARY

LOCATION : TA-55
 TYPE OF UNIT(S) : SPILL
 UNIT USE : SPILL
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : UNKNOWN
 HAZARDOUS RELEASE : KNOWN
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

According to the CEARP, methyl ethyl ketone and other organic solvents were observed to be present in core samples taken during drilling at the southwest side of Building 4 in 1984. The soil boring from which the core samples were obtained was located 6 to 8 ft from the basement wall. Vapor samples from the boring were analyzed by HSE-9 and found to be a solvent for plasite paint, an organic solvent-base epoxy paint. The soil that was contaminated was later covered with asphalt pavement. These contaminated areas resulted from inadvertent releases.

WASTE INFORMATION

The CEARP states that methyl ethyl ketone and other organic solvents were present in cores taken from this area. Vapor samples contained methyl ethyl ketone, toluene, methyl isobutyl ketone, and a chlorinated hydrocarbon.

RELEASE INFORMATION

These chemicals are present in the soil.

NOTES

This SWMU was formerly SWMU No. 55-XXX.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-010	TA55-6-CA-1-PP		Tsk 6 : 37	SOUTHWEST SIDE OF TA-55-4

SUMMARY

LOCATION	: TA-55	MATERIALS MANAGED :	SOLID WASTE
TYPE OF UNIT(S)	: OUTFALL		HAZARDOUS WASTE
UNIT USE	: DISPOSAL		RADIOACTIVE WASTE
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: 1970s - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

The storm drainage system for TA-55 consists of catch basins equipped with storm drains that discharge to outfalls. The catch basins, storm drains, and outfalls that serve TA-55 are as follows:

SWMU No.	Catch basin structure no.	Collects water from	Outfall location
55-011(a)	TA-55-79	NW side of TA-55-4	Mortandad Canyon
55-011(b)	TA-55-82	NE side of TA-55-4	Mortandad Canyon
55-011(c)	TA-55-83	NE side of TA-55-4	Mortandad Canyon
55-011(d)	TA-55-78	SW side of TA-55-4	Two Mile Canyon
55-011(e)	TA-55-81	NE side of TA-55-4	Mortandad Canyon

The storm drains serve to drain building TA-55-4 where moderate contamination by transuranic radionuclides has been documented. Additionally, some residual solvent contamination has been observed in the environment.

WASTE INFORMATION

The storm drains manage storm water that could contain transuranic radionuclides, solvents, or metals.

RELEASE INFORMATION

It is unknown if hazardous or radioactive constituents have been released from the catch basins, storm drains, or outfall receiving areas.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-011(a)	**		Tsk 6 : 21 25	TA-55-79
55-011(b)	**		Tsk 6 : 22 26	TA-55-82
55-011(c)	**		Tsk 6 : 23 28	TA-55-83
55-011(d)	**		Tsk 6 : 24 29	TA-55-78
55-011(e)	**		Tsk 6 : 27	TA-55-81

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-55 MATERIALS MANAGED : HAZARDOUS WASTE
TYPE OF UNIT(S) : CONTAINER STORAGE AREA
UNIT USE : STORAGE
OPERATIONAL STATUS : INACTIVE
PERIOD OF USE : 1988 - 1990
HAZARDOUS RELEASE : NONE
RADIOACTIVE RELEASE : NONE

UNIT INFORMATION

About 100 ml of waste acid containing heavy metals generated during reagent preparation for plutonium analysis was stored in a bottle on a shelf in Room 503, building TA-55-4. The storage site was not listed as active in January, 1990

WASTE INFORMATION

The waste consisted on nitric acid solution containing non-radioactive heavy metals.

RELEASE INFORMATION

No known release occurred.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-012	**			IN TA-55-4

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-55
 TYPE OF UNIT(S) : CONTAINER STORAGE AREA
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : ? - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

According to an April, 1990 LANL database, several container storage areas for hazardous waste are presently in use in TA-55 in TA-55-3, Room 186. The fume hood [55-013(a)] in the northeast quadrant of TA-55-3, Room 186 is a satellite facility, and stores acetone, trichloroethylene, tetrahydrofuran, pyrodine, toluene, ethanol, freon-113, diethyl ether, pentane, dichloromethane, solvent contaminated hydrolysis products of alkali, diatomaceous earth (celite), metals, hydrides, and molecular sieves. In TA-55-4, Room 208, intro hood XB-206 in southeast corner of room [55-013(b)] is a satellite facility, and stores tetrahydrofuran, pyrodine, dimethoxyethane (ethylene, hexane, glycol, dimethyl ether). Active container storage areas are inspected regularly. The schedule is dependent on the type of material stored.

WASTE INFORMATION

As noted above, these areas store hazardous waste.

RELEASE INFORMATION

No hazardous releases are known to have occurred at these sites.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
55-013(a)	**			TA-55-3
55-013(b)	**			TA-55-4

** No corresponding E. R. Program unit.

**TA-55 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
55-001	55-1
55-002(a)	Not shown
55-002(b)	55-1
55-003	55-1
55-004	55-1
55-005	55-1
55-006	55-1
55-007	55-1
55-008	55-1
55-009	55-1
55-010	55-1
55-011(a)	55-1
55-011(b)	55-1
55-011(c)	55-1
55-011(d)	55-1
55-011(e)	55-1
55-012	55-1
55-013(a)	55-1
55-013(b)	55-1

NOTE: Some structure locations contain more than one SWMU.

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LAN:TA-Units/72

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LEGEND-ARCHY SITE STATUS

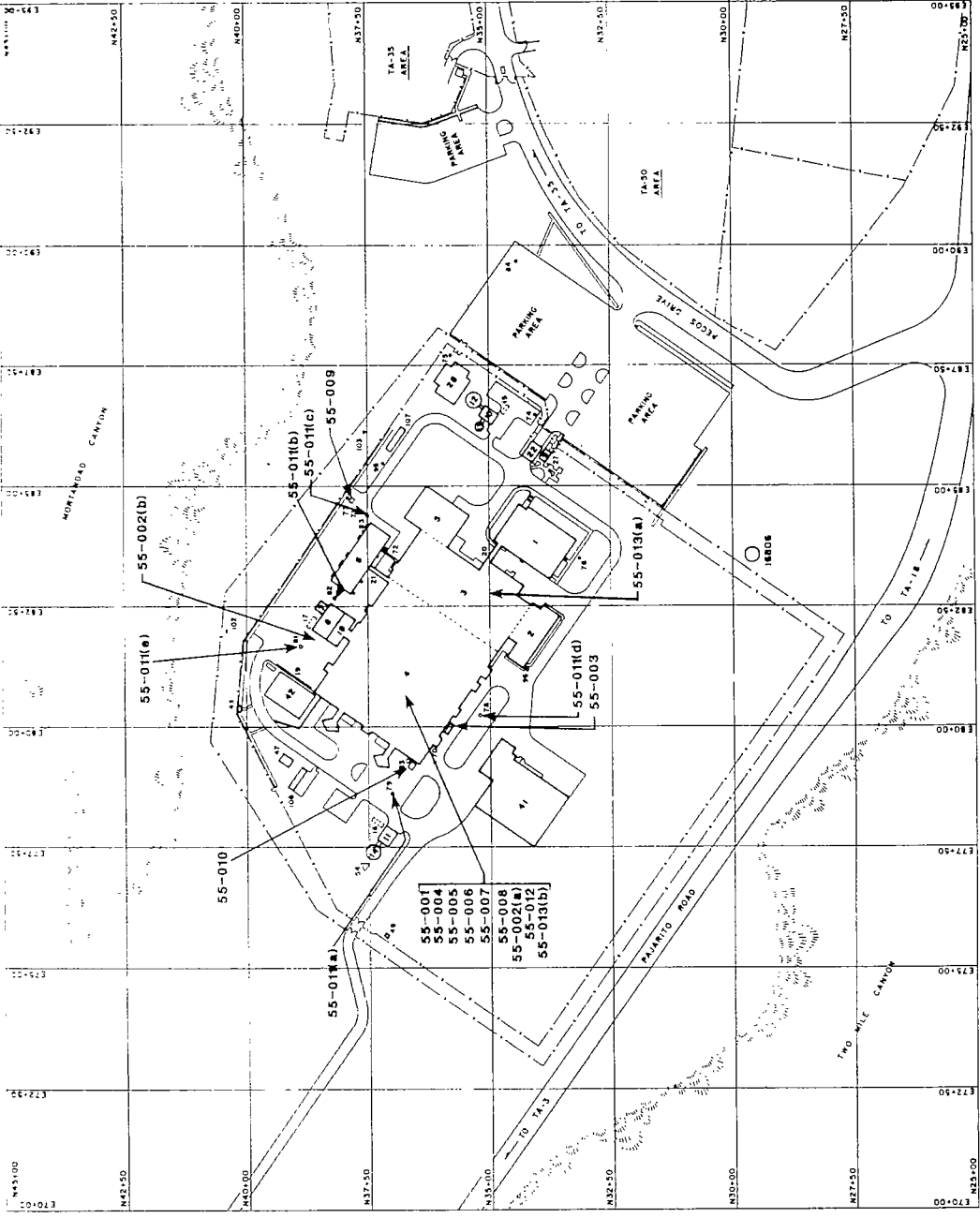
- △ EXCAVATED
- ▲ PARTIALLY EXCAVATED
- UNEXCAVATED

EXPLANATION

55-001 SWMU LOCATION
 REV. 17/9/90
 FIGURE 55-1

SOLID WASTE MANAGEMENT UNITS
 (SWMUs) IN TA-58

UNIVERSITY OF CALIFORNIA
 Los Alamos National Laboratory
 FACILITIES INVESTIGATION
 STRUCTURE Location Plot
 TA-58 PLUMBING



TA-56

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 56, known as the Subterrene Basalt Site, was used in the early 1970s for a program that attempted to substitute melting for drilling to penetrate rock, with electricity used as the heat source in the experimental tests. In a field test, basalt was melted in Ancho Canyon. There are no current operations at the site (DOE, 1987a). The former site of TA-56 lies within the current boundaries of TA-39. There are no solid waste management units in this Technical Area.

TA-57
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 57 is the site of Hot Dry Rock geothermal energy research. It lies on the western flank of the Valles Caldera, about 20 miles west of Los Alamos. Fluids have been produced at temperatures suitable to generate electricity. Mud pits used in drilling and experimental operations are removed when no longer required (DOE, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-57

57-001	DECOMMISSIONED DRILLING MUD PITS
57-002	DISPOSAL AREAS
57-003	SATELLITE STORAGE AREA
57-004	INACTIVE DRILLING MUD PIT / ACTIVE HOLDING POND
57-005	WATER FILTER

SUMMARY

LOCATION	: TA-57	MATERIALS MANAGED	: SOLID WASTE
TYPE OF UNIT(s)	: SURFACE IMPOUNDMENT		SUSPECTED HAZARDOUS WASTE
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: DECOMMISSIONED		
PERIOD OF USE	: 1970s - 1980s		
HAZARDOUS RELEASE	: NONE		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

Three decommissioned mud pits/ponds were used to support drilling and experimental activities for the hot dry rock project. 1) The earliest pit [57-001(a)] was a pit for drilling mud located in Barley Canyon. It was in use during the 1970s. When drilling activities were moved to Fenton Hill, this pit was backfilled and reseeded. It has been filled in since 1973. 2) When Fenton Hill Site, TA-57, began operation, a pond designated GT-2 [57-001(b)] was constructed. This pond was triangular in shape, approximately 150' on each side and 12' deep. It was in use for a number of years. In 1988, some of the sludge from this pond was removed, taken to a landfill, and the pond was backfilled. 3) After construction of GT-2, another pond [57-001(c)] was constructed to the north. This was a fairly small pond and in approximately 1978 the bottom sludge was removed to a landfill and this pond was also backfilled. Trailer TA-57-26 is now located on top of this area. The Fenton Hill ponds were used both as drilling mud ponds and as holding ponds during circulation experiments.

WASTE INFORMATION

Materials stored in the drilling pits and ponds consisted of drilling mud, cuttings and, for the Fenton Hill ponds, any minerals which precipitated during circulation experiments. Sludge from the GT-2 pond [57-001(b)] was analyzed and found not to be E.P. Toxic for metals.

RELEASE INFORMATION

There is no evidence that a hazardous release occurred from the mud storage ponds.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
57-001(a)	TA57-2-CA-A-HW			
57-001(b)	TA57-2-CA-A-HW			GT-2
57-001(c)	TA57-2-CA-A-HW			NEAR TA-57-26

SUMMARY

LOCATION : TA-57
TYPE OF UNIT(S) : LANDFILL
UNIT USE : DISPOSAL
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : 1975 - PRESENT
HAZARDOUS RELEASE : NONE
RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SOLID WASTE
SUSPECTED HAZARDOUS WASTE

UNIT INFORMATION

Drilling mud and cuttings from the old Fenton Hill ponds and EE-1 drilling mud pond (see 57-001) have been disposed of in a former gravel pit located on Forest Service property, about 5 miles west of TA-57.

WASTE INFORMATION

The waste consists of sludge removed from the TA-57 mud ponds.

RELEASE INFORMATION

No known releases have occurred from this unit.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
57-002	TA57-4-L-I-HW			WEST OF TA-57

SUMMARY

LOCATION : TA-57
 TYPE OF UNIT(S) : CONTAINER STORAGE AREA
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : ? - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

A storage area, TA-57-56, is used for product storage as well as satellite storage of solvents and waste oil at TA-57. The satellite storage area consists of two drums on a wooden palette. It is located outside the Fenton Hill shed where the containers are picked up and transported off-site.

WASTE INFORMATION

The wastes consist of spent solvents and waste oil. The waste is generated by cleaning machine parts.

RELEASE INFORMATION

Stained ground was observed during an E.R. site visit on 6/21/90. Past operations at most container storage areas have resulted in systematic releases of solid wastes, including RCRA-regulated constituents.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
57-003	**			TA-57-56

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-57	MATERIALS MANAGED	: SOLID WASTE
TYPE OF UNIT(S)	: SURFACE IMPOUNDMENT		SUSPECTED HAZARDOUS WASTE
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: SEE BELOW		
PERIOD OF USE	: 1978 - PRESENT		
HAZARDOUS RELEASE	: NONE		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

There is a drilling mud circulation pit [57-004(a)] at TA-57 that is used to store wastes from deep drilling operations and experiments. It is currently being refurbished for use as a holding pond with a PVC underliner and a Seaman Corp. Style 8130, XR-5 top liner. The pit is approximately 300' x 75' x 30' deep. The drilling muds are removed as necessary and transported to a landfill (see 57-002). The pit is designated EE-1. A new surface impoundment [57-004(b)] has recently been constructed. The new surface impoundment replaced 57-004(a).

WASTE INFORMATION

Wastes stored in the pond include drilling mud, cuttings, and precipitates from circulation experiments. The water could include dissolved arsenic, cadmium, boron, lithium, and fluorine.

RELEASE INFORMATION

The mud pit has NPDES-permitted outfall No. 001 (see Appendix A). The outfall is assigned NMEID No. NM0028576 for geothermal discharge.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
57-004(a)	TA57-2-CA-A-HW			EE-1, TA-57-1
57-004(b)	**			

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-57 MATERIALS MANAGED : SUSPECTED HAZARDOUS WASTE
TYPE OF UNIT(S) : FILTER
UNIT USE : TREATMENT
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : 1980s - PRESENT
HAZARDOUS RELEASE : NONE
RADIOACTIVE RELEASE : NONE

UNIT INFORMATION

Liquids from the EE-1 surface impoundment [see 57-004(a)] are passed through a filter system before they are discharged into a 5-million gallon holding pond. The filter system consists of 4 cylindrical filter columns, two with sand/gravel filter composite followed by two filters with activated carbon. The filter is periodically backflushed to remove the solids. The solids are placed in the EE-1 pond.

WASTE INFORMATION

The wastes consist of suspended solids in the liquid.

RELEASE INFORMATION

There have been no known releases of hazardous constituents.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
57-005	**			EE-1

** No corresponding E. R. Program unit.

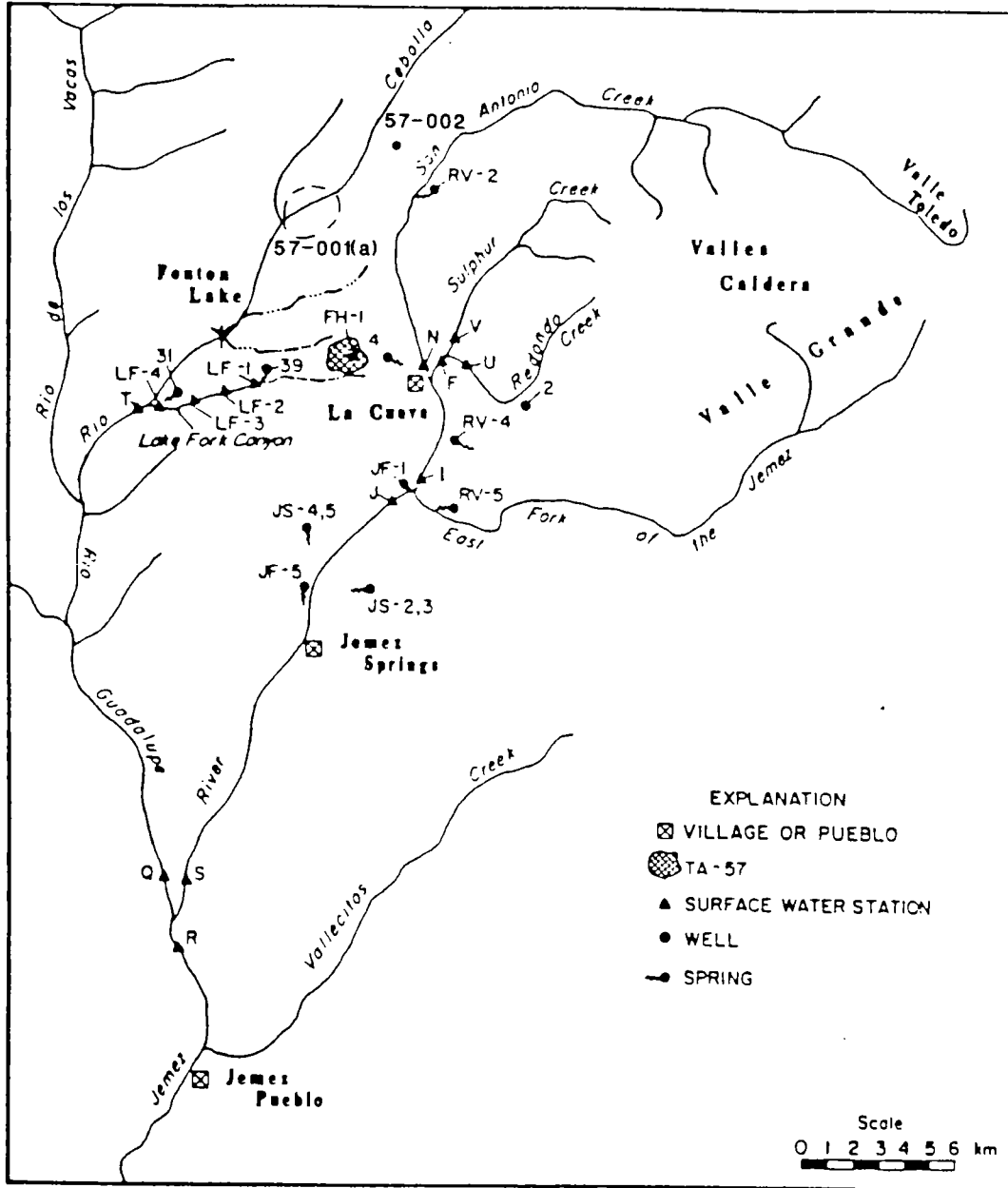
**TA-57 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
57-001(a)	57-2
57-001(b)	57-1
57-001(c)	57-1
57-002	57-2
57-003	57-1
57-004(a)	57-1
57-004(b)	Not shown
57-005	57-1

NOTE: Some structure locations may contain more than one SWMU.

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REV.1 6/28/90

FIGURE 57-2
LOCATION OF TA-57 IN NEW MEXICO

UNCLASSIFIED

TA-59
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 59 is occupied by health, safety, and environmental operations at the Laboratory. An environmental laboratory uses samples for chemistry and radiological measurements. These samples are solid, water, vegetation, animals, foodstuffs, and bioassay samples (DOE, 1987a).

TA-59 lies at elevations between about 7,200 and 7,380 feet asl. The area is located on the narrow mesa formed between Mortandad Canyon on the north and Two Mile Canyon, a branch of Pajarito Canyon, on the south. Canyon walls are steep slopes or cliffs in this area. TA-59 lies on welded Bandelier Tuff, in the Ponderosa Pine/Pinon-Juniper and Ponderosa Pine-fir overstory vegetation zones. The soils at TA-59 include Carjo loam, Tocal very fine sandy loam, and rock outcrop (Nyhan et al., 1978).

At TA-59, the potentiometric surface of the main aquifer in the Los Alamos region lies at about 6,170 to 6,250 feet asl. Over 900 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-59

59-001	SEPTIC SYSTEM
59-002	DRUM STORAGE
59-003	SUMPS
59-004	OUTFALL

SUMMARY

LOCATION	: TA-59	MATERIALS MANAGED	: SUSPECTED HAZARDOUS WASTE
TYPE OF UNIT(S)	: SEPTIC SYSTEM		UNKNOWN
UNIT USE	: TREATMENT/DISPOSAL		
OPERATIONAL STATUS	: DECOMMISSIONED		
PERIOD OF USE	: 1966 - 1979		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

According to the CEARP, this unit (TA-59-4) was located 115 ft southwest of Building 1. This septic system was completed in 1966. The septic tank was constructed of reinforced concrete in two compartments, was 4'3" x 7' x 7' deep, and had a capacity of 1,500 gallons. The septic tank had an overflow to a leach field through a distribution box. The distribution box was located 160' southwest of the southwest corner of TA-59-1. The box was constructed of reinforced concrete and had dimensions of 1'6" x 6' x 2'3" deep. The tank was removed in 1979.

WASTE INFORMATION

According to LANL staff this tank could have received photo processing wastes. Other industrial wastes may also have been present.

RELEASE INFORMATION

It is unknown whether the soil surrounding the tank was sampled during the tank decommissioning. It is unknown whether hazardous release has occurred.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
59-001	TA59-1-ST-I-HW/RW			TA-59-4

SUMMARY

LOCATION	: TA-59	MATERIALS MANAGED	: RADIOACTIVE WASTE
TYPE OF UNIT(S)	: CONTAINER STORAGE AREA		HAZARDOUS WASTE
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: INACTIVE/ACTIVE		
PERIOD OF USE	: ? - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

In 1986, the CEARP field survey found debris and drums stored at several outside locations in TA-59. Some of the drums were marked as being radioactive. Most of the drums have been removed. According to LANL staff, there was a satellite drum storage area at TA-59-1 in Room 123. The 1990 Active Container Storage Area inventory lists an active satellite storage area for inorganics and organics outside TA-59-1 at the dock on the south side.

WASTE INFORMATION

Some of the drums contain radioactive waste and the contents of the other drums are unknown. The drums at TA-59-1 contain spent inorganic and organic solutions.

RELEASE INFORMATION

No information is available in the CEARP indicating whether the drums have leaked. There have been no known releases from the storage area in TA-59-1. However, past operations at most container storage areas have resulted in systematic releases of solid wastes, including RCRA-regulated constituents.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
59-002	TA59-4-CA-A-HW/RW			TA-59-1

SUMMARY

LOCATION : TA-59
 TYPE OF UNIT(s) : SUMP
 UNIT USE : TREATMENT
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1980s - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : SUSPECTED HAZARDOUS WASTE
 SUSPECTED RADIOACTIVE WASTE

UNIT INFORMATION

Four sumps are located in the basement of the Occupational Health Laboratory (TA-59-1). One sump has a capacity of between 35 and 50 gallons and the capacity of the other sump is approximately 10 gallons. Each sump is equipped with a pump that feeds the liquid into the industrial acid line which goes to TA-50.

WASTE INFORMATION

The sumps handle waste from laboratory sinks which could contain radioactive materials. In past years, solvents and other chemicals may have been in the waste.

RELEASE INFORMATION

There have been no known releases from these units.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
59-003	**			TA-59-1

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-59
TYPE OF UNIT(S) : OUTFALL
UNIT USE : DISPOSAL
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : 1966 - PRESENT
HAZARDOUS RELEASE : KNOWN
RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

The 1987 CEARP notes an outfall that discharges waste from basement drains in TA-59-1 and once-through cooling water from cooling tower TA-59-10. The NPDES serial number is 098.

WASTE INFORMATION

Liquids discharged from the outfall are cooling water, treated with biodegradable scale and corrosion inhibitors, and unknown liquids from TA-59-1 basement drains.

RELEASE INFORMATION

The outfall discharges into Two Mile Canyon.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
59-004	TA59-3-0/CA-A-HW			TA-59-1, -10

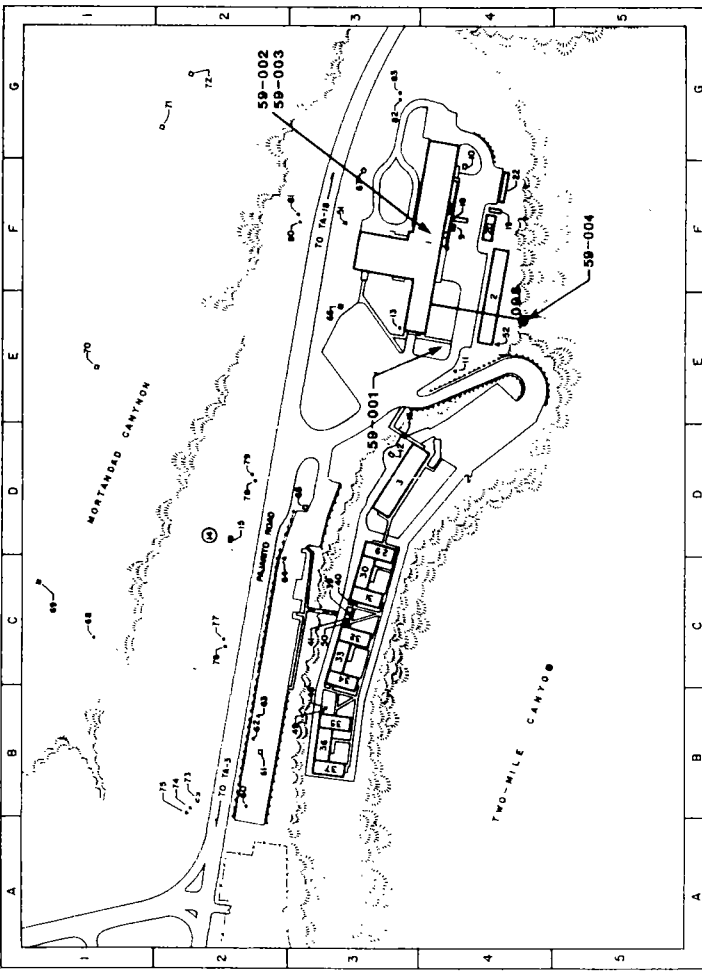
**TA-59 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
59-001	59-1
59-002	59-1
59-003	59-1
59-004	59-1

NOTE: Some structure locations may contain more than one SWMU.

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STRUCTURE NUMBER	STRUCTURE DESCRIPTION	REMARKS	SWMT LOC MAP KEY
TA-59-01	TRANSFORMER STATION	CANCELLED	C-3
TA-59-02	TRANSFORMER STATION	CANCELLED	C-3
TA-59-03	TRANSFORMER STATION	CANCELLED	C-3
TA-59-04	TRANSFORMER STATION	CANCELLED	C-3
TA-59-05	TRANSFORMER STATION	CANCELLED	C-3
TA-59-06	TRANSFORMER STATION	CANCELLED	C-3
TA-59-07	TRANSFORMER STATION	CANCELLED	C-3
TA-59-08	TRANSFORMER STATION	CANCELLED	C-3
TA-59-09	TRANSFORMER STATION	CANCELLED	C-3
TA-59-10	TRANSFORMER STATION	CANCELLED	C-3
TA-59-11	TRANSFORMER STATION	CANCELLED	C-3
TA-59-12	TRANSFORMER STATION	CANCELLED	C-3
TA-59-13	TRANSFORMER STATION	CANCELLED	C-3
TA-59-14	TRANSFORMER STATION	CANCELLED	C-3
TA-59-15	TRANSFORMER STATION	CANCELLED	C-3
TA-59-16	TRANSFORMER STATION	CANCELLED	C-3
TA-59-17	TRANSFORMER STATION	CANCELLED	C-3
TA-59-18	TRANSFORMER STATION	CANCELLED	C-3
TA-59-19	TRANSFORMER STATION	CANCELLED	C-3
TA-59-20	TRANSFORMER STATION	CANCELLED	C-3
TA-59-21	TRANSFORMER STATION	CANCELLED	C-3
TA-59-22	TRANSFORMER STATION	CANCELLED	C-3
TA-59-23	TRANSFORMER STATION	CANCELLED	C-3
TA-59-24	TRANSFORMER STATION	CANCELLED	C-3
TA-59-25	TRANSFORMER STATION	CANCELLED	C-3
TA-59-26	TRANSFORMER STATION	CANCELLED	C-3
TA-59-27	TRANSFORMER STATION	CANCELLED	C-3
TA-59-28	TRANSFORMER STATION	CANCELLED	C-3
TA-59-29	TRANSFORMER STATION	CANCELLED	C-3
TA-59-30	TRANSFORMER STATION	CANCELLED	C-3
TA-59-31	TRANSFORMER STATION	CANCELLED	C-3
TA-59-32	TRANSFORMER STATION	CANCELLED	C-3
TA-59-33	TRANSFORMER STATION	CANCELLED	C-3
TA-59-34	TRANSFORMER STATION	CANCELLED	C-3
TA-59-35	TRANSFORMER STATION	CANCELLED	C-3
TA-59-36	TRANSFORMER STATION	CANCELLED	C-3
TA-59-37	TRANSFORMER STATION	CANCELLED	C-3
TA-59-38	TRANSFORMER STATION	CANCELLED	C-3
TA-59-39	TRANSFORMER STATION	CANCELLED	C-3
TA-59-40	TRANSFORMER STATION	CANCELLED	C-3
TA-59-41	TRANSFORMER STATION	CANCELLED	C-3
TA-59-42	TRANSFORMER STATION	CANCELLED	C-3
TA-59-43	TRANSFORMER STATION	CANCELLED	C-3
TA-59-44	TRANSFORMER STATION	CANCELLED	C-3
TA-59-45	TRANSFORMER STATION	CANCELLED	C-3
TA-59-46	TRANSFORMER STATION	CANCELLED	C-3
TA-59-47	TRANSFORMER STATION	CANCELLED	C-3
TA-59-48	TRANSFORMER STATION	CANCELLED	C-3
TA-59-49	TRANSFORMER STATION	CANCELLED	C-3
TA-59-50	TRANSFORMER STATION	CANCELLED	C-3
TA-59-51	TRANSFORMER STATION	CANCELLED	C-3
TA-59-52	TRANSFORMER STATION	CANCELLED	C-3
TA-59-53	TRANSFORMER STATION	CANCELLED	C-3
TA-59-54	TRANSFORMER STATION	CANCELLED	C-3
TA-59-55	TRANSFORMER STATION	CANCELLED	C-3
TA-59-56	TRANSFORMER STATION	CANCELLED	C-3
TA-59-57	TRANSFORMER STATION	CANCELLED	C-3
TA-59-58	TRANSFORMER STATION	CANCELLED	C-3
TA-59-59	TRANSFORMER STATION	CANCELLED	C-3
TA-59-60	TRANSFORMER STATION	CANCELLED	C-3
TA-59-61	TRANSFORMER STATION	CANCELLED	C-3
TA-59-62	TRANSFORMER STATION	CANCELLED	C-3
TA-59-63	TRANSFORMER STATION	CANCELLED	C-3
TA-59-64	TRANSFORMER STATION	CANCELLED	C-3
TA-59-65	TRANSFORMER STATION	CANCELLED	C-3
TA-59-66	TRANSFORMER STATION	CANCELLED	C-3
TA-59-67	TRANSFORMER STATION	CANCELLED	C-3
TA-59-68	TRANSFORMER STATION	CANCELLED	C-3
TA-59-69	TRANSFORMER STATION	CANCELLED	C-3
TA-59-70	TRANSFORMER STATION	CANCELLED	C-3
TA-59-71	TRANSFORMER STATION	CANCELLED	C-3
TA-59-72	TRANSFORMER STATION	CANCELLED	C-3
TA-59-73	TRANSFORMER STATION	CANCELLED	C-3
TA-59-74	TRANSFORMER STATION	CANCELLED	C-3
TA-59-75	TRANSFORMER STATION	CANCELLED	C-3
TA-59-76	TRANSFORMER STATION	CANCELLED	C-3
TA-59-77	TRANSFORMER STATION	CANCELLED	C-3
TA-59-78	TRANSFORMER STATION	CANCELLED	C-3
TA-59-79	TRANSFORMER STATION	CANCELLED	C-3
TA-59-80	TRANSFORMER STATION	CANCELLED	C-3
TA-59-81	TRANSFORMER STATION	CANCELLED	C-3
TA-59-82	TRANSFORMER STATION	CANCELLED	C-3
TA-59-83	TRANSFORMER STATION	CANCELLED	C-3
TA-59-84	TRANSFORMER STATION	CANCELLED	C-3
TA-59-85	TRANSFORMER STATION	CANCELLED	C-3



REV.1 6/28/90
FIGURE 59-1

SOLID WASTE MANAGEMENT UNITS
(SWMUS) IN TA-59

UNIVERSITY OF CALIFORNIA
Los Angeles COLLEGE OF ENGINEERING
FACILITIES ENGINEERING DIVISION

STRUCTURE LOCATION PLAN
TA-59
DATE: 6/28/90
BY: [Signature]

EXPLANATION

- 59-001 SWMT LOCATION
- 010 LOCATION OF OUTFALL INDICATING ASSOCIATED PIPING AND NPDES SERIAL NUMBERS (SEE APPENDIX A)

UNCLASSIFIED



TA-60 OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 60 operations currently consist primarily of the Laboratory's Maintenance Contractor Services physical support operations and of activities associated with the Test Fabrication Facility. This technical area was created during the 1989 laboratory redefinition of the technical areas wherein portions of TA-3 were designated as TA-60. SWMUs located on Sigma Mesa have been renumbered from TA-3 to TA-60 SWMU designations.

TA-60 lies at elevations ranging between 7,100 and 7,350 feet asl. It is located on the eastern end of Sigma Mesa, between Sandia Canyon on the north and Mortandad Canyon on the south. Canyon walls are steep in this area. Most of TA-60 lies on approximately 800 feet of welded Bandelier Tuff. The mesa top is in the Ponderosa Pine/Pinon-Juniper overstory vegetation zone, and the canyon walls are in the Ponderosa Pine-fir overstory vegetative zone. A small non-forested Shrub-Grass-Forb component also exists in TA-60. The soil in TA-60 consists of rock outcrop along the canyon walls, Carjo loam and Seaby loam on the upper mesa, Nyjack loam on the lower mesa, and Tocal very fine sandy loam in the canyon at the east end of the TA (LANL, 1989).

The potentiometric surface of the main aquifer in the Los Alamos region lies at about 5,900 to 6,100 feet asl at TA-60. Over 1,000 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-60

60-001	ACTIVE CONTAINER STORAGE AREAS
60-002	LANDFILL / SURFACE DISPOSAL
60-003	VEHICLE MAINTENANCE OIL AND WATER SEPARATORS
60-004	SIGMA MESA STORAGE FACILITIES
60-005	INACTIVE SURFACE IMPOUNDMENTS
60-006	SEPTIC SYSTEMS
60-007	OPERATIONAL RELEASES

SUMMARY

LOCATION	: TA-60	MATERIALS MANAGED	: HAZARDOUS WASTE
TYPE OF UNIT(S)	: CONTAINER STORAGE AREA		SUSPECTED PCBs
UNIT USE	: STORAGE		SOLID WASTE
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: EST. 1970s - PRESENT		
HAZARDOUS RELEASE	: KNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

The following are active container storage areas, based on a 10/88 LANL database:

SWMU NO.	LOCATION	UNIT TYPE	SETTING
60-001(a)	TA-60-1, formerly TA-3-382	satellite	
60-001(b)	TA-60-7, formerly TA-3-383	satellite	20' sq concrete pad

The active container storage areas are inspected regularly. The schedule is dependent on the type of material stored. A November 1988 field survey noted the 60-001(a) container storage area outside. A large number of drums were stored there at the time. A 1/90 LANL Active Container Storage Areas database noted the following additional active container storage areas in TA-60:

SWMU NO.	LOCATION	UNIT TYPE	SETTING
60-001(a)	TA-60-1	satellite	outside, east side
60-001(a)	TA-60-1	satellite	at the motor pool
60-001(c)	TA-60-17	satellite	
60-001(d)	TA-60-29	satellite	at the pesticide shed

WASTE INFORMATION

TA-60-1 container storage area has stored spent solvents, drums of wastewater and paint from the paint booth, used batteries, empty drums, and waste oil. Containers of product have also been stored in the area, including heat transfer oils, diesel fuel, transmission fluid, anti-freeze and solvents. Soil from this storage area was stained and possibly contaminated. Soil samples were collected in May, 1990 and analytical results indicate the presence of volatile and semivolatile organic compounds. Solvent waste is stored at TA-60-7, along with various materials, such as paint and paint thinner, copper pipe, denatured alcohol, and MEK. The satellite storage at TA-60-17 contains rags contaminated with solvents. The pesticide shed stores pesticide products, as well as pesticide-contaminated rinse water.

RELEASE INFORMATION

Some of the drums are noted to be leaking. Past operations at most container storage areas have resulted in systematic releases of solid wastes, including RCRA-regulated constituents.

NOTES

SWMU Nos. 60-001(a) and 60-001(b) were formerly SWMU Nos. 3-001(g) and 3-001(h), respectively.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
60-001(a)	TA3-1-CA-A/I-HW/RW		Tsk 19 : 85 93 100	TA-60-1, formerly TA-3-382
60-001(b)	TA3-1-CA-A/I-HW/RW		Tsk 19 : 86	TA-60-7, formerly TA-3-383
60-001(c)	**			TA-60-17
60-001(d)	**			TA-60-29

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-60	MATERIALS MANAGED	: SOLID WASTE
TYPE OF UNIT(S)	: SURFACE DISPOSAL		SUSPECTED HAZARDOUS WASTE
UNIT USE	: DISPOSAL		
OPERATIONAL STATUS	: INACTIVE		
PERIOD OF USE	: ?		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

There is a boneyard southeast of TA-60-2, formerly TA-3-381. An additional area used for the storage of piles of broken-up asphalt is located on Sigma Mesa, just west of the drilling mud pit. Also on Sigma Mesa, there is a mound of concrete debris with wood, steel piping, and discarded metal. The mound is located about 100 ft east of the fence for the test rack facility, TA-60-17. The surface disposal area appears to be inactive.

WASTE INFORMATION

The boneyard consists of large piles of asphalt, metal debris, wood crates, old drums, and other materials. The asphalt piles were probably created during road repair.

RELEASE INFORMATION

No known hazardous or radioactive release has occurred.

NOTES

This SWMU was formerly SWMU No. 3-009(h).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
60-002	TA3-10-0L/L-A/I-HW		Tsk 19 : 63 64 105	TA-60-2, formerly TA-3-381 SIGMA MESA TA-60-17

SUMMARY

LOCATION : TA-60
 TYPE OF UNIT(S) : SUMP
 UNIT USE : TREATMENT
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : ? - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SUSPECTED HAZARDOUS WASTE
 SOLID WASTE

UNIT INFORMATION

The motor vehicle facility at TA-60 contains several oil and water separators. In the motor repair shop, TA-60-1 (formerly TA-3-382), the floor drains are connected to grease/oil traps. The grease/oil residue from the traps is sent to two 560-gallon waste oil tanks and the decantation (water separated from the grease/oil) is routed to the sanitary sewer. Behind TA-60-1 is an oil and water separator. Outside, at the motor repair shop, vehicles may be washed/steam cleaned. Runoff from vehicle washing operations goes to a drain and then into the oil/water separator before the liquid decants to the sanitary sewer.

WASTE INFORMATION

The waste consists of oil and grease.

RELEASE INFORMATION

Decantation from the sumps discharges to sanitary and storm sewers. Releases from the tanks have been noted in a drainage channel that is present north of TA-60-1, trending east toward Sandia Canyon (see SWMU No. 60-007). There have been no known hazardous releases from this unit.

NOTES

This SWMU was formerly SWMU No. 3-027(a).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
60-003	TA3-4-S-A/I-PP TA3-1-CA-A/I/HW/RW		Tsk 19 : 26 31 45 156 157	TA-60-1, formerly TA-3-382

SUMMARY

LOCATION	: TA-60	MATERIALS MANAGED	: HAZARDOUS WASTE
TYPE OF UNIT(s)	: CONTAINER STORAGE AREA		SOLID WASTE
UNIT USE	: STORAGE		PCBs
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: ? - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

Several storage areas are present on Sigma Mesa. A storage area [60-004(a)] is located about halfway to the end of the mesa. This storage area appeared to contain mainly old, out-of-date equipment and general debris. Near the end of the mesa, twelve drums [60-004(b)] containing diesel sludge cleaned out of underground storage tanks at the Western Steam Plant during its decommissioning were noted. An area approximately 100' x 3', covered with plastic sheeting, is also within the mesa-end storage area. In the experimental pond area [see 60-005(a)], several drums are also stored [60-004(c)]. The contents of the drums are not known. On occasion, decommissioned underground storage tanks from the TA-3 area are brought to the eastern end of Sigma Mesa to be cut up and to await salvage. The cutting area [60-004(d)] is located adjacent to the cement pad for the geothermal well, directly north of the drilling mud pit. Drums containing residues from cleaning the tanks are also present in this area. Just east of the geothermal test well pad is a storage area [60-004(e)]. An E.R. Program site reconnaissance survey in 1989 observed 5 transformers, 4 large dumpsters, stainless steel piping, corrugated tin, 6 large cooling fans and 5 storage tanks, which ranged between 3,000 and 5,000 gallons, at the site.

WASTE INFORMATION

LANL staff report that a large number of drums marked soil and diesel waste, a drum in poor condition that contained sodium hydroxide solution, and non-PCB containing oil are stored in the storage area halfway to the end of Sigma Mesa. Drums of soil and diesel waste, transformers containing oil, and very large vessels (contents unknown) are stored in the mesa-end storage area. In the tank salvage area, the drums and tanks contain petroleum products.

RELEASE INFORMATION

It is unknown whether a hazardous release has occurred from any of these Sigma Mesa storage areas. However, tanks are virtually empty before transport to the cutting area at Sigma Mesa, so the extent of contamination would be minimal.

NOTES

SWMU Nos. 60-004(a), (b), and (c) were formerly SWMU Nos. 3-005(a), (b), and (c), respectively.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
60-004(a)	**		Tsk 19 : 74	SIGMA MESA
60-004(b)	**		Tsk 19 : 167	SIGMA MESA
60-004(c)	**		Tsk 19 : 68	SIGMA MESA
60-004(d)	**		Tsk 19 : 43	SIGMA MESA
60-004(e)	**		Tsk 19 : 67	SIGMA MESA

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-60	MATERIALS MANAGED :	SOLID WASTE
TYPE OF UNIT(s)	: SURFACE IMPOUNDMENT		HAZARDOUS WASTE
UNIT USE	: DISPOSAL		RADIOACTIVE WASTE
OPERATIONAL STATUS	: INACTIVE		SUSPECTED PCBs
PERIOD OF USE	: 1970s - ?		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

Two inactive surface impoundments are present in TA-60. A solar pond [60-005(a)] was used in a study to evaluate the evaporation of radioactive liquids. Approximately 25,000 gallons of treated effluent from the TA-50 treatment plant were placed in the pond at one time. The pond is fenced and posted as radioactive. A large pit [60-005(b)] is located just west of the easternmost storage area on Sigma Mesa. The pit served as the drilling mud pit for an experimental geothermal well being drilled in the same area in 1979. The pit is still present and is 60 ft wide, 120 ft long, and 20 ft deep. At one time, the pit was lined, but the lining lasted only a short time before it became torn and weathered.

WASTE INFORMATION

The solar pond contains tritium and other low level radionuclides. Most of the drilling mud placed in the pit during the drilling of the well is still present. There is also evidence of dumping in the pit, including piles of sand, gravel, concrete, rebar, and asphalt. Approximately four large transformers and other electrical equipment were observed to be stored on the geothermal pad, located on the eastern side of the pit. The transformers were observed to be leaking oil but, according to LANL personnel, were sampled and found to be free of PCBs.

RELEASE INFORMATION

The solar pond was equipped with a plastic liner underlain by sand/bentonite/sand. No releases of hazardous materials have been reported from the two inactive impoundments.

NOTES

SWMU No. 60-005(a) was formerly SWMU No. 3-029(a). SWMU No. 60-005(b) was formerly SWMU No. 3-030(a).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
60-005(a)	TA3-8-SI-A/I-HW/RW/PP		Tsk 19 : 37	SIGMA MESA
60-005(b)	TA3-8-SI-A/I-HW/RW/PP		Tsk 19 : 36	SIGMA MESA

SUMMARY

LOCATION	: TA-60	MATERIALS MANAGED	: SUSPECTED HAZARDOUS WASTE
TYPE OF UNIT(S)	: SEPTIC SYSTEM		SANITARY WASTE
UNIT USE	: DISPOSAL		
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: 1979 - PRESENT		
HAZARDOUS RELEASE	: SUSPECTED		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

Septic tank TA-3-1885 [60-006(a)] is located northeast of the Pan Am Test Rack facility, TA-60-17, on Sigma Mesa (see Notes). The tank has a 1000-gallon capacity and overflows to seepage pit TA-3-1886, located just north of the septic tank. The bathrooms in TA-60-17 all discharge to the septic tank, along with six floor drains in the building and one sink drain from the building's paint booth. A 1989 E.R. Program site reconnaissance survey located a buried septic tank [60-006(b)] just north of the storage area at the end of Sigma Mesa. The tank is a 700-gallon, fiberglass unit that was installed in 1979. It served the trailers that were located there during the drilling of the geothermal well. The Active Septic Tank Systems List (December 1989) supplied by the Environmental Surveillance Section (HSE-8) lists septic tank TA-60-00 [60-006(c)]. It is unknown when this tank was installed; it presently serves the test track. It has a capacity of 1,000 gallons and its overflow discharges to a seepage pit. TA-60-00 serves from 30 to 35 people.

WASTE INFORMATION

It is possible that paints, solvents, or oils may have entered the drains to septic tank TA-3-1885 from operations in the paint booth.

RELEASE INFORMATION

It is not known whether releases have occurred from these units.

NOTES

TA-3-1885 and -1886 were previously identified as SWMU numbers 3-016(c) and 3-016(d), respectively. Although the units are located in the newly designated TA-60, revised structure identifier numbers to reflect the change have not yet been assigned.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
60-006(a)	**		Tsk 19 : 15 16 21	TA-3-1885, -1886
60-006(b)	**		Tsk 19 : 18	SIGMA MESA
60-006(c)	**			TA-60-00

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-60	MATERIALS MANAGED	: SOLID WASTE
TYPE OF UNIT(S)	: OPERATIONAL RELEASE		SUSPECTED HAZARDOUS WASTE
UNIT USE	: DISPOSAL		
OPERATIONAL STATUS	: INACTIVE		
PERIOD OF USE	: 1979 - ?		
HAZARDOUS RELEASE	: SUSPECTED		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

An area of stained soil is located about 20 ft east of the concrete pad for the geothermal well on the eastern end of Sigma Mesa [60-007(a)]. Over a period of several months in 1979, while the geothermal well was being drilled, the drill rig and associated equipment were oiled and greased in this area. The area of stained soil was noted to be about 20 sq ft. Releases into Sandia Canyon have occurred as a result of operations at the motor vehicle facility, TA-60-1 [60-007(b)]. Leaks and spills have occurred from the product distribution area located near the building, from transfer operation practices at two 560-gallon waste oil tanks present in the area, and from steam cleaning operations. These leaks and spills were collected in storm drainage systems adjacent to building TA-60-1. The storm drains discharge to Sandia Canyon via an outfall.

WASTE INFORMATION

Because of the type of drilling activities that were conducted at the geothermal well, it is assumed that drums of oil, grease, and solvents were stored at the site. The waste associated with the motor vehicle facility would also consist of oil, grease, and solvents.

RELEASE INFORMATION

A 20-ft square area of stained soil is present near the geothermal well. Stained soil associated with the waste oil tanks was removed in 1986, according to a memo. The soil was placed at Sigma Mesa for interim storage, until sample analysis had been completed. Analytical results and disposal information are not available. Stains are present in the drainage channel that runs north of TA-60-1 and trends toward Sandia Canyon. A 1986 memo indicates that the visibly contaminated soils in the drainage channel were removed and stored along with the soil from near the waste oils tanks.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
60-007(a)	**		Tsk 19 : 47	SIGMA MESA
60-007(b)	**			TA-60-1

** No corresponding E. R. Program unit.

**TA-60 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
60-001(a)	60-2
60-001(b)	60-2
60-001(c)	60-2
60-001(d)	60-2
60-002	60-2
60-003	60-2
60-004(a)	Not Shown
60-004(b)	Not Shown
60-004(c)	60-1
60-004(d)	60-1
60-004(e)	60-1
60-005(a)	60-1
60-005(b)	60-1
60-006(a)	60-2
60-006(b)	Not Shown
60-006(c)	Not Shown
60-007(a)	60-1
60-007(b)	60-2

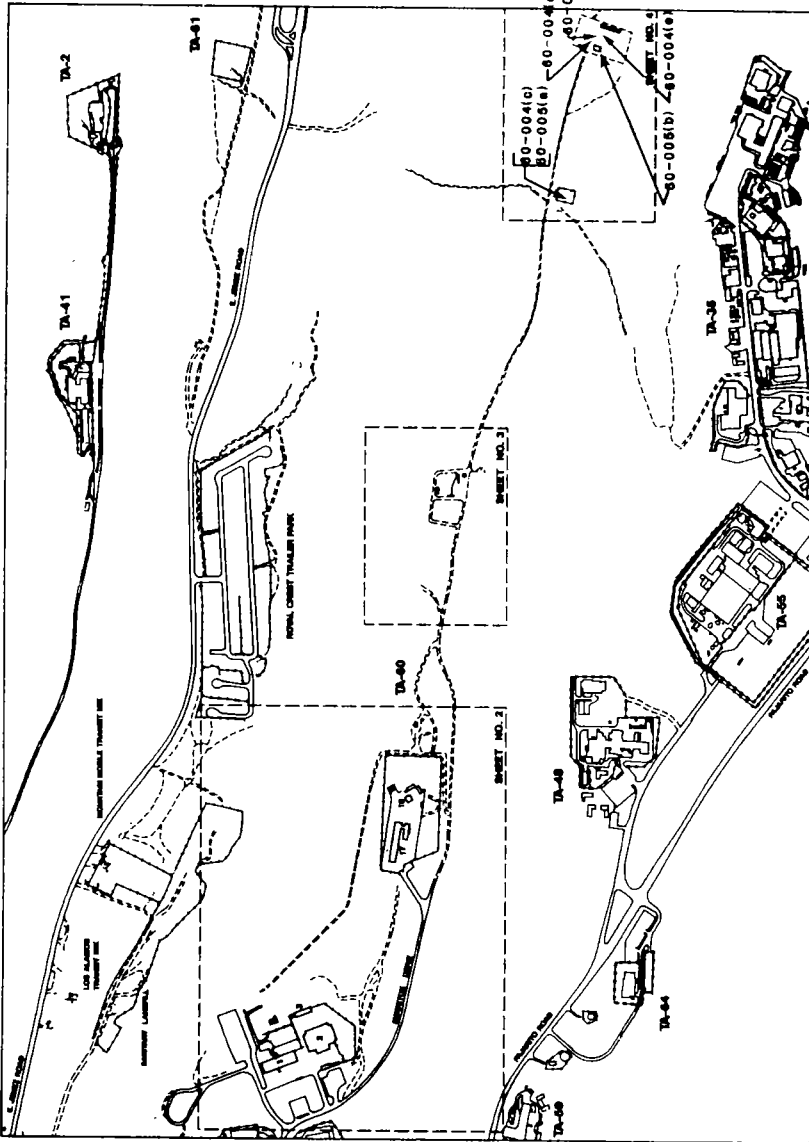
NOTE: Some structure locations may contain more than one SWMU.

Rev. 1, 5/21/90

TA-60

STRUCTURE NUMBER INDEX

STRUCTURE NUMBER	STRUCTURE DETERMINATION	STRUCTURE NOMENCLATURE	SHEET MAP NO.	KEY
40-1	MOBILE EQUIP., REPAIR SHOP		2	A-2
40-2	WAREHOUSE		2	B-3
40-3	TRAILER, OFFICE		2	B-4
40-4	TRAILER, OFFICE		2	A-1
40-5	TRAILER, OFFICE		2	A-1
40-6	TRAILER, OFFICE		2	B-2
40-7	TRAILER, OFFICE		2	B-2
40-8	STORAGE SHED		2	A-2
40-9	STORAGE SHED		2	A-2
40-10	FUEL PUMPING STATION		2	B-2
40-11	STORAGE SHED		2	B-2
40-12	STORAGE SHED		2	B-2
40-13	STORAGE SHED		2	B-2
40-14	STORAGE SHED		2	B-2
40-15	STORAGE SHED		2	B-2
40-16	STORAGE SHED		2	B-2
40-17	STORAGE SHED		2	B-2
40-18	STORAGE SHED		2	B-2
40-19	STORAGE SHED		2	B-2
40-20	STORAGE SHED		2	B-2
40-21	STORAGE SHED		2	B-2
40-22	STORAGE SHED		2	B-2
40-23	STORAGE SHED		2	B-2
40-24	STORAGE SHED		2	B-2
40-25	STORAGE SHED		2	B-2
40-26	STORAGE SHED		2	B-2
40-27	STORAGE SHED		2	B-2
40-28	STORAGE SHED		2	B-2
40-29	STORAGE SHED		2	B-2
40-30	STORAGE SHED		2	B-2
40-31	STORAGE SHED		2	B-2
40-32	STORAGE SHED		2	B-2
40-33	STORAGE SHED		2	B-2
40-34	STORAGE SHED		2	B-2
40-35	STORAGE SHED		2	B-2
40-36	STORAGE SHED		2	B-2
40-37	STORAGE SHED		2	B-2
40-38	STORAGE SHED		2	B-2
40-39	STORAGE SHED		2	B-2
40-40	STORAGE SHED		2	B-2
40-41	STORAGE SHED		2	B-2
40-42	STORAGE SHED		2	B-2
40-43	STORAGE SHED		2	B-2
40-44	STORAGE SHED		2	B-2
40-45	STORAGE SHED		2	B-2
40-46	STORAGE SHED		2	B-2
40-47	STORAGE SHED		2	B-2
40-48	STORAGE SHED		2	B-2
40-49	STORAGE SHED		2	B-2
40-50	STORAGE SHED		2	B-2
40-51	STORAGE SHED		2	B-2
40-52	STORAGE SHED		2	B-2
40-53	STORAGE SHED		2	B-2
40-54	STORAGE SHED		2	B-2
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40-58	STORAGE SHED		2	B-2
40-59	STORAGE SHED		2	B-2
40-60	STORAGE SHED		2	B-2
40-61	STORAGE SHED		2	B-2
40-62	STORAGE SHED		2	B-2
40-63	STORAGE SHED		2	B-2
40-64	STORAGE SHED		2	B-2
40-65	STORAGE SHED		2	B-2
40-66	STORAGE SHED		2	B-2
40-67	STORAGE SHED		2	B-2
40-68	STORAGE SHED		2	B-2
40-69	STORAGE SHED		2	B-2
40-70	STORAGE SHED		2	B-2
40-71	STORAGE SHED		2	B-2
40-72	STORAGE SHED		2	B-2
40-73	STORAGE SHED		2	B-2
40-74	STORAGE SHED		2	B-2
40-75	STORAGE SHED		2	B-2
40-76	STORAGE SHED		2	B-2
40-77	STORAGE SHED		2	B-2
40-78	STORAGE SHED		2	B-2
40-79	STORAGE SHED		2	B-2
40-80	STORAGE SHED		2	B-2
40-81	STORAGE SHED		2	B-2
40-82	STORAGE SHED		2	B-2
40-83	STORAGE SHED		2	B-2
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40-86	STORAGE SHED		2	B-2
40-87	STORAGE SHED		2	B-2
40-88	STORAGE SHED		2	B-2
40-89	STORAGE SHED		2	B-2
40-90	STORAGE SHED		2	B-2
40-91	STORAGE SHED		2	B-2
40-92	STORAGE SHED		2	B-2
40-93	STORAGE SHED		2	B-2
40-94	STORAGE SHED		2	B-2
40-95	STORAGE SHED		2	B-2
40-96	STORAGE SHED		2	B-2
40-97	STORAGE SHED		2	B-2
40-98	STORAGE SHED		2	B-2
40-99	STORAGE SHED		2	B-2
40-100	STORAGE SHED		2	B-2



EXPLANATION
 60-001 SWMU LOCATION

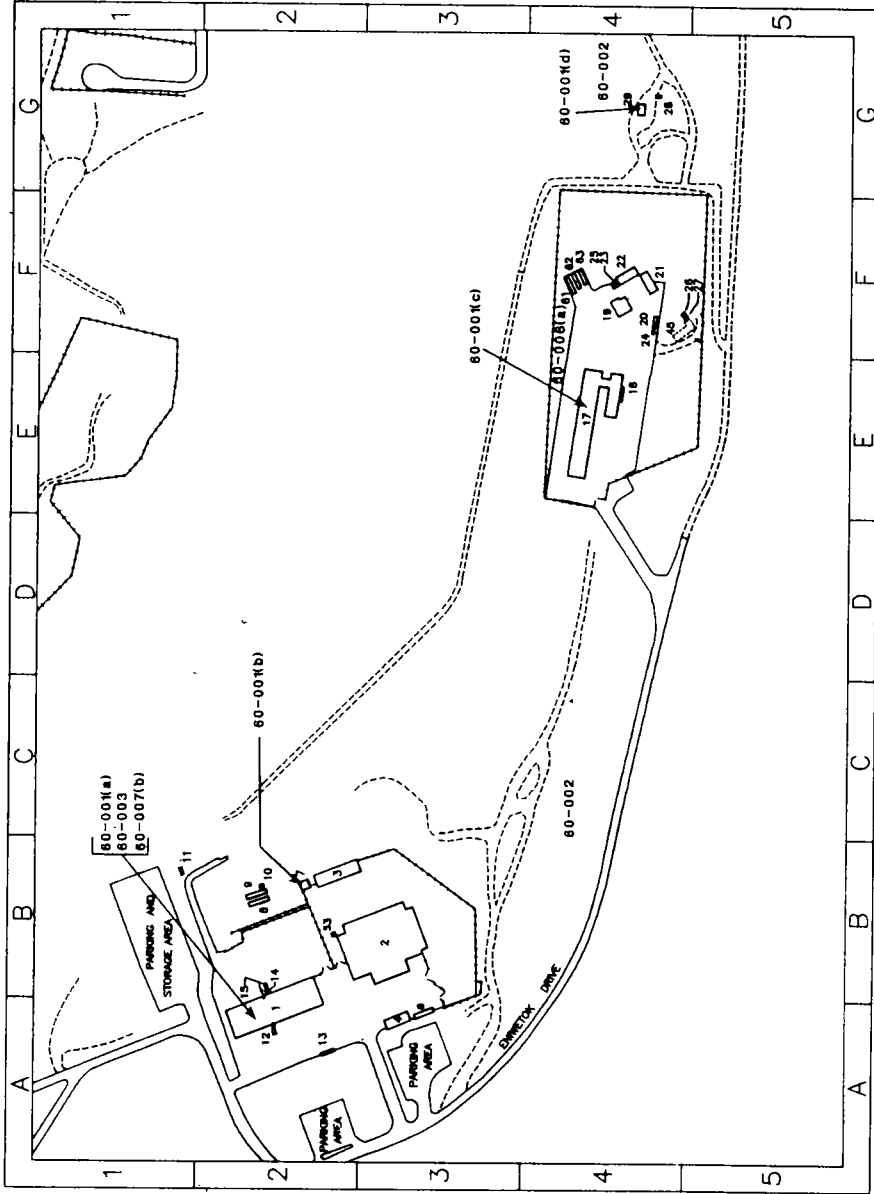


REV. 1 8/21/80

FIGURE 60-1
 SOLID WASTE MANAGEMENT
 UNITS (SWMUs) IN TA-60

UNIVERSITY OF CALIFORNIA	DATE	BY	CHK'D
Los Alamos	10/11/80	J. J. [Signature]	C. [Signature]
FACILITIES ENGINEERING DIVISION		SCALE	1" = 400'
STRUCTURE LOCATION MAP		DATE	10/11/80
TA-60	PROJECT NO.	10-80-001	ENGINEER
DR. [Signature]	DATE	10/11/80	ENG-01788

TA-60

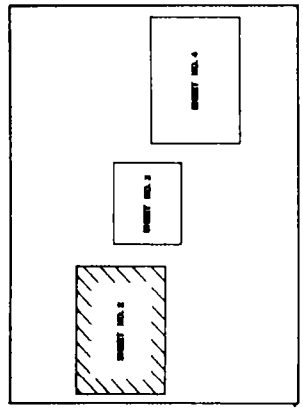


EXPLANATION
60-001 SWMU LOCATION

SCALE 1" = 100'



REV. 1 5/21/90



TA-60 MAP GUIDE

FIGURE 60-2
SOLID WASTE MANAGEMENT
UNITS (SWMUs) IN TA-60

NO.	DATE	DESCRIPTION
1	5/21/90	REVISED TO SHOW SWMU LOCATIONS
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UNIVERSITY OF CALIFORNIA
Los Angeles
FACILITIES ENGINEERING DIVISION
STRUCTURE LOCATION MAP
DATE: 5/21/90
BY: [Signature]

TA-61 OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 61 operations include the county sanitary landfill, Los Alamos and Mountain Mobile transit mix areas, and the radio repair shop. These structures serve the function of physical support and infrastructure for the Laboratory. The remaining land in the TA serves non-programmatic needs. In the future, TA-61 will be the site of the Materials Management functions and other Laboratory public access support functions. TA-61 structures are located on South Mesa and include several that were previously considered part of TA-3. The former site of Area No. 2 of TA-2 also lies within the current boundaries of TA-61, near the Technical Area's eastern edge. Additionally, SWMUs in this area, previously identified as TA-0, are renumbered to TA-61 SWMU designations in this revision. TA-61 includes the mesa, which is bounded by Los Alamos Canyon on the north and Sandia Canyon on the south, and the north wall of upper Sandia Canyon.

The elevation of TA-61 ranges from about 7,000 feet asl at the eastern boundary to about 7,300 feet asl at the western boundary. TA-61 lies in the Ponderosa Pine/Pinon-Juniper overstory vegetation zone. The area is underlain by welded Bandelier Tuff, forming steep cliffs at the top of the canyon walls. The soil consists primarily of rock outcrop and Carjo loam, with small areas of Tocal very fine sandy loam and Nyjack loam (LANL, 1989).

The potentiometric surface of the main aquifer in the Los Alamos region lies at about 5,950 to 6,225 feet asl at TA-61. Over 1,000 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-61

61-001	ACTIVE CONTAINER STORAGE AREA
61-002	PCB STORAGE AREA
61-003	BURN SITE
61-004	INACTIVE SEPTIC SYSTEMS
61-005	ACTIVE LANDFILL
61-006	USED OIL CONTAINER STORAGE AREA
61-007	LEAKING PCB TRANSFORMERS

SUMMARY

LOCATION	: TA-61	MATERIALS MANAGED	: HAZARDOUS WASTE
TYPE OF UNIT(S)	: CONTAINER STORAGE AREA		SUSPECTED PCBs
UNIT USE	: STORAGE		SOLID WASTE
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: EST. 1970s - PRESENT		
HAZARDOUS RELEASE	: KNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

A November 1988 field survey noted a container storage area outside of TA-61-23 (formerly TA-3-282).

WASTE INFORMATION

The storage area stores capacitors, unmarked drums, and several oil-filled vessels. The contents of the oil-filled vessels were analyzed prior to disposal.

RELEASE INFORMATION

Some of the drums are noted to be leaking. Past operations at most container storage areas have resulted in systematic releases of solid wastes, including RCRA-regulated constituents.

NOTES

This SWMU was formerly SWMU No. 3-001(q).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
61-001	TA3-1-CA-A/I-HW/RW			TA-61-23

SUMMARY

LOCATION : TA-61
 TYPE OF UNIT(s) : CONTAINER STORAGE AREA
 UNIT USE : STORAGE
 OPERATIONAL STATUS : INACTIVE/DECOMMISSIONED
 PERIOD OF USE : ? - 1988
 HAZARDOUS RELEASE : KNOWN
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE
 PCBs

UNIT INFORMATION

A fenced area outside TA-61-23, formerly TA-3-282, included a storage area for capacitors, transformers, and other electrical equipment. Some of the PCB-marked equipment was noted to have been leaking during the CEARP field survey. The capacitors containing PCBs were shipped off site. Several inches of soil were placed over the storage area and the area was covered with asphalt.

WASTE INFORMATION

The capacitors and other electrical equipment contained oil, some containing PCBs. Drums in this area were unmarked.

RELEASE INFORMATION

The PCB-containing equipment has been removed and the contaminated soil was covered.

* NOTES

This SWMU was formerly SWMU No. 3-003(c).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
61-002	TA3-1-CA-A/1-HW/RW	3.067	Tsk 21 : 1164 1165	TA-61-23, formerly TA-3-282

SUMMARY

LOCATION : TA-61
TYPE OF UNIT(S) : PIT
UNIT USE : DISPOSAL/TREATMENT
OPERATIONAL STATUS : DECOMMISSIONED
PERIOD OF USE : 1943 - 1949
HAZARDOUS RELEASE : UNKNOWN
RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : SUSPECTED RADIOACTIVE WASTE
SUSPECTED HAZARDOUS WASTE

UNIT INFORMATION

There were burning pits for both nonexplosive and explosive materials at South Mesa. Where all pits were located and how many pits there were is unknown. Aerial photos taken in the 1940s show what appears to be the burn pit on E. Jemez Road near where the trailer court is today.

WASTE INFORMATION

HE and other combustible materials are believed to have been burned in these pits. Depleted uranium may also have been treated or disposed of in these pits.

RELEASE INFORMATION

It is believed that no releases of hazardous materials occurred.

NOTES

This SWMU was formerly SWMU No. 3-006(a).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
61-003	TA3-12-CA-1-HW/RW	3.092	Tsk 20 : 109	SOUTH MESA

SUMMARY

LOCATION	: TA-61	MATERIALS MANAGED	: SANITARY WASTE
TYPE OF UNIT(S)	: SEPTIC SYSTEM		SUSPECTED HAZARDOUS WASTE
UNIT USE	: DISPOSAL/TREATMENT		SUSPECTED MIXED WASTE
OPERATIONAL STATUS	: INACTIVE		
PERIOD OF USE	: 1970 - ?		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

Inactive septic tank TA-3-689 [61-004(a)] is located northeast of TA-61-23, formerly TA-3-282, and was probably built to serve that building. Information on TA-3-689 is lacking. During trenching activities conducted in September, 1989, a cinder block structure [61-004(b)] was encountered in the soil along the south side of East Jemez Road. The site is located approximately seven-tenths of a mile east of the intersection of East Jemez Road and Diamond Drive. The block structure was approximately 6' x 8' x 6' deep. It had a corrugated tin roof that had been covered with poured concrete. There was a 6" feeder pipe in the top and a 6" effluent pipe that was located on the side wall. The structure was encountered at approximately 1' below grade. It is suspected to be a septic tank, probably placed in that location for solid waste disposal from one of the contracting firms that operated in the vicinity in the past.

WASTE INFORMATION

The septic tanks probably managed primarily sanitary waste. Detailed information on possible discharges of industrial liquids to the tanks is lacking.

RELEASE INFORMATION

It is unknown whether the tanks have released hazardous waste.

NOTES

SWMU No. 61-004(a) was formerly SWMU No. 3-017(b). SWMU No. 61-004(b) was formerly SWMU No. 0-022.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
61-004(a)	TA3-2-CA/ST-A/I-HW/RW		Tsk 21 : 126	TA-3-689 NORTHEAST OF TA-61-23, formerly TA-3-282
61-004(b)	**			SOUTH MESA

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-61	MATERIALS MANAGED :	SOLID WASTE
TYPE OF UNIT(S)	: LANDFILL		SUSPECTED HAZARDOUS WASTE
UNIT USE	: DISPOSAL		SUSPECTED RADIOACTIVE WASTE
OPERATIONAL STATUS	: ACTIVE		SUSPECTED PCBs
PERIOD OF USE	: 1974 - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: UNKNOWN		

UNIT INFORMATION

An active municipal landfill is located on East Jemez Road. The landfill is operated by Los Alamos County for both county and LANL use. It occupies about 24.3 acres of land that is owned by DOE. The landfill is excavated into bedrock and has no release controls associated with it. The waste is covered with soil at intervals.

WASTE INFORMATION

The landfill generally manages nonhazardous waste including laboratory and municipal solid wastes from the town of Los Alamos. It is unknown whether hazardous constituents have been included with the waste, but potential contaminants could include volatiles, semivolatiles, pesticides, PCBs, metals, and possibly radioactively contaminated material.

RELEASE INFORMATION

The RFA reported that leachate was ponded below the landfill as noted during the VSI. LANL staff believe that the liquid noted during the VSI was storm runoff. It is unknown whether the liquid contains hazardous constituents.

NOTES

This SWMU was formerly SWMU No. 0-006.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
61-005	TA0-6-L-A-SW	0.002	Tsk 27 : 1018	SOUTH MESA

SUMMARY

LOCATION	: TA-61	MATERIALS MANAGED	: SOLID WASTE
TYPE OF UNIT(S)	: CONTAINER STORAGE AREA		SUSPECTED HAZARDOUS WASTE
UNIT USE	: STORAGE		
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: ? - PRESENT		
HAZARDOUS RELEASE	: SUSPECTED		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

A used-oil management area is maintained at the active landfill located on East Jemez Road (see 61-005). This area is owned and operated by Los Alamos County. The area is used for the storage of drums and three storage tanks of waste oil, as noted in the RFA. The storage tanks were underground at the time of the VSI. Subsequently, the tanks were excavated and are presently aboveground. In 1989, two of the tanks were given to a recycler as scrap metal and were crushed and removed from the site at DOE's request. The tanks were estimated to be 12 ft long with a 5-ft diameter and a 2,500-gallon capacity. The oil is brought by local residents for recycling. The oil stored at the site is picked up periodically by an oil recycler. The drum storage area manages quantities of less than ten drums and measures approximately 50 square feet. It is underlain by soil.

WASTE INFORMATION

The used-oil management areas manage primarily waste oil. An acid battery was also noted on site during the VSI. The waste oil may contain metals. It is unknown whether the oil is analyzed prior to shipment off-site.

RELEASE INFORMATION

The RFA noted soil discoloration at the used-oil management area that extended over the edge of the canyon.

NOTES

This SWMU was formerly SWMU No. 0-002.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
61-006	**	0.001 0.003 0.004- 0.006	Tsk 26 : 23	SOUTH MESA

** No corresponding E. R. Program unit.

SUMMARY

LOCATION	: TA-61	MATERIALS MANAGED	: HAZARDOUS WASTE
TYPE OF UNIT(S)	: SOIL CONTAMINATION		PCBs
UNIT USE	: DISPOSAL		
OPERATIONAL STATUS	: INACTIVE		
PERIOD OF USE	: UNKNOWN		
HAZARDOUS RELEASE	: KNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

During sewer construction activities conducted in August 1989, detectable concentrations of polychlorinated biphenyls (PCBs) were encountered in the soil along the south side of East Jemez Road. The site is located approximately three-quarters of a mile east of the intersection of East Jemez Road and Diamond Drive. The location is thought to be near the transformer staging area of an electrical contracting firm that once operated in this vicinity. The firm is no longer in existence and its years of operation are not known. The contaminated soil is characterized as a brown, sandy clay with an organic odor. Initial analyses of the soil indicated the presence of PCBs in specific subsurface locations. The contamination is thought to be a result of the release of transformer oils containing PCBs.

WASTE INFORMATION

The soil contains PCBs, possibly due to releases of transformer oil.

RELEASE INFORMATION

Detectable concentrations of PCBs were encountered at several subsurface locations along the south side of East Jemez Road. Soil samples were taken along a 15' by 200' rectangular trench running parallel to the roadway. The soil samples with the high concentration of PCBs were collected from the eastern portion of the sampling area. These contained 4300 ppm PCBs. The majority of samples collected from the trench, however, indicated concentrations of less than 10 ppm or below the detection limit. In the trench itself, soil was removed to the point that PCB residuals were of concentrations below 10 ppm, although higher levels of contamination are thought to be present in nearby areas. The extent of vertical and lateral contamination is not known.

NOTES

This SWMU was formerly SWMU No. 0-023.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
61-007	**			SOUTH MESA

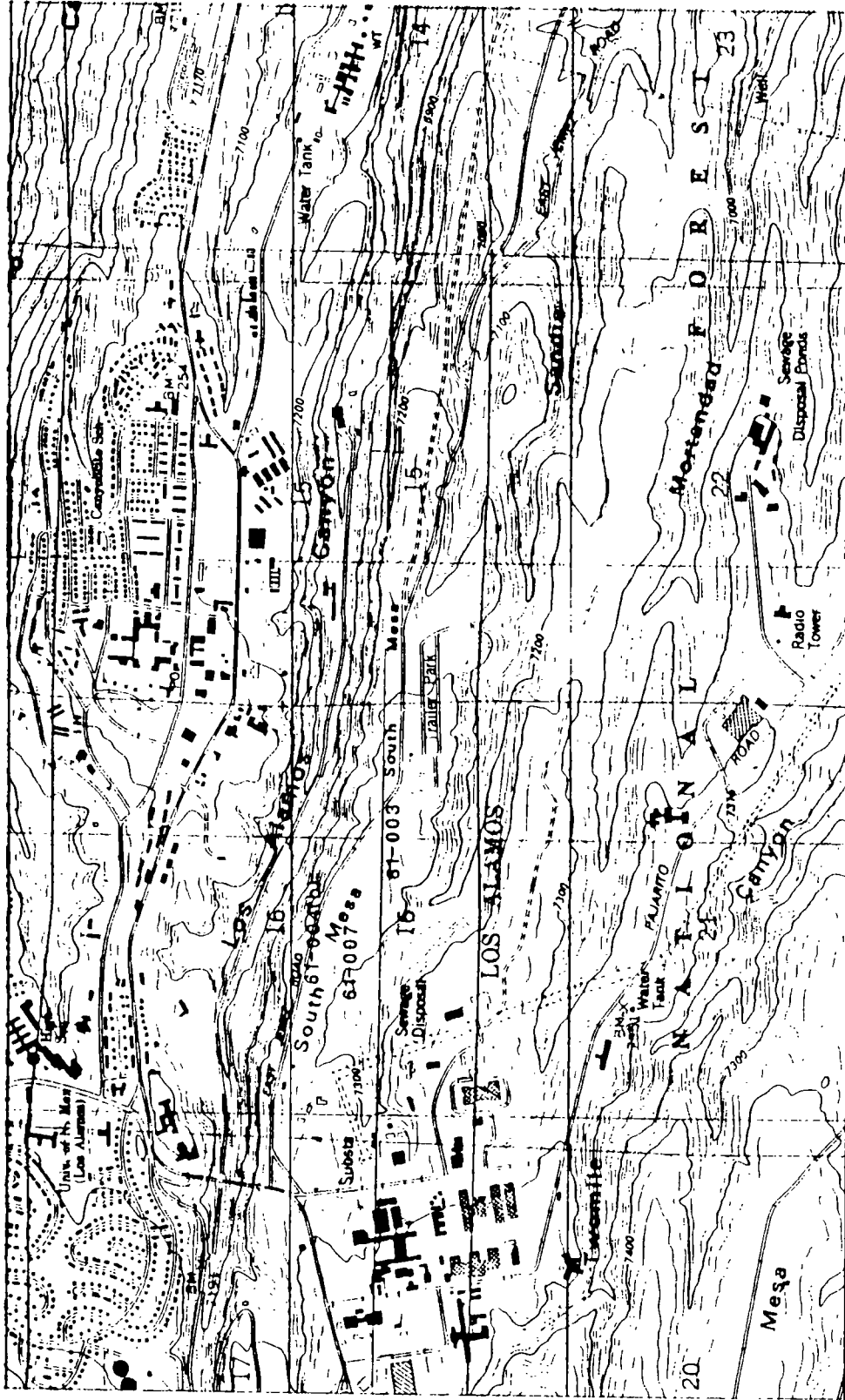
** No corresponding E. R. Program unit.

**TA-61 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
61-001	61-1
61-002	61-1
61-003	61-2
61-004(a)	61-1
61-004(b)	61-2
61-005	61-1
61-006	61-1
61-007	61-2

NOTE: Some structure locations may contain more than one SWMU.

Rev. 1, 5/21/90



EXPLANATION

61-001 SWMU LOCATION

UNCLASSIFIED

FIGURE 61-2

SOLID WASTE MANAGEMENT UNITS
(SWMUs) IN TA -61

TA-62
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 62 was established in 1989 when the Laboratory redefined the technical area boundaries. This site is primarily a buffer zone of the Laboratory, and has not been used for any Laboratory operations. This area has no solid waste management units from Laboratory use.

TA-63
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 63 houses a Laboratory engineering section office and several supporting office trailers. This technical area was created during the 1989 Laboratory redefinition of the technical areas wherein the western portion of TA-52 was designated as TA-63.

TA-63 lies at about 7,220 feet asl. It is located on Mesita del Buey, bounded on the north by Ten Site Canyon (a tributary of Mortandad Canyon) and on the south by Canada del Buey. Canyon walls are steep slopes or cliffs in this area. TA-63 lies on welded Bandelier Tuff, in the Ponderosa Pine/Pinon-Juniper and the Pinon-Juniper overstory vegetation zones. Soils in the technical area include Hackroy-Rock outcrop complex and rock outcrop (LANL, 1989).

At TA-63, the potentiometric surface of the main aquifer in the Los Alamos region lies at about 6,000 feet asl. Over 1,000 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-63

63-001

SEPTIC SYSTEMS

SUMMARY

LOCATION	: TA-63	MATERIALS MANAGED	: SANITARY WASTE
TYPE OF UNIT(S)	: SEPTIC SYSTEM		SUSPECTED HAZARDOUS WASTE
UNIT USE	: TREATMENT/DISPOSAL		
OPERATIONAL STATUS	: ACTIVE		
PERIOD OF USE	: 1965 - PRESENT		
HAZARDOUS RELEASE	: UNKNOWN		
RADIOACTIVE RELEASE	: NONE		

UNIT INFORMATION

Two active septic systems are listed on the LANL 12/89 Active Septic Tank Systems database. The first system [63-001(a)] consists of a 1000-gallon septic tank (TA-63-12), a seepage pit, and connecting drainlines. It is not known when this system was constructed. It serves approximately 20 to 30 people. The second system [63-001(b)] consists of a 920-gallon septic tank (TA-63-14, formerly TA-52-154), a seepage pit (formerly TA-0-462), and connecting drainlines. It was constructed in 1965 and has been active to the present. This septic system is registered as an Unpermitted Individual Liquid Waste System with EID registration number LA-09. This system serves building TA-63-1, an office building with 30 to 40 people. This building was previously used as a maintenance shop.

WASTE INFORMATION

Both systems currently handle sanitary waste. The TA-63-14 system may be suspect for solvent and chemicals discharged in previous years from the maintenance shop.

RELEASE INFORMATION

It is unknown whether there have been hazardous releases from these units.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
63-001(a)	**			TA-63-12
63-001(b)	TA52-2-CA/S/UST/ST-1/A-HW/RW		Tsk 7 : 145	TA-63-14

** No corresponding E. R. Program unit.

**TA-63 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
63-001(a)	Not shown
63-001(b)	63-1

NOTE: Some structure locations may contain more than one SWMU.

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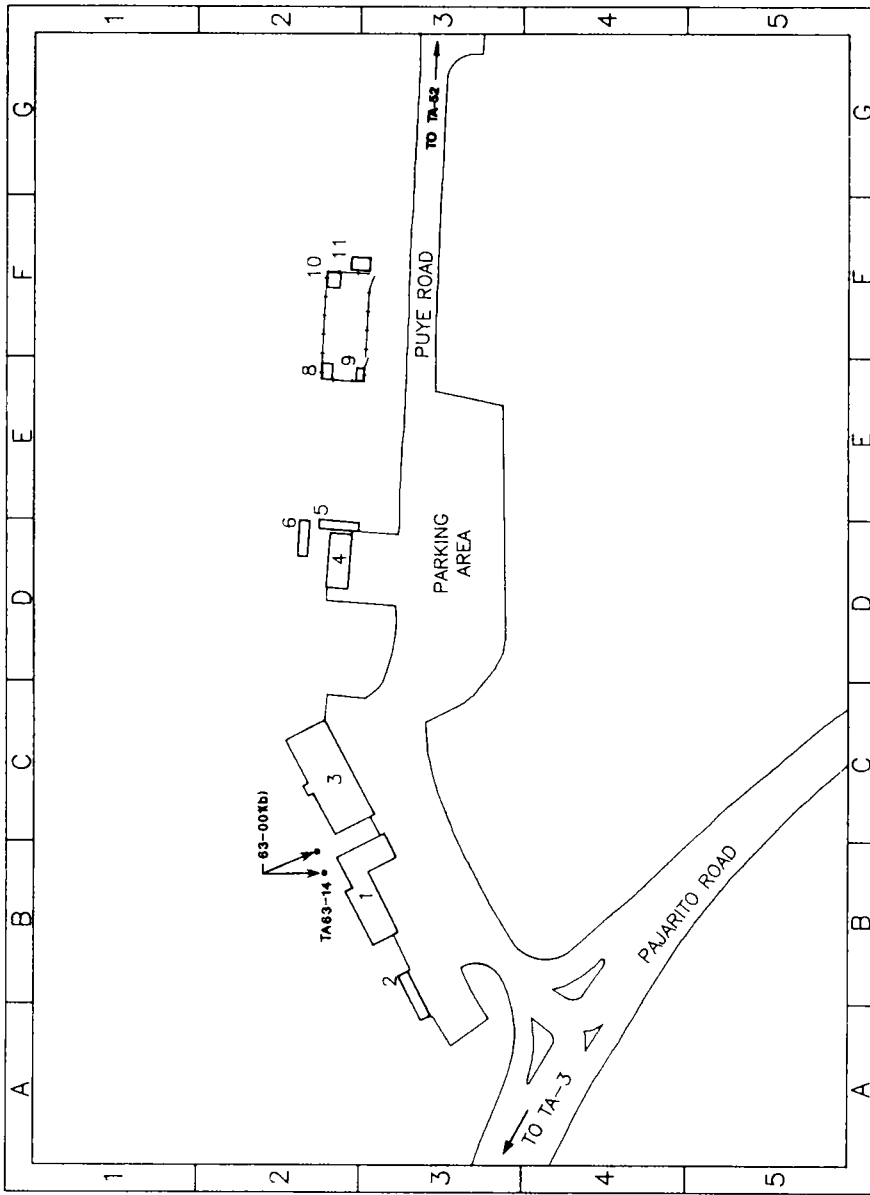
TA-63

STRUCTURE NUMBER INDEX

STRUCTURE NUMBER	STRUCTURE DESIGNATION	STRUCTURE NOMENCLATURE	SHEET MAP NO.	KEY	STRUCTURE LOCATION
63-1	42-1	ENG. 5 SECTION OFFICE	1	B-3	
63-2	42-2	TRAILER, OFFICE	1	B-3	
63-3	42-3	TRAILER, OFFICE	1	B-3	
63-4	42-4	TRAILER, OFFICE	1	C-2	
63-5	42-5	TRAILER, OFFICE	1	D-2	
63-6	42-6	TRAILER, OFFICE	1	D-2	
63-7	42-7	PLYWOOD SHED	1	E-2	
63-8	42-8	PLYWOOD SHED	1	E-2	
63-9	42-9	PLYWOOD SHED	1	F-2	
63-10	42-10	PLYWOOD SHED	1	F-2	
63-11	42-11	METAL SHED	1	F-2	

EXPLANATION

63-001 SWMU LOCATION



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FIGURE 63-1

BY: JMC	DATE: 8/25/90	BY: JMC	DATE: 8/25/90
UNIVERSITY OF CALIFORNIA			
LOS ANGELES			
FACILITIES ENGINEERING DIVISION			
STRUCTURE LOCATION MAP			
TA-63	SATELLITE SERVICE AREA	SCALE: 1" = 600'	DATE: 8/25/90
DESIGNED BY: JMC	CHECKED BY: JMC	DATE: 8/25/90	DATE: 8/25/90
DRWN BY: JMC	DATE: 8/25/90	ENGR: JMC	DATE: 8/25/90

TA-64

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 64 operations currently consist of physical support and infrastructure and administrative and technical services. Structures in the area include the Central Guard Facility, two water tanks, a storage area, and a pumping station.

TA-64 lies at an elevation ranging between 7,100 feet asl and 7,375 feet asl. TA-64 structures are located on the narrow mesa formed between Mortandad Canyon on the north and Two Mile Canyon, a branch of Pajarito Canyon, on the south. The technical area also includes a portion of the north wall of Two Mile Canyon. Canyon walls are steep slopes or cliffs in this area. TA-64 lies on Bandelier Tuff, in the Ponderosa Pine/Pinon-Juniper and Ponderosa Pine-fir overstory vegetation zones. Soil consists of steep rock outcrop and Tocal very fine sandy loam (LANL, 1989).

The potentiometric surface of the main aquifer in the Los Alamos region lies at 6,100 to 6,175 feet asl at TA-64 (IT, 1987). Over 1,000 feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-64

64-001

ACTIVE WASTE CONTAINER STORAGE AREA

SUMMARY

LOCATION : TA-64
 TYPE OF UNIT(S) : CONTAINER STORAGE AREA
 UNIT USE : STORAGE
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1988 - PRESENT
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

A satellite container storage area in TA-64 is listed in the 4/90 LANL Active Container Storage Area database. It is located in the armory room of building TA-64-1. The armory room is used to store and clean firearms. Most of the waste generated is from an ultrasonic cleaner that uses freon. Other solvents are used to remove carbon. HSE-5 has found high lead concentrations on the surfaces in the room.

WASTE INFORMATION

The waste materials stored in this area include freon, RBC cleaning Compound, 2-butoxy ethanol, acetone, and monoethanolamine. Lead is also likely to be present in the waste.

RELEASE INFORMATION

The storage area is located within a building. Hazardous releases to the environment are unlikely.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
64-001	**			TA-64-1

** No corresponding E. R. Program unit.

**TA-64 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
64-001	64-1

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LAN:TA-Units/78

TA-65
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 65 was established in 1989 when the Laboratory redefined the technical area boundaries. This site is primarily a buffer zone of the Laboratory, and has not been used for any Laboratory operations. This area has no solid waste management units from Laboratory use.

TA-66

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 66 was established in 1989 when the Laboratory redefined the technical area boundaries. This site is primarily a buffer zone of the Laboratory, and has not been used for any Laboratory operations. This area has no solid waste management units from Laboratory use.

TA-67
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 67 was established in 1989 when the Laboratory redefined the technical area boundaries. This site is primarily a buffer zone of the Laboratory, and has not been used for any Laboratory operations. This area has no solid waste management units from Laboratory use.

TA-68

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 68 was established in 1989 when the Laboratory redefined the technical area boundaries. This site is primarily a buffer zone of the Laboratory, and has not been used for any Laboratory operations. This area has no solid waste management units from Laboratory use.

TA-69
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 69 includes a guardhouse and a building in which documents were once shredded and incinerated. A portion of TA-69 is planned to be developed for use in Laboratory transportation and circulation. Another part will be used as a security and safety buffer zone.

TA-69 is located on near the northwest corner of the laboratory on Two Mile Mesa, a broad mesa bounded by Two Mile Canyon on the north and Pajarito Canyon on the south. The elevation of the area ranges between 7,600 feet asl at its eastern boundary and 7,800 feet asl at its western boundary. The area is underlain by welded Bandelier Tuff. Soil consists of Frijoles and Tocal very fine sandy loam, Carjo loam, fine Typic Eutroboralfs, and a very small area of rock outcrop. Vegetation is in the Ponderosa Pine/Pinon-Juniper and Ponderosa Pine-fir overstory vegetation zone (LANL, 1989).

The potentiometric surface of the main aquifer in the Los Alamos area lies over 6,200 feet asl at TA-69 (IT, 1987). Over 1,000 feet of unsaturated tuff and volcanic rock separates the surface from the underlying aquifer. Studies have shown the potential for downward movement of water from the surface is very low because of the hydraulic properties of the tuff and its very low moisture content (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-69

69-001
69-002

TWO-MILE MESA INCINERATOR
SEPTIC SYSTEMS

SUMMARY

LOCATION : TA-69
 TYPE OF UNIT(S) : INCINERATOR
 UNIT USE : TREATMENT
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : EST. 1959 - ?
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SOLID WASTE

UNIT INFORMATION

Two inactive incinerators and a shredder are located in a building, TA-69-3, formerly TA-0-139, just outside the gate leading to the Two-Mile Mesa site (TA-6). A LANL employee reported that they were used by the DOE to incinerate classified documents. During a 1986 CEARP survey, a pipe was seen protruding from the building. The pipe was part of a drain leading into the canyon.

WASTE INFORMATION

The incinerators at TA-0-139 burned classified documents.

RELEASE INFORMATION

There have been no known hazardous releases from these incinerators.

NOTES

This SWMU was formerly 0-013.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
69-001	TA0-17-0/IN-I-HW			TA-69-3, formerly TA-0-139

SUMMARY

LOCATION : TA-69
 TYPE OF UNIT(S) : SEPTIC SYSTEM
 UNIT USE : TREATMENT/DISPOSAL
 OPERATIONAL STATUS : ACTIVE/INACTIVE
 PERIOD OF USE : ? - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SANITARY WASTE

UNIT INFORMATION

Two active septic systems are listed in the LANL 12/89 Active Septic Tank Systems database. The first is tank TA-69-9 [69-002(a)], formerly TA-0-69, which was installed in 1954, serves a guardhouse (TA-69-1), and is built of reinforced concrete. It measures 5'4" x 5'4" x 3' deep and overflows to a 90-ft long drainline that discharges to an outfall. This system is registered as an Unpermitted Individual Liquid Waste System with EID Registration Number LA-08. The Active Septic Tank System database indicates that the drainline was plugged in 1988, and that the waste is now collected in a holding tank and pumped. The second system [69-002(b)] includes a 1000-gallon septic tank (TA-69-10) and a seepage pit. TA-69-10 was constructed in 1986 and presently serves a trailer (TA-69-2).

WASTE INFORMATION

These tanks are believed to handle only sewage.

RELEASE INFORMATION

There have been no known hazardous releases from these tanks.

NOTES

SWMU No. 69-002(a) was formerly SWMU No. 0-XXX.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
69-002(a)	TA0-22-ST-1/A-HW		Tsk 27 : 1013	TA-69-9 (formerly TA-0-69)
69-002(b)	**			TA-69-10

** No corresponding E. R. Program unit.

**TA-69 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
69-001	69-1
69-002(a)	69-1
69-002(b)	69-1

NOTE: Some structure locations may contain more than one SWMU.

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TA-70
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 70 was established in 1989 when the Laboratory redefined the technical area boundaries. This site is primarily a buffer zone of the Laboratory, and has not been used for any Laboratory operations. This area has no solid waste management units from Laboratory use.

TA-71
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 71 was established in 1989 when the Laboratory redefined the technical area boundaries. This site is primarily a buffer zone of the Laboratory, and has not been used for any Laboratory operations. This area has no solid waste management units from Laboratory use.

TA-72

OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 72 is currently used primarily for essential but currently non-programmatic needs, including environmental restoration and acting as a security buffer. Several pumping stations for the Laboratory's water supply are located in lower Sandia Canyon, within TA-72. TA-72 also includes some of former TA-20 and a portion of former TA-19. The Mason & Hanger Firing Range, once a part of TA-20, is still active in TA-72.

TA-72 lies at elevations ranging from 6,900 feet asl near the TA's western boundary to about 6,300 feet asl near its eastern boundary. It is located on the eastern boundary of the Laboratory, mostly in Santa Fe County, and includes parts of Sandia and Los Alamos Canyons surrounding Mesita de Los Alamos. Canyon walls are steep slopes or cliffs in this area. Most of TA-72 is underlain by Bandelier Tuff. The stream bed at the bottom of the canyons is underlain by a layer of alluvium, ranging in thickness from thin to about 36 feet in Sandia canyon and from six to 20 feet thick in Los Alamos Canyon. This layer is underlain by Bandelier Tuff in Sandia Canyon. Following the Los Alamos Canyon east, starting at the western edge of TA-72, the alluvium is underlain by Bandelier Tuff, by Puye Formation and by basalt (Purtyman, 1975).

Vegetation in TA-72 consists of the Pinon-Juniper, Ponderosa Pine/Pinon-Juniper, and Shrub-Grass-Forb overstory vegetation zones and a shrub-grass-forb component. A soil survey has not been performed on the soils of TA-72 (LANL, 1989). The potentiometric surface of the main aquifer in the Los Alamos area lies between 5,700 and 5,850 feet asl at TA-72 (IT, 1987a). Several hundred feet of unsaturated tuff and volcanic rock separate the surface from the aquifer. There is little potential for downward flow from the surface because of the low moisture conditions of the tuff (IT, 1987).

To the west of TA-72 Los Alamos Canyon receives treated industrial effluents and some sanitary effluents from TA-21, -41, -2 and -53. There are also occasional releases of cooling water from the research reactor at TA-2. On the flanks of the mountains, Los Alamos Reservoir impounds run-off from snowmelt and rainfall. Stream flow from this impoundment into the canyon is intermittent, dependent on precipitation, and may reach the Laboratory boundary at the eastern edge of TA-72. Infiltration of treated effluents and natural run-off maintains a shallow body of water in the alluvium of Los Alamos Canyon.

Sandia Canyon receives cooling tower discharges from the TA-3 power plant and some treated sanitary effluents from TA-3 facilities. Treated effluents from a sanitary treatment plant form a perennial stream in a short reach of the upper canyon, west of TA-72. Only during heavy summer thundershowers in the Sandia Canyon drainage area does stream flow reach the Laboratory boundary at the eastern edge of TA-72 (Environmental Surveillance Group, 1986).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-72

72-001
72-002
72-003

ACTIVE FIRING RANGE
OPEN DETONATION AREA
SEPTIC SYSTEM

SUMMARY

LOCATION : TA-72
 TYPE OF UNIT(S) : FIRING SITE
 UNIT USE : TESTING
 OPERATIONAL STATUS : ACTIVE
 PERIOD OF USE : 1966 - PRESENT
 HAZARDOUS RELEASE : SUSPECTED
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

An active firing range used by Mason and Hangar, the LANL security force, is located in Sandia Canyon at TA-72-11, formerly TA-0-274, just south of TA-53. The range is 175' x 250' and is surrounded by earthen berms to prevent bullets from exiting the site.

WASTE INFORMATION

The waste at this site consists of spent lead bullets and metal cases.

RELEASE INFORMATION

The lead bullets are not removed. The extent of soil contamination, if any, by lead is unknown.

NOTES

This SWMU was formerly SWMU No. 0-015(a).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
72-001	TAO-2-CA-A-HW			TA-72-11

SUMMARY

LOCATION : TA-72
TYPE OF UNIT(s) : OPEN DETONATION AREA
UNIT USE : TESTING
OPERATIONAL STATUS : INACTIVE
PERIOD OF USE : 1944 - 1948
HAZARDOUS RELEASE : KNOWN
RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : HAZARDOUS WASTE

UNIT INFORMATION

This unit consists of a mortar impact area in Sandia Canyon, located in the former TA-20. It was reportedly used for tank practice.

WASTE INFORMATION

The waste that may be present at the impact area is HE and buried shell residuals.

RELEASE INFORMATION

Ordnance and HE are known to have been present in this area; the extent of releases, if any, from these units is unknown.

NOTES

This SWMU was formerly SWMU No. 0-011(f).

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
72-002	TA0-11-CA-1-HW			TA-20

SUMMARY

LOCATION : TA-72
 TYPE OF UNIT(s) : SEPTIC SYSTEM
 UNIT USE : TREATMENT/DISPOSAL
 OPERATIONAL STATUS : ACTIVE/INACTIVE
 PERIOD OF USE : ? - PRESENT
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SANITARY WASTE

UNIT INFORMATION

One active septic system in TA-72 is listed in the 12/89 Active Septic Tank Systems database. It consists of a 2000-gallon septic tank (TA-72-18), a leach field, and connecting drainlines [72-003(a)]. This system was installed in 1989 and it serves the pistol range and 0 to 40 people. This system replaced a previous septic system [72-003(b)] which included a 540-gallon septic tank (TA-0-276) and a 100-ft long drainline. In 1987, a previous system was registered as an Unpermitted Individual Liquid Waste System with EID registration number LA-10.

WASTE INFORMATION

These septic systems manage sanitary waste.

RELEASE INFORMATION

There have been no hazardous releases from these tanks.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
72-003(a)	**			TA-72-18
72-003(b)	**			TA-0-276

** No corresponding E. R. Program unit.

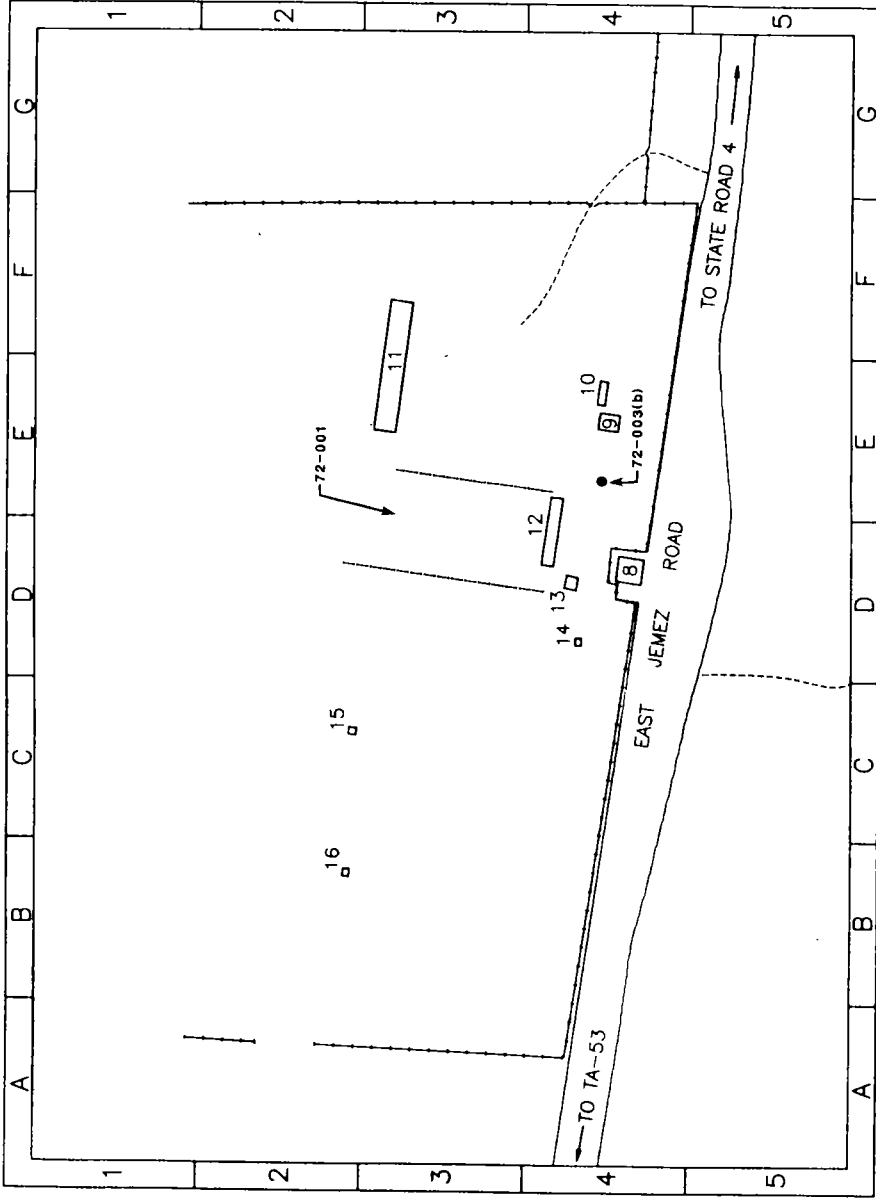
**TA-72 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

SWMU	FIGURE NUMBER
72-001	72-1
72-002	Not Shown
72-003(a)	Not Shown, Location Unknown
72-003(b)	72-1

NOTE: Some structure locations may contain more than one SWMU.

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TA-72



SCALE 1" = 600'



STRUCTURE NUMBER INDEX		STRUCTURE NOMENCLATURE		STRUCTURE LOCATION	
STRUCTURE TA-NUMBER	DESTINATION	STRUCTURE NOMENCLATURE	SHEET MAP NO.	KEY	KEY
72-1	1	LOS ALAMOS BOOSTER STA. #3	1	G-1	
72-2	2	WATER TANK	1	G-1	
72-3	3	WATER TREATMENT BLDG.	1	F-4	
72-4	4	PAZARITO WELL #1	1	F-4	
72-5	5	PAZARITO SAND TRAP	1	F-4	
72-6	6	UNIT SUBSTATION	1	C-3	
72-7	7	OFFICE BUILDING #3	2	D-2	
72-8	8	OFFICE BUILDING	2	E-4	
72-9	9	RANGE HOUSE	2	E-4	
72-10	10	SCORING AREA	2	E-4	
72-11	11	PAZARITO WELL #2	2	D-2	
72-12	12	WORKSHOP CLEANING AREA	2	D-2	
72-13	13	STORAGE BUILDING	2	D-4	
72-14	14	STORAGE SHED	2	D-4	
72-15	15	LOH HOUSE	2	C-2	
72-16	16	HIGH HOUSE	2	E-2	

FIGURE 72-1

REV. 17/03/80

DATE	BY	REVISION
UNIVERSITY OF CALIFORNIA		
Los Alamos 18 188 2000-1985		
FACILITIES ENGINEERING DIVISION		
STRUCTURE LOCATION MAP		
SCALE	DATE	BY

TA-73 OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 73 operations currently include the Los Alamos Airport (formerly designated as TA-0) and some building debris disposal. The airport was built on a landfill that was used by DOE, its predecessors, and by Los Alamos County. TA-73 also includes the location of former TA-26. SWMUs previously identified in this area that were designated TA-0 are renumbered to TA-73 in this revision. See Table I-1 in the introduction to this report for renumbered SWMUs.

The elevation of TA-73 ranges between 6,600 feet asl and 7,200 feet asl. The technical area lies at the northern boundary of the Laboratory. It includes the eastern edge of East Mesa and half of DP Canyon. East Mesa is bounded by Pueblo Canyon on the north and DP Canyon on the south. DP Canyon is a branch canyon to Los Alamos Canyon. The area is underlain by welded Bandelier Tuff. TA-73 soil consists of Hackroy sandy loam on the mesa top, steep rock outcrop on the northern DP Canyon wall, and Totavi gravelly loamy sand on the bottom of DP Canyon. Vegetation is in the Pinon-Juniper and Ponderosa Pine/Pinon-Juniper overstory vegetation zones (LANL, 1989).

The potentiometric surface of the main aquifer in the Los Alamos area lies between 5,860 and 5,940 feet asl at TA-73. Over 1,000 feet of unsaturated tuff and volcanic rock separates the surface of the mesa from the underlying aquifer. Studies have shown that the potential for downward movement of water from the surface is very low because of the hydraulic properties of the tuff and its very low moisture content (IT, 1987a).

LIST OF SOLID WASTE MANAGEMENT UNITS (SWMUs) IN TA-73

73-001	LANDFILL
73-002	AIRPORT INCINERATOR / SURFACE DISPOSAL
73-003	GARBAGE TRUCK AND CAN CLEANING
73-004	INACTIVE SEPTIC SYSTEMS
73-005	SURFACE DISPOSAL
73-006	AIRPORT BUILDING OUTFALLS

SUMMARY

LOCATION	: TA-73	MATERIALS MANAGED :	SUSPECTED HAZARDOUS WASTE
TYPE OF UNIT(s)	: LANDFILL		RADIOACTIVE WASTE
UNIT USE	: DISPOSAL		SOLID WASTE
OPERATIONAL STATUS	: INACTIVE		
PERIOD OF USE	: EST. 1943 - 1986		
HAZARDOUS RELEASE	: SUSPECTED		
RADIOACTIVE RELEASE	: SUSPECTED		

UNIT INFORMATION

An extensive landfill used for nonradioactive townsite and laboratory trash is now near the airport landing strip [73-001(a)]. On April 3, 1953, 125 lbs of natural uranium were accidentally picked up by the refuse crew and disposed of in this landfill. Approximately 25 lbs were later recovered and the remaining activity was covered with several loads of dirt. In 1959, a memo noted that disposal practices could cause an explosion, thus indicating that the trash may have contained small quantities of high explosives. Oil from the motor pool and vehicle shop was disposed in an open pit at this landfill [73-001(b)]. This pit was shown as early as 1947 on drawing SFA-ZZ-2/1 where it was labeled "Sludge Drying Pit". A 1963 topographic map (Drawing LA-FM-54) shows the pit area as a depression with water ponded in it. A 1974 engineering drawing (LA-NH-2) shows the waste oil pit with the label "Buried Waste Oil Pit". In 1974 the pit is shown as approximately 40' x 15'; the depth is unknown. A former Zia employee recalls receiving work orders to place clean sand in the waste oil pit in an attempt to solidify the oil. Laboratory trash was burned at the edge of Pueblo Canyon adjacent to the airport. Once a month, combustion residues were moved to the landfill. Los Alamos County assumed operation in 1966. Use of this landfill for disposal of construction debris continued into the late 1980s. Five bunkers for HE storage, built on four pads, were located east of the airport landfill. The bunkers were built in 1947 of concrete covered by an earth berm. Each bunker was approximately 46.7' square. In 1974, the bunkers were decommissioned, and the debris was placed at the southeast corner of the airport landing strip fenced area [73-001(c)]. In addition, a hot mix asphalt batch plant was located at the east end of the airstrip in the late 1940s. Information on the decommissioning of the asphalt batch plant is unavailable. In 1984, a portion of this landfill, located under what is now a private plane tie down area, was removed. Landfill debris was removed from an area that extended 10' to 12' past the eastern boundary of the planned tie down area. This material was buried in two pits [73-001(d)] near the northeast end of the runway. These pits were excavated to approximately 60 ft and were used until late 1986 when they were filled with dirt and hydroseeded.

WASTE INFORMATION

The waste in the landfill near the airport strip is primarily municipal and laboratory trash. The waste could potentially include volatiles, semivolatiles, metals, pesticides, and PCBs. Approximately 100 lbs of uranium is present as well as possible explosive material from pre-1959 disposal. The waste oil pit contained motor oil.

RELEASE INFORMATION

Uranium remains in the landfill; combustion products were released to the air during burning and methane is currently being generated and released to the air from the landing strip landfill. There are no release controls associated with this unit. The waste oil pit has been covered over, but the waste remains in place. The possible contaminants and the extent of releases are unknown. The landfill was investigated as a part of Environmental Problem 22 in the DOE environmental survey. Fourteen samples were collected from sampling points spaced approximately every 60 ft along the north side of the runway. The samples were analyzed for HE, metals, pesticides/PCBs, alpha, beta, and gamma emitters, and volatile organic compounds. No HE or beta emitters were detected. Metals, PCBs, alpha emitters, gamma emitters, and volatiles were present in the samples. Some debris is present on Los Alamos County land on the hillside of Pueblo Canyon.

NOTES

SWMU Nos. 73-001(a) and (b) were formerly SWMU No. 0-007.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
73-001(a)	TA0-4-L-I-HW/RW/PP	0.007	Tsk 26 : 26 27 29	AIRPORT LANDING STRIP

(continued)

SWMU CROSS-REFERENCE LIST
(continued)

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
73-001(b)	**		Tsk 26 : 28	AIRPORT LANDING STRIP
73-001(c)	TA0-5-CA-01-HW		Tsk 27 : 1082	SOUTHWEST OF AIRPORT LANDING STRIP
73-001(d)	**			NORTHEAST OF AIRPORT LANDING STRIP

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-73
 TYPE OF UNIT(S) : INCINERATOR/SURFACE DISPOSAL
 UNIT USE : TREATMENT/DISPOSAL
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : LATE 1940s - 1950s
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SOLID WASTE

UNIT INFORMATION

An incinerator was located in a two-story building, TA-73-2, formerly TA-0-1123, next to the present airport terminal. The incinerator and stack have been removed and the building is now used for storage. Noncombustible materials (including many cans) were deposited on a canyon ledge in back of the incinerator building. The noncombustibles may have been deposited from the concrete staging area that extends over the mesa edge into Pueblo Canyon. This incinerator may have been used to burn townsite wastes, but documentation is lacking.

WASTE INFORMATION

The incinerator may have burned domestic debris. The surface disposal area, by visual inspection, appears to contain burned cans and other noncombustibles.

RELEASE INFORMATION

There have been no known hazardous releases from this incinerator. A radiation, HE, toxic contamination, and environmental hazardous survey of the incinerator building was requested in 1973. HSE-1 conducted the radioactivity survey and found no radioactive contamination. HSE-5 found no significant chemical or toxic contamination. HSE-8 determined that demolition or removal of the building would not present a unique environmental problem. Sampling at the surface disposal area has not been undertaken. The receiving area of the surface disposal may be on Los Alamos County land in Pueblo Canyon.

NOTES

This SWMU was formerly SWMU No. 0-014.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
73-002	TA0-3-IN/OL-I-HW	0.012	Tsk 25 : 11 22	TA-73-2, formerly TA-0-1123

SUMMARY

LOCATION : TA-73 MATERIALS MANAGED : SOLID WASTE
 TYPE OF UNIT(S) : SOIL CONTAMINATION
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : DECOMMISSIONED
 PERIOD OF USE : EST. 1940s - 1950s
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

UNIT INFORMATION

A garbage truck and can cleaning plant was located about 30 ft south of the incinerator building, TA-73-2, formerly TA-0-1123. It is assumed that the trucks and cans were from the townsite or from noncontaminated areas of the lab. According to a 1949 engineering drawing (Z-436), this plant consisted of an open-sided truck cleaning area, a concrete-block enclosed can cleaning area, and an open storage yard. The storage yard was surrounded by a 6" concrete curb and a 4.5 ft-high wood fence. The wash areas had no concrete curbs, gutters, catch basins, or storm sewers. The washwater discharged to a septic tank [see 73-004(b)].

WASTE INFORMATION

The waste was washwater and domestic waste.

RELEASE INFORMATION

There were no known releases of hazardous constituents from this unit.

NOTES

This SWMU was formerly SWMU No. 0-020.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
73-003	**			NEAR TA-73-2, formerly TA-0-1123

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-73
 TYPE OF UNIT(S) : SEPTIC SYSTEM
 UNIT USE : TREATMENT/DISPOSAL
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : ?
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SANITARY WASTE

UNIT INFORMATION

Inactive septic systems in TA-73 include:

LOCATION	SWMU NO.	USE PERIOD	SIZE	CONSTRUCTION	BUILDING SERVED	OVERFLOW
West of incinerator bldg	73-004(a)	? - 1955	6' x 10.5' x 7.3'	concrete	incinerator (TA-73-2, formerly TA-0-1123)	outfall
NW of garbage truck & can cleaning plant	73-004(b)	1947 - ?	7' x 4' x 5.5'	concrete	Garbage truck & can cleaning plant	outfall
N of Control tower	73-004(c)	? - ?	?	?	Control tower	outfall
Airport landfill	73-004(d)	? - ?	?	?	Landfill office	leach field

WASTE INFORMATION

The tanks associated with the incinerator building, control tower, and landfill office are believed to have handled sanitary waste. The garbage truck cleaning plant tank probably received wash water, as well as sanitary waste.

RELEASE INFORMATION

There have been no known releases of hazardous constituents from these tanks. The outfalls and leach field may have released sanitary waste to Los Alamos County land in Pueblo Canyon.

NOTES

SWMU Nos. 73-004(a) and (b) were formerly SWMU Nos. 0-021(a) and (b), respectively.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CEARP IDENTIFICATION NUMBER(S)	RFA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
73-004(a)	**		Tsk 27 : 1010 1012	W OF TA-73-2, formerly TA-0-1123
73-004(b)	**		Tsk 27 : 1011	NW OF TA-73-2, formerly TA-0-1123
73-004(c)	**			NORTH OF CONTROL TOWER
73-004(d)	**			AIRPORT LANDFILL

** No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-73
 TYPE OF UNIT(S) : SURFACE DISPOSAL
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : ?
 HAZARDOUS RELEASE : NONE
 RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SOLID WASTE

UNIT INFORMATION

Just north of TA-21 and south of East Road and the airport, some mounds, concrete, and other debris were seen on the mesa. It is suspected that the debris is the remains of some small buildings that were shown on 1948 topographic maps. The history of laboratory activities in this area is not known. This area is on land currently under the laboratory's control.

WASTE INFORMATION

The mounds are suspected to contain building debris.

RELEASE INFORMATION

No known hazardous releases have occurred from this unit.

NOTES

This SWMU was formerly SWMU No. 0-010.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
73-005	TA0-13-0L-1-RW/HW		Tsk 27 : 1017	TA-73, formerly TA-0-195

SUMMARY

LOCATION : TA-73 MATERIALS MANAGED : SOLID WASTE
 TYPE OF UNIT(S) : OUTFALL
 UNIT USE : DISPOSAL
 OPERATIONAL STATUS : INACTIVE
 PERIOD OF USE : LATE 1940s - ?
 HAZARDOUS RELEASE : UNKNOWN
 RADIOACTIVE RELEASE : UNKNOWN

UNIT INFORMATION

This unit includes building drains and storm drains that discharged to outfalls at the airport. The incinerator, TA-73-2, had two drainlines that discharged to separate outfalls into Pueblo Canyon. One drainline served a 5" floor drain on the east side of the stoking room. The drainline was a 6"-dia vitrified clay pipe that extended approximately 18 ft from the north side of the building into Pueblo Canyon. The second drainline served a 5" floor drain on the west side of the stoking room. It was also a 6"-dia vitrified clay pipe that exited the east side of the building, had a 90-degree turn, and extended 21 ft from the building into Pueblo Canyon.

WASTE INFORMATION

The incinerator floor drains are assumed to have handled washwater.

RELEASE INFORMATION

It is unknown whether any hazardous or radioactive contaminants were present in the waste or if they were released to the outfall receiving areas. These outfalls released solid waste to Los Alamos County land in Pueblo Canyon.

SWMU CROSS-REFERENCE LIST

<u>SWMU NUMBER</u>	<u>CEARP IDENTIFICATION NUMBER(S)</u>	<u>RFA UNIT</u>	<u>E.R. RELEASE SITE INFO.</u>	<u>ASSOCIATED STRUCTURES</u>
73-006	**			TA-73-2, formerly TA-0-1123

** No corresponding E. R. Program unit.

**TA-73 SOLID WASTE MANAGEMENT UNITS
(SWMUs) FIGURE INDEX**

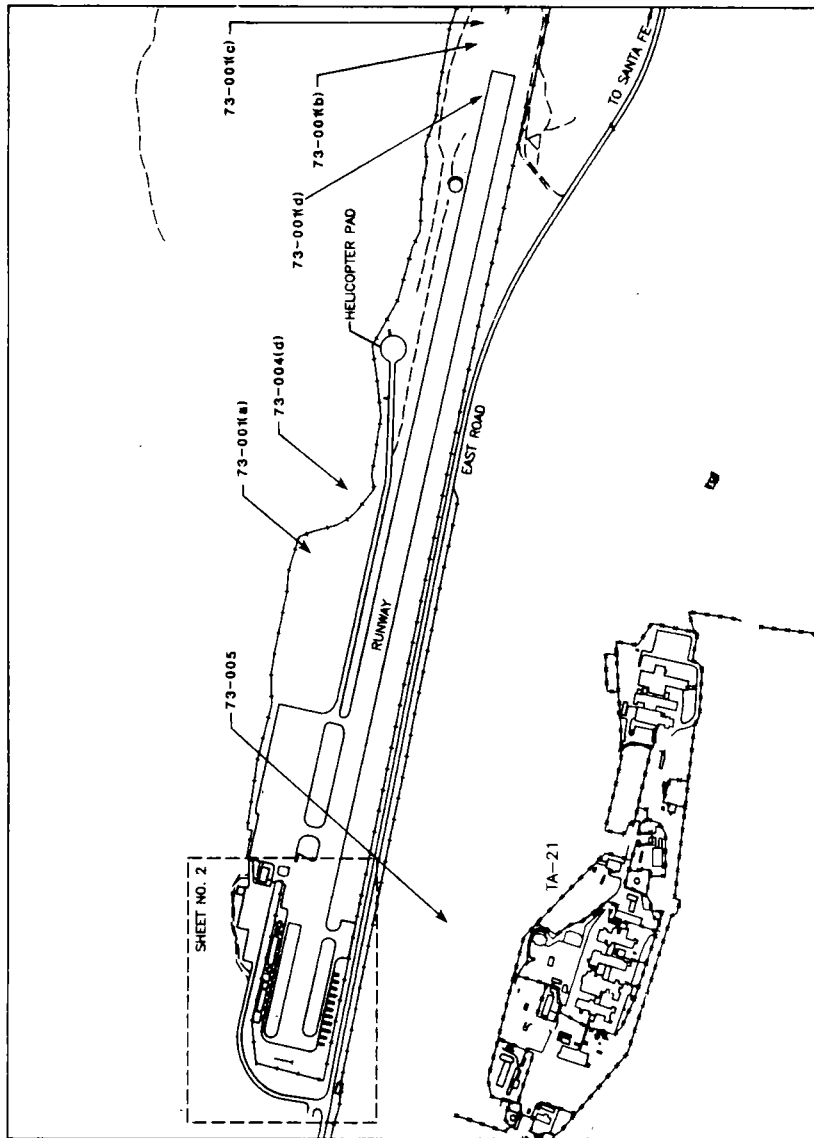
SWMU	FIGURE NUMBER
73-001(a)	73-1
73-001(b)	73-1
73-001(c)	73-1
73-001(d)	73-1
73-002	73-2
73-003	73-2
73-004(a)	73-2
73-004(b)	73-2
73-004(c)	73-2
73-004(d)	73-1
73-005	73-1
73-006	73-2

NOTE: Some structure locations may contain more than one SWMU.

Rev. 1, 4/5/90

LAN:TA-Units/81

TA-73



RU70015

STRUCTURE NUMBER INDEX

STRUCTURE NUMBER	STRUCTURE DESIGNATION	STRUCTURE NOMENCLATURE	SHEET MAP NO.	KEY
73- 1	1	AIRPORT TERMINAL FACILITY	2	G-2
73- 2	2	STORAGE BUILDING	2	G-2
73- 3	3	PERSONNEL SHED	2	G-2

EXPLANATION
73-001 SWMU LOCATION

REV. 1 4/5/00

FIGURE 73-1
SOLID WASTE MANAGEMENT
UNITS (SWMUs) IN TA-73

NO.	DATE	REVISION
UNIVERSITY OF CALIFORNIA		
Los Alamos NATIONAL LABORATORY		
FACILITIES ENGINEERING DIVISION		
STRUCTURE LOCATION MAP		
TA-73	DATE	APPROVED BY

TA-74
OPERATIONS AND ENVIRONMENTAL SETTING

Technical Area (TA) 74 was established in 1989 when the Laboratory redefined the technical area boundaries. This site is primarily a buffer zone of the Laboratory, and has not been used for any Laboratory operations. This area has no solid waste management units from Laboratory use.

APPENDIX A

OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME
TA-0	TA-0-1051	Boiler Blowdown	02A	108	Inactive	
	Pajarito Well #4	Noncontact Cooling Water	04A	118	Active	
	Pajarito Well #5	Noncontact Cooling Water	04A	119	Inactive	
TA-1	TA-1	Chemical Drain	N/A	N/A	Inactive	
	TA-1	Septic Systems	N/A	N/A	Inactive	
TA-2	TA-2	Industrial Waste	N/A	N/A	Inactive	
	TA-2	Treated Cooling Water	N/A	N/A	Inactive	
	TA-2-43	Septic System	N/A	N/A	Inactive	
	TA-2-44	Treated Cooling Water	03A	019	Active	1.56 GPM
	TA-2-49	Treated Cooling Water	03A	020	Active	4.0 GPM
TA-3	TA-3	Sewage Treatment Plant	SSS	01S	Active	0.2899 MGD
	TA-3	Geothermal Discharge	120	120	Inactive	
	TA-3-22	Power Plant	01A	001/002/003/ 004/005	Active	
TA-3	TA-3-22	Noncontact Cooling Water	04A	051	Active	3.0 GPM
	TA-3-29	Treated Cooling Water	03A	021	Active	
	TA-3-31	Storm Drain	N/A	N/A	Inactive	
	TA-3-38	Storm Drain	N/A	N/A	Unknown	
	TA-3-66	Industrial Waste	N/A	N/A	Inactive	
	TA-3-73	Asphalt Plant Discharge	04A	109	Active	1.0 GPM
	TA-3-73	Noncontact Cooling Water	04A	110	Inactive	1.0 GPM
	TA-3-102	Noncontact Cooling Water	03A	009	Active	12.5 GPM
	TA-3-105	Noncontact Cooling Water	04A	010	Inactive	
	TA-3-127	Treated Cooling Water	03A	022/138	Active	3.25 GPM
	TA-3-141	Noncontact Cooling Water	04A	140	Active	
	TA-3-156	Treated Cooling Water	03A	023	Active	2.0 GPM
	TA-3-170	Noncontact Cooling Water	04A	094	Active	1.5 GPM
	TA-3-170	Cylinder Cleaning Waste	04A	095	Inactive	

**OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY
(CONTINUED)**

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME
TA-3	TA-3-187	Treated Cooling Water	03A	024	Active	1.0 GPM
	TA-3-208	Treated Cooling Water	03A	025/026	Active	1.75 GPM
	TA-3-216	Noncontact Cooling Water	04A	086	Inactive	
	TA-3-285	Treated Cooling Water	03A	027	Active	14.0 GPM
	TA-3-382	Motorpool	N/A	N/A	Inactive	
	TA-3-1499	Treated Cooling Water	03A	148	Active	
TA-4	TA-4	Photo Waste	N/A	N/A	Inactive	
TA-5	TA-5	Photo Waste	N/A	N/A	Inactive	
	TA-5-8	Floor Drain	N/A	N/A	Inactive	
TA-6	TA-6-10	Sanitary Drainline	N/A	N/A	Inactive	
	TA-6-40	High Explosive Discharge (ST)	N/A	N/A	Inactive	
TA-8	TA-8-21	Photo Wastes	06A	075	Active	1.2 GPM
	TA-8-22	Photo Wastes	06A	074	Active	2.5 GPM
	TA-8-70	Noncontact Cooling Water	04A	115/076	Active	1.0 GPM
TA-9	TA-9	Oxidation Pond	SSS	02s/11s	Active	
	TA-9-21-A	High Explosive Discharge	05A	066	Active	4.33 GPM
	TA-9-21-B	High Explosive Discharge	05A	067	Active	6.0 GPM
	TA-9-48	High Explosive Discharge	05A	068	Active	10.0 GPM
	TA-9-203	Septic System	N/A	N/A	Inactive	
	TA-9-212	Septic System	N/A	N/A	Inactive	
TA-10	TA-10-1	Sanitary Drainline	N/A	N/A	Inactive	
	TA-10-38	Industrial Waste	N/A	N/A	Inactive	
	TA-10-41,42	Sanitary	N/A	N/A	Inactive	

**OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY
(CONTINUED)**

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME
TA-11	TA-11-30	Treated Cooling Water	03A	130	Active	
	TA-11-50	High Explosive Discharge	05A	069	Active	.062GPM
	TA-11-51	High Explosive Discharge	05A	096	Active	.0925 GPM
	TA-11-52	High Explosive Discharge	05A	097	Active	.12 GPM
TA-14	TA-14-31	High Explosive Discharge	05A	N/A	Active	
TA-15	TA-15-20	High Explosive Discharge	N/A	N/A	Inactive	
	TA-15-40	Noncontact Cooling Water	04A	102	Active	
	TA-15-40	Noncontact Cooling Water	04A	103	Active	
	TA-15-R45	Noncontact Cooling Water	04A	122	Inactive	
	TA-15-50	Industrial Waste	N/A	N/A	Inactive	
	TA-15-63	Sanitary Waste (ST)	N/A	N/A	Inactive	
	TA-15-92	Sanitary Waste	N/A	N/A	Inactive	
	TA-15-138	Noncontact Cooling Water	04A	105	Inactive	
	TA-15-R183	Photo Wastes	06A	123	Active	0.5 GPM
	TA-15-184	Noncontact Cooling Water	04A	139	Active	
	TA-15-194	Noncontact Cooling Water	04A	093	Active	2.0 GPM
	TA-15-202	Treated Cooling Water	03A	028	Active	0.875 GPM
	TA-15-203	Industrial Waste	N/A	N/A	Inactive	
	TA-15-263	Noncontact Cooling Water	04A	121	Inactive	
TA-15-306	Noncontact Cooling Water	04A	143	Active		
TA-16	TA-16	Sewage Treatment Plant	SSS	03s	Active	0.0171 MGD
	TA-16-26	Treated Cooling Water	N/A	N/A	Inactive	
	TA-16-45	Photo Wastes	N/A	N/A	Inactive	
	TA-16-175	Sanitary Waste (SS)	SSS	N/A	Inactive	
	TA-16-178	Sanitary Waste (SS)	SSS	N/A	Inactive	
	TA-16-189	Treated Cooling Water	N/A	N/A	Inactive	
	TA-16-202	Noncontact Cooling Water	04A	083	Active	2.0 GPM
	TA-16-220	Noncontact Cooling Water	04A	070	Active	1.0 GPM
	TA-16-222	Photo Wastes	06A	073	Active	

**OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY
(CONTINUED)**

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME
TA-16	TA-16-260	High Explosive Discharge	05A	056	Active	1.25 GPM
	TA-16-262	Treated Cooling Water	N/A	N/A	Inactive	
	TA-16-265	High Explosive Discharge	05A	057	Active	0.12 GPM
	TA-16-267	High Explosive Discharge	05A	149	Active	
	TA-16-280	High Explosive Discharge	05A	061	Active	0.31 GPM
	TA-16-300 Line	High Explosive Discharge	05A	058	Active	15.0 GPM
	TA-16-301	High Explosive Discharge	N/A	N/A	Inactive	
	TA-16-303	High Explosive Discharge	N/A	N/A	Inactive	
	TA-16-305	High Explosive Discharge	N/A	N/A	Inactive	
	TA-16-307	High Explosive Discharge	N/A	N/A	Inactive	
	TA-16-340	Treated Cooling Water	03A	029/054	Inactive	
	TA-16-340	High Explosive Discharge	05A	054/029	Active	15.0 GPM
	TA-16-342	High Explosive Discharge	05A	062	Active	0.05 GPM
	TA-16-345	High Explosive Discharge	N/A	N/A	Inactive	
	TA-16-360	High Explosive Discharge	N/A	N/A	Inactive	
	TA-16-370	Treated Cooling Water	03A	092	Active	1.0 GPM
	TA-16-372	Treated Cooling Water	N/A	N/A	Inactive	
	TA-16-380	High Explosive Discharge	05A	052	Active	0.0625 GPM
	TA-16-400	High Explosive Discharge	05A	063	Active	0.625 GPM
	TA-16-401,406	High Explosive Discharge	05A	055	Active	5.25 GPM
	TA-16-410	High Explosive Discharge	05A	053	Active	0.125 GPM
	TA-16-430	Treated Cooling Water	03A	060	Active	2.63 GPM
	TA-16-430	High Explosive Discharge	05A	071	Active	0.5 GPM
	TA-16-450	Noncontact Cooling Water	04A	091	Active	
	TA-16-450	High Explosive Discharge	N/A	N/A	Inactive	
	TA-16-460	Noncontact Cooling Water	04A	059/072	Inactive	
	TA-16-460	High Explosive Discharge	05A	072/059	Active	2.5 GPM
TA-16-478	Noncontact Cooling Water	04A	134	Active		
TA-16-540	Boiler Blowdown	02A	007	Active		

**OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY
(CONTINUED)**

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME
TA-18	TA-18	Oxidation Pond	SSS	04s	Active	
	TA-18-30-31	Photo Wastes	06A	104	Inactive	
	TA-18-40	Septic System	N/A	N/A	Inactive	
	TA-18-43	Septic System	N/A	N/A	Inactive	
TA-21	TA-21	Sewage Treatment Plant	SSS	05s	Active	
	TA-21-2	Treated Cooling Water	03A	030	Inactive	
	TA-21-2	Acid Sewer	N/A	N/A	Inactive	
	TA-21-3,6	Storm Drain	N/A	N/A	Inactive	
	TA-21-3,6	Sanitary and Industrial Waste (SS)	N/A	N/A	Inactive	
	TA-21-3,6	Sewer Drains	N/A	N/A	Inactive	
	TA-21-35	Treated Industrial Waste	N/A	N/A	Inactive	
	TA-21-53	Septic Systems	N/A	N/A	Inactive	
	TA-21-55	Septic Systems	N/A	N/A	Inactive	
	TA-21-106	Septic Systems	N/A	N/A	Inactive	
	TA-21-123	Septic Systems	N/A	N/A	Inactive	
	TA-21-124	Septic Systems	N/A	N/A	Inactive	
	TA-21-125	Septic Systems	N/A	N/A	Inactive	
	TA-21-143	Treated Cooling Water	03A	031	Active	2.0 GPM
	TA-21-149	Noncontact Cooling Water	04A	142	Active	
	TA-21-150	Treated Cooling Water	03A	032	Active	0.31 GPM
	TA-21-152	Treated Cooling Water	03A	033	Inactive	
	TA-21-163	Septic Systems	N/A	N/A	Inactive	
	TA-21-166	Treated Cooling Water	03A	034	Active	7.5 GPM
	TA-21-181	Septic Systems	N/A	N/A	Inactive	
	TA-21-194	Septic Systems	N/A	N/A	Inactive	
	TA-21-210	Treated Cooling Water	03A	035	Active	0.185 GPM
	TA-21-219	Septic Systems	N/A	N/A	Inactive	
	TA-21-220	Treated Cooling Water	03A	036	Active	1.1 GPM
	TA-21-257	Industrial Waste	050	050	Inactive	

**OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY
(CONTINUED)**

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME	
TA-21	TA-21-314	Treated Cooling Water	03A	037	Active	0.25 GPM	
	TA-21-357	Boiler Blowdown	02A	006	Inactive		
	TA-21-357	Boiler Blowdown	02A	129	Active		
TA-22	TA-22	Plating Solutions/Industrial	N/A	N/A	Inactive	0.125 GPM 1.75 GPM	
	TA-22 (N)	Noncontact Cooling Water	04A	011	Inactive		
	TA-22-1	High Explosive Discharge	05A	065	Inactive		
	TA-22-5 (S)	Noncontact Cooling Water	04A	084	Inactive		
	TA-22-6	Boiler Blowdown	02A	008	Inactive		
	TA-22-6	Noncontact Cooling Water	04A	085	Inactive		
	TA-22-25	High Explosive Discharge	N/A	N/A	Inactive		
	TA-22-34	High Explosive Discharge	05A	064/078	Inactive		
	TA-22-34	Photo Wastes	06A	078/064	Active		
	TA-22-52	Printed Circuit Board	077	077	Inactive		
	TA-22-91	Printed Circuit Board	SSS	128	Active		
	TA-22-91	Industrial Wastes	N/A	N/A	Inactive		
	TA-26	TA-26	Unknown	N/A	N/A		Inactive
	TA-33	TA-33-32	Sanitary Runoff	N/A	N/A		Inactive
TA-33-32		Sanitary Waste (SS)	N/A	N/A	Unknown		
TA-33-86		Noncontact Cooling Water	04A	147	Active		
TA-33-114		Treated Cooling Water	03A	038	Active		
TA-35	TA-35	Oxidation Pond	SSS	10s	Active	0.0140 MGD	
	TA-35	Sewage Treatment Plant	N/A	N/A	Inactive		
	TA-35-25	Industrial Waste	N/A	N/A	Inactive		
	TA-35-29	Noncontact Cooling Water	04A	116	Inactive		
	TA-35-33	Treated Cooling Water	03A	039	Inactive		
	TA-35-34	Noncontact Cooling Water	04A	089	Inactive		
	TA-35-36	Unknown	N/A	N/A	Inactive		
	TA-35-46	Noncontact Cooling Water	04A	087	Inactive		

**OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY
(CONTINUED)**

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME
TA-35	TA-35-67	Noncontact Cooling Water	04A	012	Inactive	
	TA-35-67	Noncontact Cooling Water	04A	088	Inactive	
	TA-35-85	Noncontact Cooling Water	04A	090	Inactive	
	TA-35-87	Photo Wastes	06A	132	Active	
	TA-35-213	Noncontact Cooling Water	04A	127	Active	
TA-36	TA-36-1	Photo Wastes	06A	106	Active	2.0 GPM
TA-39	TA-39-69	Noncontact Cooling Water	04A	141	Active	
TA-40	TA-40-1	Photo Wastes	06A	099	Inactive	
	TA-40-4	Photo Wastes	06A	079	Active	1.0 GPM
	TA-40-5	Photo Wastes	06A	080	Active	0.5 GPM
	TA-40-8	Photo Wastes	06A	081	Active	
	TA-40-9	Photo Wastes	05A	101	Inactive	
	TA-40-12	Photo Wastes	06A	082	Active	0.375 GPM
	TA-40-15	Photo Wastes	06A	100	Reactivated	
TA-41	TA-41	Photo Wastes	06A	099	Active	0.5 GPM
TA-41	TA-41	Sewage Treatment Plant	SSS	06s	Active	0.0217 MGD
TA-43	TA-43	Sanitary	N/A	N/A	Inactive	
	TA-43-1	Treated Cooling Water	03A	040/041	Active	3.0 GPM
TA-45	TA-45	Industrial Waste	N/A	N/A	Inactive	
	TA-45	Waste Treatment Plant	N/A	N/A	Inactive	
TA-46	TA-46	Oxidation Pond	SSS	07s	Active	0.0068 MGD
	TA-46	Sewage Treatment Plant	SSS	12s	Active	
	TA-46	Ditch	N/A	N/A	Inactive	
	TA-46	Storm Drain	N/A	N/A	Inactive	
	TA-46-1	Treated Cooling Water	03A	042	Active	0.375 GPM

**OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY
(CONTINUED)**

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME
TA-46	TA-46-24,59,76	Noncontact Cooling Water	04A	018	Active	5.5 GPM
	TA-46-30	Noncontact Cooling Water	04A	013	Active	0.35 GPM
	TA-46-31	Treated Cooling Water	03A	043	Active	0.375 GPM
	TA-46-41	Noncontact Cooling Water	04A	117	Inactive	
	TA-46-81	Wash Solutions	N/A	N/A	Inactive	
	TA-46-86	Treated Cooling Water	03A	044	Inactive	
	TA-46-88	Noncontact Cooling Water	04A	014	Active	2.5 GPM
	TA-46-169	Treated Cooling Water	03A	124	Active	0.16 GPM
	TA-46-200	Treated Cooling Water	03A	136	Active	
	TA-48	TA-48-1	Treated Cooling Water	03A	045/046	Active
	TA-48-1	Noncontact Cooling Water	04A	015/045	Inactive	
	TA-48-1	Noncontact Cooling Water	04A	016	Active	10.0 GPM
	TA-48-1	Noncontact Cooling Water	04A	131	Active	
	TA-48-5	Septic Tank/Sand Filter	SSS	08s/010s	Inactive	
	TA-48-8	Noncontact Cooling Water	04A	126	Active	10.0 GPM
	TA-48-46	Noncontact Cooling Water	04A	137	Active	
TA-50	TA-50-1	Industrial Waste	05A	051	Active	44,355 GPD
TA-51	TA-51	Industrial	N/A	N/A	Inactive	
TA-52	TA-52-1	Noncontact Cooling Water	04A	111	Inactive	
	TA-52-11	Noncontact Cooling Water	04A	112	Inactive	
TA-53	TA-53	Oxidation Pond	SSS	09s	Active	0.0113 MGD
	TA-53-2	Treated Cooling Water	03A	114	Active	9.0 GPM
	TA-53-2	Noncontact Cooling Water	04A	017/114	Inactive	
	TA-53-6	Treated Cooling Water	03A	145	Active	
	TA-53-14	Treated Cooling Water	03A	146	Active	
	TA-53-18	Noncontact Cooling Water	04A	135	Active	
	TA-53-19	Noncontact Cooling Water	04A	133	Active	

**OUTFALLS REGULATED UNDER NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES)
AT LOS ALAMOS NATIONAL LABORATORY
(CONTINUED)**

TECH AREA NUMBER	BUILDING NUMBER	TYPE OF DISCHARGE	EPA OUTFALL NUMBER	NPDES SERIAL NUMBER	STATUS	ESTIMATED SOLID WASTE VOLUME
TA-53	TA-53-28	Treated Cooling Water	03A	125	Active	0.5 GPM
	TA-53-60	Treated Cooling Water	03A	047	Active	1.5 GPM
	TA-53-62	Treated Cooling Water	03A	048	Active	4.5 GPM
	TA-53-64	Treated Cooling Water	03A	049	Active	7.5 GPM
	TA-53-293,294	Treated Cooling Water	03A	113	Active	1.46 GPM
TA-57	TA-57	Geothermal Discharge	* 001	001	Active	
TA-59	TA-59-1	Treated Cooling Water	03A	098	Active	2.0 GPM

NOTES:

- NPDES = National Pollutant Discharge Elimination System
- 05A = EPA OUTFALL Number
- 017, 004/001 = NPDES Serial Number of Discharge/NPDES Serial Number of Combined Outfall
- N/A = Not Applicable
- MGD = Million Gallons Per Day
- GPM = Gallons Per Minute
- ? = Unknown, Data Not Available

APPENDIX B

AIR STACK LOCATIONS AT LOS ALAMOS NATIONAL LABORATORY

(Source: Los Alamos National Laboratory
Toxic Air Pollutant Database Developed for HSE-8
by PEI, August, 1988)

TECHNICAL AREA	BUILDING NUMBER	CONTROL TYPE	ROOM LOCATION OF CONTROL TYPE	TYPE OF WASTE	COMMENTS
TA-0	TA-0-1051				Metals
TA-3	TA-3-4				Solvents
	TA-3-16				Solvents/Metals/Corrosives
	TA-3-22				Unknown
	TA-3-29				Solvents/Metals
	TA-3-29				Solvents/Metals
	TA-3-32				Solvents/Corrosives
	TA-3-34				Solvents/Corrosives
	TA-3-35				Solvents
	TA-3-37				Solvents
	TA-3-38				Solvents/Metals
	TA-3-39				Solvents
	TA-3-40				Solvents/Corrosives
	TA-3-43				Solvents
	TA-3-66		Caustic Scrubber	103	Unknown
	TA-3-66		Fabric Filter	H107	Unknown
	TA-3-70				Nonhazardous
	TA-3-86				Solvents
TA-3-100				Solvents/Corrosives	
TA-3-102				Solvents/Reactive/Radionuclides	
TA-3-105		Fabric Filter	13	Solvents/Corrosives	
TA-3-141				Solvents	
TA-3-216		Dry Scrubber/Fabric Filter	139	Solvents	
TA-3-218				Solvents	
TA-3-223				Solvents	
TA-3-287				Nonhazardous	
TA-3-316				Solvents	
TA-3-381				Solvents	
TA-3-382				Flammables	
				Unknown	

AIR STACK LOCATIONS AT LOS ALAMOS NATIONAL LABORATORY

(Source: Los Alamos National Laboratory
Toxic Air Pollutant Database Developed for HSE-8
by PEI, August, 1988)
(CONTINUED)

TECHNICAL AREA	BUILDING NUMBER	CONTROL TYPE	ROOM LOCATION OF CONTROL TYPE	TYPE OF WASTE	COMMENTS
TA-3	TA-3-410	Carbon Adsorber	109	Unknown	Scrubber water is discharged to the canyon.
	TA-3-473			Solvents	
	TA-3-494			Solvents/Corrosives	
	TA-3-1485			Metals	
	TA-3-1559			Solvents	
TA-8	TA-8-22			Nonhazardous	
TA-9	TA-9-21			Solvents/Corrosives	Scrubber water is discharged to the canyon. There are two stacks.
	TA-9-34			Unknown	
	TA-9-37			Solvents	
TA-11	TA-9-45	Wet Scrubber	101	Solvents/Corrosives	
	TA-11-1	Solvents		Unknown	
TA-14	TA-14-23			Unknown	
TA-15	TA-15-20			Solvents	
	TA-15-50			Corrosives	
	TA-15-183			Solvents	
	TA-15-194			Solvents	
	TA-15-233			Unknown	
	TA-15-280			Solvents	
TA-15-285			Possible Reactives		
TA-15-291			Nonhazardous		

AIR STACK LOCATIONS AT LOS ALAMOS NATIONAL LABORATORY

(Source: Los Alamos National Laboratory
Toxic Air Pollutant Database Developed for HSE-8
by PEI, August, 1988)
(CONTINUED)

TECHNICAL AREA	BUILDING NUMBER	CONTROL TYPE	ROOM LOCATION OF CONTROL TYPE	TYPE OF WASTE	COMMENTS
TA-16	TA-16-7			Nonhazardous	
	TA-16-38			Reactives	
	TA-16-202			Solvents	
	TA-16-204			Nonhazardous	
	TA-16-300	Fabric Filter	All	Solvents/Metals	
	TA-16-300	Wet Scrubber	All	Solvents/Metals	
	TA-16-302	Wet Scrubber	All	Solvents/Reactives	
	TA-16-304			Solvents	
	TA-16-340	Wet Condenser	102	Solvents	
	TA-16-340	Wet Condenser	104	Solvents	
	TA-16-342	Set Scrubber	101	Unknown	
	TA-16-380	Wet Scrubber	All	Reactives	
	TA-16-389			Toxics	
	TA-16-412			Reactives	
	TA-16-430	Wet Scrubber	All	Reactives	
TA-16-450			Solvents		
TA-16-460			Solvents		
TA-18	TA-18-30			Solvents/Metals/Corrosives	
TA-21	TA-21-3N			Solvents/Corrosives	
	TA-21-4	Fabric Filter		Solvents	
	TA-21-150			Solvents/Corrosives	
	TA-21-152			Solvents/Corrosives	
	TA-21-155N			Unknown	
	TA-21-209			Solvents/Corrosives	
	TA-21-210			Solvents/Corrosives	
	TA-21-210			Solvents/Metals/Reactives/Corrosives	
	TA-21-213			Solvents	
					Scrubber water is discharged to the canyon

AIR STACK LOCATIONS AT LOS ALAMOS NATIONAL LABORATORY

(Source: Los Alamos National Laboratory
Toxic Air Pollutant Database Developed for HSE-8
by PEI, August, 1988)
(CONTINUED)

TECHNICAL AREA	BUILDING NUMBER	CONTROL TYPE	ROOM LOCATION OF CONTROL TYPE	TYPE OF WASTE	COMMENTS
TA-21	TA-21-357			Corrosives	
TA-22	TA-22-34			Solvents/Reactives	
	TA-22-52			Nonhazardous	
	TA-22-91			Solvents/Corrosives	
TA-33	TA-33-39			Solvents	
	TA-33-86			Solvents	
	TA-33-113			Solvents	
TA-35	TA-35-2			Solvents/Corrosives/Reactives	
	TA-35-25			Solvents	
	TA-35-67			Metals	
	TA-35-85			Reactives	
	TA-35-125	Caustic Scrubber	820	Solvents/Reactives/Corrosives	
	TA-35-125	Caustic Scrubber	A-20	Solvents/Reactives/Corrosives	
	TA-35-128	Caustic Scrubber	All	Solvents/Reactives/Corrosives	
	TA-35-128			Solvents/Reactives/Corrosives	
	TA-35-188			Metals/Reactives	
	TA-35-207	Carbon Adsorber	102	Solvents/Corrosives	
	TA-35-213	Soda Limetrap/Caustic Scrubber	C116	Solvents/Corrosives	
	TA-35-213			Solvents/Corrosives	
TA-36	TA-36-1			Solvents	
	TA-36-3			Solvents	
	TA-36-4			Solvents	
	TA-36-5			Solvents	
	TA-36-6			Nonhazardous	
	TA-36-7			Solvents	
	TA-36-8			Solvents	
	TA-36-11			Solvents	
	TA-36-12			Nonhazardous	

AIR STACK LOCATIONS AT LOS ALAMOS NATIONAL LABORATORY

(Source: Los Alamos National Laboratory
Toxic Air Pollutant Database Developed for HSE-8
by PEI, August, 1988)
(CONTINUED)

TECHNICAL AREA	BUILDING NUMBER	CONTROL TYPE	ROOM LOCATION OF CONTROL TYPE	TYPE OF WASTE	COMMENTS
TA-36	TA-36-47			Solvents	
	TA-36-55			Nonhazardous	
	TA-36-82			Solvents	
TA-39	TA-39-2			Solvents/Corrosives/Reactives	
	TA-39-6,7			Solvents	
	TA-39-15			Solvents	
	TA-39-57			Nonhazardous	
	TA-39-88			Reactive	
TA-40	TA-40-12			Unknown	
	TA-40-15			Nonhazardous	
	TA-40-23			Nonhazardous	
TA-41	TA-41-4			Unknown	
TA-43	TA-43-1			Solvents/Metals/Corrosives/Reactives	
TA-46	TA-46			Unknown	
	TA-46-1			Solvents/Corrosives	
	TA-46-16				
	TA-46-24				
	TA-46-30				
	TA-46-31				
	TA-46-31		Flammables		
	TA-46-31		Caustic Scrubber	102C	
	TA-46-31		Caustic Scrubber	103	
	TA-46-31		Caustic Scrubber	115	
	TA-46-31		Caustic Scrubber	140	
	TA-46-41				
	TA-46-58				
TA-46-76					
TA-46-77					
TA-46-88					

AIR STACK LOCATIONS AT LOS ALAMOS NATIONAL LABORATORY
 (Source: Los Alamos National Laboratory
 Toxic Air Pollutant Database Developed for HSE-8
 by PEI, August, 1988)
 (CONTINUED)

TECHNICAL AREA	BUILDING NUMBER	CONTROL TYPE	ROOM LOCATION OF CONTROL TYPE	TYPE OF WASTE	COMMENTS
TA-46	TA-46-154	Dry Scrubber	111	Solvents/Reactives/Corrosives	
	TA-46-154	Caustic Scrubber	114	Unknown	
TA-48	TA-48-1	Dry Scrubber	314	Solvents/Metals/Corrosives/Reactives/Flammables	
	TA-48-8			Solvents/Corrosives	
	TA-48-17			Solvents/Flammables	
TA-50	TA-50-1			Solvents/Metals/Flammables/Corrosives	
	TA-50-37			Solvents/Flammables	
	TA-50-69			Metals/Solvents	
	TA-53-1			Solvents/Corrosives/Flammables	
	TA-53-2			Solvents/Corrosives	
	TA-53-3			Solvents/Corrosives	
TA-53	TA-53-4			Solvents/Flammables	
	TA-53-14			Solvents	
	TA-53-15			Solvents	
	TA-53-16			Solvents/Metals	
	TA-53-17			Solvents	
	TA-53-18			Solvents	
	TA-53-19			Solvents	
	TA-53-21			Unknown	
	TA-53-29			Solvents	
	TA-53-39			Solvents	
	TA-54			Area L	
Area 4		Nonhazardous			
TA-55	TA-55-1	Soda Limetrup Dry Scrubber	177	Solvents	
	TA-55-3			Solvents/Corrosives/Reactives	
	TA-55-4			Solvents/Corrosives/Flammables/Reactives	

AIR STACK LOCATIONS AT LOS ALAMOS NATIONAL LABORATORY

(Source: Los Alamos National Laboratory
 Toxic Air Pollutant Database Developed for HSE-8
 by PEI, August, 1988)
 (CONTINUED)

TECHNICAL AREA	BUILDING NUMBER	CONTROL TYPE	ROOM LOCATION OF CONTROL TYPE	TYPE OF WASTE	COMMENTS
TA-55	TA-55-4	Caustic Scrubber	177	Solvents/Corrosives	
	TA-55-4	Scrubber	?	Unknown	
	TA-55-4	Condenser and Scrubber	?	Unknown	
	TA-55-4	Caustic Scrubber	?	Unknown	
	TA-55-42	Scrubber	?	Solvents/Reactives/Corrosives	
TA-59	TA-59-1	Caustic Scrubber	180	Solvents/Reactives/Corrosives	

**LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C**

TA-0

Site No.	Associated Structure	Description
C-0-001	Guaje Canyon	Canyon bordered by TA-74, residences
C-0-002	Rendija Canyon	Canyon bordered by TA-74, residences
C-0-003	Barrancas Canyon	Canyon bordered by TA-74, residences
C-0-004	Bayo Canyon	Canyon bordered by TA-0, -10, -74, residences
C-0-005	Pueblo/Acid Canyon	Canyon bordered by TA-0, -1, -21, -72, -73
C-0-006	Los Alamos Canyon	Canyon bordered by TA-0, -1, -2, -3, -21, -41, -43, -53, -61, -62, -72, -74
C-0-007	Sandia Canyon	Canyon bordered by TA-3, -53, -60, -61, -72
C-0-008	Mortandad Canyon	Canyon bordered by TA-3, -5, -35, -48, -50, -55, -59
C-0-009	Canada del Buey	Canyon bordered by TA-5, -18, -46, -51, -52, -54, -65
C-0-010	Two Mile Canyon	Canyon bordered by TA-3, -55, -58, -59, -64
C-0-011	Pajarito Canyon	Canyon bordered by TA-6, -18, -22, -40, -46, -50, -51, -54, -65, -66, -69
C-0-012	Three Mile Canyon	Canyon bordered by TA-18, -36
C-0-013	Potrillo Canyon	Canyon bordered by TA-14, -15, -36, -67
C-0-014	Canon de Valle	Canyon bordered by TA-9, -11, -14, -15, -16, -37, -67
C-0-015	Fence Canyon	Canyon bordered by TA-70, -71
C-0-016	Water Canyon	Canyon bordered by TA-11, -16, -28, -36, -37, -68, -71
C-0-017	Indio Canyon	Canyon bordered by TA-39, -70

**LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C**

**TA-0
(Continued)**

Site No.	Associated Structure	Description
C-0-018	Ancho Canyon	Canyon bordered by TA-33, -39
C-0-019	Chaquehui Canyon	Canyon bordered by TA-33

**LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C**

TA-3

<u>Site No.</u>	<u>Associated Structure</u>	<u>Description</u>
C-3-001	TA-3-1844	A gas trap is located southeast of TA-3-1498. It is believed to have been installed in 1987. A gas trap manhole is adjacent to TA-3-28 and is designated TA-3-1872. The function of the gas trap is unknown. (Task 19, Record 151 and 152)
C-3-002	TA-3-35	A leak from an asphalt laydown machine occurred about 30 feet northeast of TA-3-35. (Task 20, Record 40)
C-3-003	TA-3-39	An area of stained asphalt was noted on the east side of TA-3-39; source unknown. (Task 20, Record 43)
C-3-004	TA-3-66	An empty can of kerosene, lying on its side, was observed near an area of stained soil at the northeast corner of TA-3-66 (Task 20, Record 45)
C-3-005	TA-3-73	In May 1985, a large oil emulsion spill occurred at the kerosene washdown area of the asphalt plant, TA-3-73, when a tank on an oil distributor truck was accidentally opened. The oil emulsion flowed downgradient to the storm drain that serves as the main outfall for the asphalt plant into Sandia Canyon. (Task 19, Records 44, 51)
C-3-006	South of TA-3-29	In 1974, there was an overflow from an industrial waste line at manhole ULR-736, located south of TA-3-29. The incident reportedly released between 500 to 1,000 gallons of potentially mixed waste into the soil. (Task 20, Record 25)

**LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C**

**TA-3
(Continued)**

Site No.	Associated Structure	Description
C-3-007	TA-3-35	The Press Building TA-3-35 was used for fuel element production. The process requires uranium-238 and -239 and graphite materials. At one time the building was also used for the storage of uranium-235. (Task 20, Record 53)
C-3-008	TA-3-164	The storage building TA-3-164 is suspected of being contaminated. It is used for the storage of radioactive materials, possibly including uranium and transuranic materials. (Task 20, Record 68)
C-3-009	TA-3-169	The storage building TA-3-169 is used to store oil, acids and equipment to be used for research and development activities. (Task 20, Record 69)
C-3-010	TA-3-19	Remnant contamination may be present at the site of a decommissioned cooling tower TA-3-19, removed in 1966. The leaks and spills may have contained chromates. (Task 21, Record 1222)
C-3-011	Near TA-3-73	A decommissioned 250-gallon leaded gasoline tank is located near TA-3-73. The tank has no secondary containment. Spills have occurred from the tank to the surrounding soil in the past, as evidenced by stains in the area. (Task 19, Record 58)
C-3-012	TA-3-29	A product storage area is located outside on the south side of Wing 5 of TA-3-29. The cabinet contains photoprocessing and organic chemicals and a plastic bag labeled "hot material inside." (Task 20, Record 58)

**LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C**

**TA-3
(Continued)**

Site No.	Associated Structure	Description
C-3-014	TA-3-35	A product storage area is located at TA-3-35. The area is used to store scrap metal, presses and molds with the potential for radionuclide contamination. (Task 20, Record 59)
C-3-015	TA-3-36-2	An underground product storage tank is located near TA-3-36. 5000 gallon capacity; storage for unleaded gasoline. (Task 19, Record 153)
C-3-016	Near TA-3-73	An underground oil distributor clean-out tank is located near TA-3-73. The material stored consists of asphalt emulsion, kerosene, oil and water. A spill report from 7/7/88 describes an incident that occurred when the valve was not closed properly after a distribution truck had filled up with emulsion oil. The spill material was reportedly cleaned up and removed to the county landfill. (Task 19, Record 159)
C-3-017	Northside of TA-3-28	An underground fuel storage tank is located near TA-3-28. (Task 19, Record 160)
C-3-018	TA-3-157, north of TA-3-28	A 100-gallon, underground diesel fuel storage tank is located at TA-3-157. (Task 19, Record 161)
C-3-019	Near TA-3-16	An underground storage tank for petroleum product is located near TA-3-16. (Task 21, Record 1215)
C-3-020	TA-3-107,-108,-109	Three inactive underground storage tanks are located near TA-3-105. The tanks were used to store petroleum products. They were filled with sand in 1978. (Task 21, Record 1216)

LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C

TA-3
(Continued)

Site No.	Associated Structure	Description
C-3-021	TA-3-191	Underground storage tank TA-3-191 is used for storage of gasoline. It serves an emergency generator in TA-3-16. (Task 21, Record 1217)
C-3-022	Near TA-3-73	A tanker trailer was used to store kerosene product near TA-3-73. The trailer was removed in 1989. (Task 19, Record 164)

LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C

TA-4

Site No.	Associated Structure	Description
C-4-001	TA-4-3, -4, -5, -6, -1, -2, -8, -13	Potential soil contamination associated with former structures TA-4-3, -4, -5, -6, -1, -2, -8 and -13, which were decontaminated and decommissioned in 1986. (CEARP ID No. TA-4-2-CA-I-HW/RW)

LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C

TA-5

Site No.	Associated Structure	Description
C-5-001	TA-5-8, -21	Potential soil contamination associated with former structures TA-5-8 and -21, which were decontaminated and decommissioned in 1986. (CEARP ID No.; TA-5-2-CA-I-HW/RW)

**LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C**

TA-6

Site No.	Associated Structure	Description
C-6-001	TA-6-4	Former location of magazine "M" and associated soil HE contamination; removed in 1972. Reportedly, the combustible portions of the magazine were burned, and the concrete and other non-combustibles were disposed of in Area P. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-002	TA-6-10	Former location of laboratory and any associated soil contamination; formerly listed as a detonator pressing hutment. Reported as HE-contaminated in 1959; removed on 1/16/60 by burning. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-003	TA-6-11	Former location of laboratory and any associated soil contamination; formerly sited as a detonator loading shack, relocated to the contaminated dump on Pajarito Road; retired on 8/17/55. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-004	TA-6-12	Former location of storage building and any associated soil contamination; formerly listed as a detonator pressing hutment; removed approximately 1949. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-005	TA-6-13	Former location of storage building and any associated soil contamination; formerly listed as a small explosives lab. The building was reported to be HE-contaminated in 1959; removed on 1/16/60 by burning. (CEARP [BID No. TA-6-2-CA-I-HW)
C-6-006	TA-6-14	Former location of pressing hutment and any associated soil contamination. The building was reported to be HE-contaminated in 1959; removed on 1/16/60 by burning. (CEARP ID No. TA-6-2-CA-I-HW)

**LOS ALAMOS NATIONAL
LABORATORY POTENTIAL RELEASE SITES
APPENDIX C**

**TA-6
(Continued)**

Site No.	Associated Structure	Description
C-6-007	TA-6-15	Former location of boiler house and any associated soil contamination; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-008	TA-6-16	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-009	TA-6-17	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-010	TA-6-21	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-011	TA-6-22	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-012	TA-6-23	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-013	TA-6-24	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-014	TA-6-25	Former location of magazine and any associated soil HE-contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)

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**TA-6
(Continued)**

Site No.	Associated Structure	Description
C-6-015	TA-6-27	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-016	TA-6-28	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-017	TA-6-29	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-018	TA-6-30	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-019	TA-6-38	Former location of generator building and any associated soil contamination; reported to be HE-contaminated in 1959; removed in 1960 by burning. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-020	TA-6-49	Former location of building and ramp, and any associated soil contamination; removed by burning in 1960. (CEARP ID No. TA-6-2-CA-I-HW)
C-6-021	TA-6-26	Former location of magazine and any associated soil contamination; reported to be HE-contaminated in 1959; burned on 1/16/60. (CEARP ID No. TA-6-2-CA-I-HW)

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TA-8

Site No.	Associated Structure	Description
C-8-001	TA-8-4	Former location of the field test building used for explosives development and/or storage and associated soil. It was built before 1947 and removed in 1950 (Task 36, Record 7).
C-8-002	TA-8-5	Former location of the field test building used for explosives development and/or storage. It was built before 1947 and removed in 1950 (Task 36, Record 8).
C-8-003	TA-8-6	Former location of the carpenters shop which may have been used for explosives development and/or storage. It was built before 1947 and removed in 1948 (Task 36, Record 9).
C-8-004	TA-8-10	Main ranch house with vault in basement. The building and vault were removed in 1950 (Task 36, Record 10).
C-8-005	TA-8-11	Guest house at Anchor Ranch; removed in 1950 (Task 36, Record 11).
C-8-006	TA-8-12	Guest house at Anchor Ranch; removed in 1950 (Task 36, Record 12).
C-8-007	TA-8-13	Bunk house at Anchor Ranch; removed in 1950 (Task 36, Record 13).
C-8-008	TA-8-15	Ranch barn at Anchor Ranch; removed in 1950 (Task 36, Record 14).
C-8-009	TA-8-18	Ranch barn at Anchor Ranch; removed in 1950 (Task 36, Record 15).
C-8-010	TA-8-34	Drum storage building, possibly soil contamination from hydrocarbons or solvents; removed in 1947 (Task 36, Record 16).

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**TA-8
(Continued)**

<u>Site No.</u>	<u>Associated Structure</u>	<u>Description</u>
C-8-011	TA-8-7	Storage building associated with explosives development and/or storage; built before 1957 and removed in 1960 (Task 36, Record 18).
C-8-012	TA-8-8	Former location of storage building associated with explosives development; built before 1947, transferred to the Zia Co. in 1968, then removed (Task 36, Record 19).
C-8-013	TA-8-9	Former location of storage building associated with explosives development; built before 1947, transferred to the Zia Co. in 1968, then removed (Task 36, Record 20).
C-8-014	TA-8-21	Laboratory and administrative building (Task 36, Record 22).
C-8-015	TA-8-31	HE magazine (Task 36, Record 30).
C-8-016	TA-8-32	HE magazine (Task 36, Record 31).
C-8-017	TA-8-27	Storage vault (Task 36, Record 32).
C-8-018	TA-8-65	Storage building (Task 36, Record 33).
C-8-019	TA-8-30	Storage building (Task 36, Record 34).
C-8-020	TA-8-76	Buried material area north of Old Anchor West. Dates back to 1945, located in 1956. (Task 36, Record 36). (CEARP ID No. TA-8-7-L-I-HW/RW)

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TA-9

<u>Site No.</u>	<u>Associated Structure</u>	<u>Description</u>
C-9-001	TA-9-31	Stained ground associated with the outfall from a chemical storage area; chemicals could consist of organics. (Task 37, Record 105).
C-9-002	TA-9-9	Former location of two trimming buildings, a personnel shelter, and any associated soil contaminated with HE. The structures were burned in 1960 and debris removed in 1965 (Task 37, Record 116).
C-9-003	TA-9-16	Location of former pump building and any associated soil contaminated with HE. The building was burned in 1960; unburned building residues were removed in 1965 (Task 37, Record 117).
C-9-004	TA-9-19	Building containing an oven and HE (Task 37, Record 118).
C-9-005	TA-9-58	Location of former X-unit chamber at Far Point Site. Associated soil contaminated with HE and cesium-137; structure removed in 1965 (Task 37, Record 119).
C-9-006	TA-9-6, -11, -12, -16 (AE -6, -11, -18)	Former location of magazines at Far Point, which were contaminated with HE. All were burned in 1960 and unburned building debris was removed in 1965 (Task 37, Record 121).
C-9-007	TA-9-7, -8	Location of former storage building and associated soil contaminated with HE, beryllium, and uranium-238. The buildings were burned in 1960, and unburned building debris was removed in 1965 (Task 37, Record 122).

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**TA-9
(Continued)**

Site No.	Associated Structure	Description
C-9-008	TA-9-182 east of TA-9-1	UST which stored petroleum products. The tank was abandoned in 1959 and removed in 1965 (Task 37, Record 123).
C-9-009	TA-9-28	Oil stains found on northeast deck of TA-9-28 (Task 37, Record 127).
C-9-010	TA-9-2b	Burning pit; location unknown. Potential contaminants are HE and radionuclides (Task 37, Record 133).
C-9-011	TA-9-2c	Burn area associated with decommissioning of TA-9-1 at Anchor Site East (Task 37, Record 134).

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TA-11

<u>Site No.</u>	<u>Associated Structure</u>	<u>Description</u>
C-11-001	TA-11-5	Former location of TA-11-5 laboratory, darkroom, and associated soils contaminated with HE, radionuclides. Structure was removed in 1956 (Task 12, Record 14)
C-11-002	TA-11-12	Former location of TA-11-12 laboratory and associated soil contaminated with HE. Structure was removed 1959 (Task 12, Record 16).
C-11-003	TA-11-12	In 1949, a 9 Ci lanthanum source was dropped at TA-11. It was found to be leaking. Soil contamination occurred when the source was hung between two trees and washed with a hose. (Task 12, Record 13)

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TA-12

Site No.	Associated Structure	Description
C-12-001	TA-12-1	Former location of trimming building and associated soil, reported in a 1959 inspection to be contaminated with HE; building was destroyed by burning in 1960, but debris remains in place. (CEARP ID No. TA12-1-CA-I-HW/RW)
C-12-002	TA-12-2	Former location of control chamber and associated soil, reported in a 1959 inspection to be contaminated with HE; building was destroyed by burning in 1960, but debris remains in place. (CEARP ID No. TA12-1-CA-I-HW/RW)
C-12-003	TA-12-3	Former location of magazine, reported in a 1959 inspection to be contaminated with HE. The building was destroyed by burning in 1960, but debris remains in place. (CEARP ID No. TA12-1-CA-I-HW/RW)
C-12-004	TA-12-5	Former location of generator shelter, reported to be free of radioactive or HE contamination; destroyed by burning in 1960. (CEARP ID No. TA12-1-CA-I-HW/RW)
C-12-005	TA-12-6	Former location of junction shelter, reported to be free of radioactive of HE contamination; destroyed by burning in 1960. (CEARP ID No. TA12-1-CA-I-HW/RW)
C-12-006	TA-12-8	A tall pole with a plastic tube near TA-12-8, which became contaminated with HE and Sr-90 as a result of a release during a radiation experiment in 1950. (CEARP ID No. TA12-2-CA-I-HW/RW)

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TA-14

Site No.	Associated Structure	Description
C-14-001	TA-14-1	Former location of magazine and associated soil contamination; building was reported to be contaminated with HE in 1959; destroyed by burning in 1960. (CEARP ID No. TA14-1-CA-A/I-HW/RW)
C-14-002	TA-14-3	Former location of control room and associated soil contaminated with hazardous waste and radionuclides; removed in 1952. (CEARP ID No. TA14-1-CA-A/I-HW/RW)
C-14-003	TA-14-4	Former location of explosives preparation building and associated soil contaminated with hazardous waste and radionuclides; removed in 1952. (CEARP ID No. TA14-1-CA-A/I-HW/RW)
C-14-004	TA-14-7	Former location of electronic shop and any associated soil contaminated with hazardous waste and radionuclides; removed in 1952. (CEARP ID No. TA14-1-CA-A/I-HW/RW)
C-14-005	TA-14-8	Former location of storage building and any associated soil contaminated with hazardous waste and radionuclides; removed in 1952. (CEARP ID No. TA14-1-CA-A/I-HW/RW)
C-14-006	TA-14-9	Former location of magazine and any associated soil contaminated with hazardous waste and radionuclides; removed in 1952. (CEARP ID No. TA14-1-CA-A/I-HW/RW)
C-14-007	TA-14-10	Former location of storage building and any associated soil contaminated with hazardous waste and radionuclides; removed in 1952. (CEARP ID No. TA14-1-CA-A/I-HW/RW)

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**TA-14
(Continued)**

Site No.	Associated Structure	Description
C-14-008	TA-14-11	Former location of magazine and any associated soil contaminated with hazardous waste and radionuclides; removed in 1952. (CEARP ID No. TA14-1-CA-A/I-HW/RW)
C-14-009	TA-14-13	Former location of magazine and any associated soil contaminated with hazardous waste and radionuclides; building was reported to be HE-contaminated in 1959; destroyed by burning in 1960. (CEARP ID No. TA14-1-CA-A/I-HW/RW)

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TA-15

Site No.	Associated Structure	Description
C-15-001	South of TA-15-9	Soil pile contaminated with radionuclides noted during 1988 E.R. site reconnaissance visit (Task 22, Record 1530).
C-15-002	South of TA-15-285	Soil pile contaminated with metals, radionuclides, and HE noted during 1988 E.R. site reconnaissance visit; located 200 feet south of TA-15-285. (Task 22, Record 1532)
C-15-003	North of TA-15-45	Pile of black granular material noted during 1988 E.R. site reconnaissance visit. (Task 23, Record 1624).
C-15-004	TA-15-56	A transformer station consisting of 2 transformers: one containing 30 gallons of 174 ppm PCB oil and the other containing 18 gallons of 79 ppm PCB oil; removed 12/3/89. (Task 23, Record 1631)
C-15-005	TA-15-1	Former location of TA-15-1, laboratory and shop. Potential soil contamination with thorium and mercury; removed in 1962. (Task 24, Record 1583)
C-15-006	TA-15-7	Former location of TA-15-7, office, darkroom, and associated soil contaminated with mercury; removed in 1962. (Task 24, Record 1584)
C-15-007	TA-15-194	Stained soil on exterior southwest corner of building noted during E.R. site reconnaissance visit in 1988. (Task 24, Record 1585)
C-15-008	TA-15-261	Puddle of clear liquid north of oil storage tank TA-15-261 was noted during E.R. site reconnaissance visit in 1988. (Task 24, Record 1587)

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**TA-15
(Continued)**

Site No.	Associated Structure	Description
C-15-009	TA-15-48	Inactive underground fuel storage tank. (UST list to EPA)
C-15-010	TA-15-52	Inactive underground fuel storage tank. (UST list to EPA)
C-15-011	TA-15-274	An inactive 218 gallon underground gasoline storage tank. (UST list to EPA)
C-15-012	TA-15-287	An active 15,000 gallon underground dielectric oil storage tank. (UST list to EPA)
C-15-013	TA-15-291	An inactive 1200 gallon underground ethylene EPA glycol storage tank. (UST list to EPA)

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TA-16

Site No.	Associated Structure	Description
C-16-001	TA-16-384	A cross-over platform was identified on drawing ENG-R2441. It was built in 1962 and removed in 1970. (No hazardous materials were ever handled or stored on the cross-over platform.) (Task 12, Record 122)
C-16-002	TA-16-262	Former location of cooling tower; constructed in 1945 and removed in 1958. Available information indicates that no hazardous materials have ever been used, handled or stored at this site; therefore, no further action is warranted. (Task 13, Record 253)
C-16-003	TA-16-162	Former location of latrine; constructed in 1945 and removed in 1971. (Task 13, Record 254)
C-16-004	TA-16-150	Former location of hose house; constructed in 1945 and removed in 1958. (Task 13, Record 259)
C-16-005	TA-16-53	Former optical equipment storage building and associated soil contaminated with HE; constructed in 1945 and removed in 1960. (Task 14, Record 521)
C-16-006	TA-16-148	Former location of equipment building; constructed in 1950 and removed in 1968. (Task 13, Record 262)
C-16-007	TA-16-521	Former location of tank stand; constructed in 1944 and removed in 1968. (Task 13, Record 263)
C-16-008	TA-16-136	Former location of implement shed; constructed in 1944 and removed in 1955. (Task 14, Record 477)

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**TA-16
(Continued)**

Site No.	Associated Structure	Description
C-16-009	TA-16-134	Former location of mess hall; constructed in 1944 and removed in 1955. (Task 14, Record 478)
C-16-010	TA-16-135	Former location of storage building; constructed in 1944 and removed in 1955. (Task 14, Record 479)
C-16-011	TA-16-132	Former location of paint shop; constructed in 1944 and removed in 1955. (Task 14, Record 480)
C-16-012	TA-16-138	Former location of blacksmith shop; constructed in 1944 and removed in 1955. (Task 14, Record 482)
C-16-013	TA-16-133	Former location of lumber storage area; constructed in 1944 and removed in 1955. (Task 14, Record 485)
C-16-014	TA-16-144	Former location of equipment room; constructed in 1945 and removed in 1955. (Task 14, Record 487)
C-16-015	TA-16-143	Former location of hose house; constructed approximately in 1945 and removed in 1955. (Task 14, Record 488)
C-16-016	TA-16-142	Former location of fire house; constructed in 1944 and removed in 1955. (Task 14, Record 489)
C-16-017	TA-16-502	Former location of steam plant; constructed in 1945 and removed in 1960. (Task 14, Record 490)
C-16-018	TA-16-172	Former location of water storage tank; constructed in 1945 and removed in 1959. (Task 14, Record 491)

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**TA-16
(Continued)**

Site No.	Associated Structure	Description
C-16-019	TA-16-19	Former location of pump house; constructed in 1944 and removed in 1956. (Task 14, Record 492)
C-16-020	TA-16-22	Former location of office building; constructed in 1944 and removed in 1961. (Task 14, Record 493)
C-16-021	TA-16-1	Former location of Administration building; constructed in 1944 and removed in 1956. (Task 14, Record 494)
C-16-022	TA-16-2	Former location of office building; constructed in 1944 and removed in 1956. (Task 14, Record 495)
C-16-023	TA-16-12	Former location of warehouse; constructed in 1950 and removed in 1956. (Task 14, Record 497)
C-16-024	TA-16-9	Former location of motor pool dispatch office; constructed in 1945 and removed in 1956. (Task 14, Record 498)
C-16-025	TA-16-8	Former location of Zia Cabinet Shop; constructed in 1945 and removed in 1956. (Task 14, Record 499)
C-16-026	TA-16-6	Former location of Zia repair shop; constructed in 1945 and removed in 1956. (Task 14, Record 500)
C-16-027	TA-16-17	Former location of plumbing shop; constructed in 1945 and removed in 1956. (Task 14, Record 501)
C-16-028	TA-16-5	Former location of instrument shop; constructed approximately in 1945 and removed in 1956. (Task 14, Record 502)

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**TA-16
(Continued)**

Site No.	Associated Structure	Description
C-16-029	TA-16-3	Former location of Zia electric building; constructed in 1944 and removed in 1956. (Task 14, Record 503)
C-16-030	TA-16-181	Former location of tank housing; constructed in 1948 and removed in 1956. (Task 14, Record 504)
C-16-031	TA-16-182	Former location of diesel unit building; constructed in 1944 and removed in 1956. (Task 14, Record 505)
C-16-032	TA-16-167	Former location of hose house; constructed in 1946 and removed in 1971. (Task 14, Record 514)
C-16-033	TA-16-85	Former location of warehouse; constructed in 1945 and removed in 1947. (Task 14, Record 515)
C-16-034	TA-16-1130	Former location of water tank; constructed approximately in 1944 and removed in 1949. (Task 14, Record 516)
C-16-035	TA-16-1131	Former location of water tank; constructed approximately in 1944 and removed in 1949. (Task 14, Record 517)
C-16-036	TA-16-145	Former location of latrine; constructed in 1944 and removed in 1955. (Task 14, Record 518)
C-16-037	TA-16-23	Former location of product storage area; constructed in 1945 and removed in 1957. (Task 14, Record 519)
C-16-038	TA-16-11	Former location of product storage area; constructed in 1956 and removed in 1956. (Task 14, Record 520)

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**TA-16
(Continued)**

Site No.	Associated Structure	Description
C-16-039	TA-16-151	Former location of hose house; constructed in 1946 and removed in 1958. (Task 14, Record 522)
C-16-040	TA-16-152	Former location of hose house constructed in 1946 and removed in 1958. (Task 14, Record 523)
C-16-041	TA-16-198	Former location of hose house; constructed in 1945 and removed in 1958. (Task 14, Record 539)
C-16-042	TA-16-511	Former location of steam manhole; constructed in 1945 and removed in 1968. (Task 14, Record 604)
C-16-043	TA-16-1084	Former location of steam manhole; constructed in 1944; removal date unknown. (Task 14, Record 605)
C-16-044	TA-16-1079	Former location of steam manhole; constructed in 1944; removal date unknown. (Task 14, Record 606)
C-16-045	TA-16-168	Former location of manhole; construction date unknown and removed in 1952. (Task 14, Record 607)
C-16-046	TA-16-1090	Former location of steam manhole; construction date unknown, removed in 1970. (Task 14, Record 608)
C-16-047	TA-16-1101	Former location of oil switch; construction date unknown and removed in 1966. (Task 14, Record 609)
C-16-048	TA-16-1083	Former location of steam manhole; constructed approximately in 1944 and removed in 1951. (Task 14, Record 611)

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**TA-16
(Continued)**

Site No.	Associated Structure	Description
C-16-049	TA-16-475	Former location of office and shop building; constructed in 1944 and removed in 1951. (Task 12, Record 57)
C-16-050	TA-16-482	Former location of storage building; constructed in 1944 and removed in 1945. (Task 12, Record 58).
C-16-051	TA-16-1103	Former location of oil switch; construction date unknown and removed in 1966. (Task 13, Record 315)
C-16-052	TA-16-506	Former location of steam manhole; constructed in 1944 and removed in 1968. (Task 13, Record 316)
C-16-053	TA-16-508	Former location of water manhole; constructed in 1944 and removed in 1968. (Task 13, Record 317)
C-16-054	TA-16-509	Former location of steam manhole; constructed in 1944 and removed in 1968. (Task 13, Record 318)
C-16-055	TA-16-510	Former location of switch box; constructed in 1945 and removed in 1960. (Task 13, Record 319)
C-16-056	TA-16-1087	Former location of steam manhole; construction date unknown and removed in 1970. (Task 13, Record 320)
C-16-057	TA-16-1086	Former location of steam manhole; construction date unknown and removed in 1970. (Task 13, Record 321)
C-16-058	TA-16-1102	Former location of oil switch; construction date unknown and removed in 1966. (Task 13, Record 322)

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**TA-16
(Continued)**

Site No.	Associated Structure	Description
C-16-059	TA-16-524	Former location of electrical pit; constructed in 1944 and removed in 1945. (Task 13, Record 323)
C-16-060	TA-16-429	Former location of storage building and associated soil contaminated with radionuclides; removed in 1951. (Task 12, Record 121)
C-16-061	TA-16-396	Former location of a crossover platform and associated soil contaminated with HE; the Release Site Database indicates that the platform was removed in 1970. Engineering Drawing R511 indicates that it was removed in 1968. Prior to removal, structure was burned. (Task 12, Record 123)
C-16-062	TA-16-889	Former location of electrical manhole; removed in 1972. (Task 12, Record 158)
C-16-063	TA-16-888	Former location of electrical manhole; removed in 1972. (Task 12, Record 157)
C-16-064	TA-16-183	Former location of chemical storage area and associated soil potentially contaminated with organics. It is unknown whether waste chemicals were stored; structure removed in 1967. (Task 13, Record 264)
C-16-065	TA-16-185	Former location of chemical storage and associated soil contaminated with organics. It is unknown whether waste chemicals were stored. Drum storage area abandoned in place in 1960. (Task 13, Record 265)
C-16-066	TA-16-186	Former location of chemical storage and associated soil contaminated with organics. It is unknown whether waste chemicals were stored. Drum storage area abandoned in place in 1960. (Task 13, Record 266)

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**TA-16
(Continued)**

Site No.	Associated Structure	Description
C-16-067	TA-16-187	Former location of chemical storage area and associated soil contaminated with organics. It is unknown whether waste chemicals were stored. Drum storage area removed prior to 1961. (Task 13, Record 267)
C-16-068	TA-16-522	Former building operations and associated soil contaminated with beryllium; removed in 1945. (Task 13, Record 393)
C-16-069	TA-16-87	Former location of machine shop trailer; constructed in 1945 and removed in 1960. (Task 14, Record 513)
C-16-070	TA-16-391	Underground fuel storage (tank has capacity of 3,063 gallons); tank abandoned in 1970. (Task 14, Record 652)
C-16-071	TA-16-430	An unknown volume of hydraulic oil was spilled to the canyon shelf south of TA-16-430 about 1985. The spill has been cleaned up. (06/90) Since cleanup occurred ER will review existing documentation for further action, if warranted.
C-16-072	TA-16-216	Fuel tank; existence not verified. (Task 14, Record 475)
C-16-073	TA-16-200	Underground fuel tank located 6' south of TA-16-200. (Task 14, Record 660)
C-16-074	TA-16-517	The DOE Environmental Survey Team observed soil staining where 43 reportedly "empty" drums were stacked near TA-16-517. The drums contained residual HE-contaminated hydraulic oil. (Revised Implementation Plan in Response to DOE Environmental Survey Team Preliminary, Los Alamos National Laboratory, 01/12/90)

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TA-18

Site No.	Associated Structure	Description
C-18-001	? or TA-18-1 or TA-18-30	A photoprocessing lab reportedly operating in the 1940s. It may have been removed in 1945, or it may be TA-18-1 or TA-18-30. Structure designated as photolab will be further investigated and dealt with accordingly. (CEARP ID No. TA18-4-CA/ST/O-A/I-HW/RW)
C-18-002	TA-18-10	Assembly building TA-18-10 was moved to TA-5 in 1947-1948. (CEARP ID No. TA18-4-CA/ST/O-A/I-HW/RW)
C-18-003	TA-18-1	A possible radioactive waste storage area behind TA-18-1.

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TA-19

Site No.	Associated Structure	Description
C-19-001	TA-19-1, -2, -3, -4, -5, -7	Potential soil contamination beneath former structures. TA-19-1, -2, -3, -4, -5, -7 (CEARP ID No. TA19-1-ST-I-HW/RW; Task 45, Records 21-26).

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TA-20

<u>Site No.</u>	<u>Associated Structure</u>	<u>Description</u>
C-20-001	TA-20-11	Former location of storage building and associated soil which was radioactive-contaminated; has been removed.
C-20-002	TA-20-12	Former location of storage building and associated soil reported to be HE-contaminated; destroyed by burning on 2/29/60.
C-20-003	TA-20-14	Former location of magazine and associated soil reported to be HE-contaminated; destroyed by burning on 2/28/60.

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TA-21

Site No.	Associated Structure	Description
C-21-001	TA-21-17	A hydrogen fluoride spill in a corridor of this building. (Task 10, Record 176)
C-21-002	TA-21-35	Leak of radionuclides from a waste storage tank to surrounding soil; soil was removed. (CEARP ID No. TA21-8-CA-I-RW/HW; Task 10, Record 177)
C-21-003	TA-21-2 and -3	Unknown releases to paved area between these two structures; area has been repaired. (CEARP ID No. TA21-8-CA-I-RW/HW; Task 10, Record 178)
C-21-004	TA-21-2	Possible radionuclide and hazardous waste release to asphalt driveways. Soil was removed and area was repaved. (CEARP ID No. TA21-8-CA-I-RW/HW; Task 10, Record 179)
C-21-005	TA-21-257	Release of Am-241 and plutonium on west side of building; soil was decontaminated. (RFA Unit 21.018, Task 10, Record 180) Addressed as part of 21-011.
C-21-006	TA-21-2	Release of Am-241 from a leaking transport trailer. The contaminated area was covered with asphalt. (CEARP ID No. TA21-8-CA-I-RW/HW; Task 10, Record 182)
C-21-007	TA-21-257	Release of plutonium, americium, and uranium from a tank vent. (CEARP ID No. TA21-8-CA-I-RW/HW; Task 10, Record 183) Addressed as part of 21-011.
C-21-008	TA-21-4	Release of radioactive material from a process exhaust line; soil was excavated. (Task 10, Record 184)
C-21-009	MDA-T Shafts	Spill of Am-241 in a cement paste. Paste was removed and the area was decontaminated. (Task 10, Record 185) Addressed as part of 21-016.

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APPENDIX C**

**TA-21
(Continued)**

Site No.	Associated Structure	Description
C-21-010	TA-21-35	Leak of Am-241 and plutonium from drums; area was decontaminated. (CEARP ID No. TA21-8-CA-I-RW/HW; Task 10, Record 186)
C-21-011	TA-21-155	In 1963, a plugged scrubber on the roof of building 155 backed up and spilled material containing Uranium-235; area was cleaned. (Task 10, Record 187)
C-21-012	MDA-T	Spill of Am-241 and plutonium in a cement paste. (Task 10, Record 188) Addressed as part of 21-016
C-21-013	TA-21-331	A waste storage pit next to Building TA-21-212. It is possible that the pit was never built and therefore the CEARP field team was unable to locate this pit. (CEARP ID No. TA21-2-SI-I-RW/HW)
C-21-014	TA-21-286	A currently operational equipment warehouse used by HSE-1, -6, -7. (Task 10, Record 154)
C-21-015	TA-21-45	A safety training building; building and soil were removed down to tuff. (Task 10, Record 157)
C-21-016	TA-21-23	A storage hutment removed in 1954. (Task 10, Record 158)
C-21-017	TA-21-24	A storage hutment removed in 1954. (Task 10, Record 159)
C-21-018	TA-21-25	A storage hutment removed in 1954. (Task 10, Record 160)
C-21-019	TA-21-26	A storage hutment removed in 1954. (Task 10, Record 161)

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**TA-21
(Continued)**

Site No.	Associated Structure	Description
C-21-020	TA-21-27	A storage hutment removed in 1954. (Task 10, Record 162)
C-21-021	TA-21-28	A storage hutment removed in 1954. (Task 10, Record 163)
C-21-022	TA-21-34	A laboratory that was demolished and disposed of in TA-54, Area G. (Task 10, Record 164)
C-21-023	TA-21-54	Former location of a laboratory building and associated soil. Structure was demolished and disposed of in TA-54, Area G. (Task 10, Record 165)
C-21-024	TA-21-22	Former location of a warehouse and associated soil. Structure was demolished and disposed of in TA-54, Area G, Pit No. 4. (CEARP ID No. TA21-1-CA-I/A-RW/HW, Task 10, Record 166)
C-21-025	TA-21-19	Former location of a corridor contaminated with radionuclides; structure demolished in 1965. (Task 10, Record 167)
C-21-026	TA-21-151	Former location of an administrative building with shops; removed in 1966. (Task 10, Record 169)
C-21-027	TA-21-143	A chilled water recirculator which is still active. (Task 10, Record 172)
C-21-028	TA-21-47	A 12,788 gallon aboveground fuel tank that was removed. (CEARP ID No. TA21-10-UST-A/I-RW/HW/PP, Task 9, Record 113)
C-21-029	TA-21-60	An above ground 3,000 gallon steel oil tank that was removed. (CEARP ID No. TA21-10-UST-A/I-RW/HW/PP, Task 9, Record 119)

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**TA-21
(Continued)**

Site No.	Associated Structure	Description
C-21-030	TA-21-64	A 320 gallon propane tank that was removed. (CEARP ID No. TA21-10-UST-A/I-RW/HW/PP, Task 9, Record 120)
C-21-031	TA-21-325	A 5200 gallon stainless steel tank. This tank is described as half-buried. (CEARP ID No. TA21-10-UST-A/I-RW/HW/PP, Task 9, Record 115)
C-21-032	TA-21-152 Basement	A standby diesel generator served by a 300-gallon day tank and a 1000-gallon underground tank. (CEARP ID No. TA21-10-UST-A/I-RW/HW/PP)
C-21-033	TA-21-257	1976 TRU cement paste spill. (Task 10, Record 181) Addressed as part of 21-011.

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TA-25

Site No.	Associated Structure	Description
C-25-001	Building V-3	Former location of beryllium operations housed in Building V-3 and associated soil, as noted by CEARP; removed in 1945. (CEARP ID No. TA25-1-CA-I-HW/RW)

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TA-31

Site No.	Associated Structure	Description
C-31-001	TA-31-2, -3, -4, -5, -6, -7	Potential soil contamination from beneath former structure locations TA-31-2, TA-31-2, -3, -4, -5, -6, and -7. (CEARP ID No. TA31-1-ST-I-HW/PP; Task 49, Records 29,30)

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TA-32

Site No.	Associated Structure	Description
C-32-001	TA-32-1, -2, -3, -5, -12, -13	Potential soil contamination from beneath former structure locations TA-31-1, -2, -3, -5, -12, and -13. (CEARP ID No. TA32-1-CA-I-RW/HW; RFA Unit 32.004; Task 40, Records 4-8)

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TA-33

Site No.	Associated Structure	Description
C-33-001	TA-33-124	Transformer pad with stains; no active leak noted during transformer assessment on 9/24/85; PCB ID No. 5031. (LANL Transformer Assessment Sheets)
C-33-002	TA-33-95	Transformer in vault with old stains present; no active leak noted during transformer assessment; PCB ID. No. 5606. (LANL Transformer Assessment Sheets)

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TA-35

Site No.	Associated Structure	Description
C-35-001	TA-35-18	Former location of underground storage tank for diesel fuel; removed in 1988 with no visible evidence of contamination. (Task 7, Record 118)
C-35-002	TA-35-19	Former location of underground storage tank for fuel oil; removed in 1988 with no visible evidence of contamination. (Task 7, Record 119)
C-35-003	TA-35-20	Former location of underground storage tank for fuel oil; removed in 1988 with no visible evidence of contamination. (Task 7, Record 120)
C-35-004	TA-35-125	1,000 gallon shell, Dela Oil spill south of TA-35-125 that discharged into Ten Site Canyon through the storm water drain on 10/9/86. The oil reached the canyon and extended 30 feet downstream. Analyses of the oil indicated less than the detection limit for PCBs. The spill was cleaned up with absorbent materials (memorandum).
C-35-005	TA-35-125	100 gallon oil spill from overfilling MARX Generator Tank on 12/3/86. The oil was spilling inside TA-35-125 and oil flowed out the door and into Ten Site Canyon. Oil and water were discharged to the canyon for a distance of 400 yards. Oil and water froze on the snow in the canyon and was easily cleaned up. Analyses of the oil in the MARX Tank and of the spilled oil indicated PCBs in concentrations between detection limit and 11.7 ppm. (memorandum).

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APPENDIX C**

**TA-35
(Continued)**

Site No.	Associated Structure	Description
C-35-006	TA-35-213	Spill of 5 gallons of organic waste (toluene, styrene, water mixtures) in the receiving area on 5/25/88. HSE-7 cleaned up the spill; all clean-up materials were placed in a 30 gallon drum (spill report on file).
C-35-007	east of TA-35 sanitary lagoons	Unknown spilled material observed over an area extending 0.25 mile on a dirt road. The spilled material was reported on 6/27/88 when it was observed that it was killing vegetation. A spill report filed on 7/1/88 indicated that a composite sample had been collected and corrective actions were pending analytical results. No records of analytical results or corrective action are available (spill report on file).
C-35-008	TA-35-2 basement	Leaking PCB transformer in basement; oil mixed with water leaking from condensate pipe; required two clean-up sessions (PCB ID No. 5618) (memorandum).

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TA-36

Site No.	Associated Structure	Description
C-36-001	?	A building below the mesa at I-J that had a large, spherical chamber for containment and recovery shots. Chamber reported free of contamination, but filter system contaminated with plutonium. [Building number and status unknown. May not even be a TA-36 site]. (CEARP) (CEARP ID No. TA36-1-CA-I/A-HW/RW) Addressed as part of 36-004(e).
C-36-002	N/A	A surface disposal [formerly 36-006(b)] on mesa near lab coordinates E200+00, S85+00; recent field check found it to be soil excavated on site, and destined to be used for fill material. (CEARP) No further action warranted under ER program.
C-36-003	TA-36-1, -3, -4, -5, -6, -7, -8, -11, -12	There are several storm drains associated with building in TA-36. It is believed that these drains carry storm water. However, the storm drain connected to TA-36-1 may also carry photochemical waste. This drain may also carry HCl and U-238. (CEARP ID No. TA36-4-S-S/ST/0-I/A-HW/RW; RFA Unit 36.0007(?))

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TA-39

Site No.	Associated Structure	Description
C-39-001	TA-39-8	Spill of PCB-containing oil from a transformer; estimated 1 ounce of black tarry substance on the cement floor of the bunker on 9/16/86. Repaired leak and cleaned floor. (memo)
C-39-002	TA-39-1	Two small mercury spills inside building; one in 1965 and one in 1967. (CEARP ID No. TA39-4-CA-A-HW)

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TA-40

Site No.	Associated Structure	Description
C-40-001	TA-40-3, -6, -11, -14	Herbicide was used to remove vegetation for a 50' radius around preparatory structures TA-40-3, -6, -11, -14. (1961 office memo)

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TA-41

<u>Site No.</u>	<u>Associated Structure</u>	<u>Description</u>
C-41-001	TA-41-10	A sump it indicated on site drawing ENG-R5122. Addressed as 41-003.
C-41-002	TA-41-W2	Tank TA-41-W2; 560 gal. steel diesel tank, 2 years old. (Active Underground Storage Tank Database)
C-41-003	TA-41-45	CEARP TA41-4 notes an industrial waste tank TA-41-45. This tank is located 50' SW of W4. 1988 SWMU file indicates that this tank never existed. (Memorandum 3/11/81, 41-XXX 1988 SWMU file).
C-41-004	None	Storm drains shown on LASL Drawing No. ENG-R1490, 8/13/62. Surface contamination from operational releases.
C-41-005	TA-41-W46	Identified by CEARP TA-41-5-UST-A-PP (Fuel Tank), location unknown (ENG R-5122, 9-22-83). It is unknown if tank is still in existence or whether it has leaked.

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TA-42

Site No.	Associated Structure	Description
C-42-001	Canyon Edge	Debris, including pipes, was disposed over the canyon edge (CEARP ID No. TA42-3-OL-HW/RW). Addressed as part of 42-004.

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TA-43

Site No.	Associated Structure	Description
C-43-001	TA-43-1	Storm drain around TA-43-1; 8" diameter, 75' pipe which connects into a 12" diameter by 148' cmp and a 12" diameter by 137' cmp. This system drains toward or into Los Alamos Canyon. (CEARP ID No. TA43-2-CA/0-A/I-HW/RW)

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TA-45

Site No.	Associated Structure	Description
C-45-001	Former TA-45 parking lot	On January 21, 1957, a spill of plutonium contaminated sludge was reported in the parking lot area south of TA-45. Contamination was detected in excess of 20,000 cpm. Soil in the contaminated area was removed to a depth of 1 1/2 feet. Addressed as part of 45-001, Radioactive Wastewater Treatment Facility.

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TA-46

Site No.	Associated Structure	Description
C-46-001*	TA-46-75	Elemental mercury was spilled on the ground near TA-46-75 on July 22, 1975 (Office memo - 7/23/75).
C-46-002*	TA-46-31	Probable release of radioactive material from TA-46-31 stack in 1960. (Office memo- 4/8/60)
C-46-003*	TA-46-158 (?)	1978 release of UF ₆ with U-237 as a tracer possibly from TA-46-158 (Office memo - 6/11/78).

* DOE Environmental Problem 25, "Spills and Unplanned Liquid Releases," discussed the results of six samples taken along the north side of TA-46- 31. Analyses showed the presence of cesium, uranium, plutonium, and strontium. The problem was addressed in the "Revised Implementation Plan in Response to DOE Environmental Survey Team Preliminary Report, January 12, 1990."

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TA-50

Site No.	Associated Structure	Description
C-50-001	TA-50-4	Transformer with staining noted on pad; no active leak when inspected on 9/23/85. Serial no. E-687176. (LANL Transformer Assessment Sheet 5023)

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TA-51

Site No.	Associated Structure	Description
C-51-001	Unknown	Numerous unmarked drums at an experimental complex. The drums contain soil to be used in experiments. (CEARP ID No. TA51-5-CA-A-HW)
C-51-002	North of TA-51-34 North of TA-51-15	Former location of two magazine structures and associated soils contamination. The structures are presumed to have been burned and no HE was observed during a 1986 CEARP field survey. These structures have dimensions of 20' x 20'. (CEARP ID No. TA51-1-CA-I/A-HW)

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TA-52

Site No.	Associated Structure	Description
C-52-001	TA-52-9	Transformer with stains on pad; no active leak when inspected on 9/21/85; Serial No. E-688470B. (LANL Transformer Assessment Sheet 5028)
C-52-002	TA-52-9	Transformer with stains on pad; no active leak when inspected on 9/21/85; Serial No. L-688470A. (LANL Transformer Assessment Sheet 5027)

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TA-53

Site No.	Associated Structure	Description
C-53-001	TA-53-51	Transformer has no active leaks when observed on 8/21/85; however, old stains are visible; Serial No. 16887. (LANL Transformer Assessment Sheet 5032)
C-53-002	TA-53-67	New small stains noted on 9/21/85, mainly around bushing and gaskets of this transformer; Serial No. G859183. (LANL Transformer Assessment Sheet 5036)
C-53-003	TA-53-170	New small stains noted on 9/21/85, mainly around bushing and gaskets of this transformer; Serial No. G853266A. (LANL Transformer Assessment Sheet 5037)
C-53-004	TA-53-171	New small stains noted on 9/21/85, mainly around bushing and gaskets of this transformer; Serial No. G853266B. (LANL Transformer Assessment Sheet 5038)
C-53-005	TA-53-172	New small stains noted on 9/21/85, mainly around bushing and gaskets of this transformer; Serial No. G853264A. (LANL Transformer Assessment Sheet 5039)
C-53-006	TA-53-173	New small stains noted on 9/21/85, mainly around bushing and gaskets of this transformer; Serial No. G853267A. (LANL Transformer Assessment Sheets)
C-53-007	TA-53-175	New small stains noted on 9/21/85, mainly around bushing and gaskets of this transformer; Serial No. G853265B (LANL Transformer Assessment Sheet 5042)
C-53-008	TA-53-67	Transformer has no active leaks as observed on 9/21/85; however, old stains visible on casing; Serial No. PCV7106-01. (LANL Transformer Assessment Sheet 5043)

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**TA-53
(Continued)**

Site No.	Associated Structure	Description
C-53-009	TA-53-176	Transformer has no active leaks as observed on 9/21/85; however, old stains visible on casing; Serial No. G85263A. (LANL Transformer Assessment Sheet 5044)
C-53-010	TA-53-191	Transformer has no active leaks as observed on 9/21/85; however, old stains visible on casing; Serial No. PCV7107-01. (LANL Transformer Assessment Sheet 5045)
C-53-011	TA-53-177	Transformer has no active leaks as observed on 9/21/85; however, old stains visible on casing; Serial No. G8532630. (LANL Transformer Assessment Sheet 5046)
C-53-012	TA-53-178	New small stains were noted on transformer, on 9/21/85. These stains were mainly around the bushing and gaskets; Serial No. G853267C. (LANL Transformer Assessment Sheet 5047)
C-53-013	TA-53-179	Transformer has no active leaks as noted on 9/21/85; however, old stains visible on casing; Serial No. G853264B. (LANL Transformer Assessment Sheet 5048)
C-53-014	TA-53-180	Transformer has no active leaks; however, old stains visible on casing; Serial No. G853265A. (LANL Transformer Assessment Sheet 5049)
C-53-015	TA-53-182	Transformer has no active leaks as observed on 9/21/85; however, old stains visible on pads; Serial No. PFH3797. (LANL Transformer Assessment Sheet 5051)

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**TA-53
(Continued)**

Site No.	Associated Structure	Description
C-53-016	TA-53-50	New small stains were noted around bushings or gaskets of transformer. Serial number unknown. Date of inspection unknown. (LANL Transformer Assessment Sheet 5617)
C-53-017	TA-53-70	Approximately 3 gallons of PCB oil was spilled from this capacitor on 6/12/87; Serial No. is unknown. (LANL Transformer Assessment Sheets)
C-53-018	Sector E, Salvage Staging Area	2-4 ounces of pyranol capacitor oil was spilled. The asphalt around this area was removed; Serial No. unknown. (LANL Transformer Assessment Sheets)
C-53-019	Sector A, North (outside)	Approximately 1/2 cup of PCB oil was released from this transformer on 3-20-90; Serial No. unknown. (LANL Transformer Assessment Sheets)

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TA-54

Site No.	Associated Structure	Description
C-54-001	TA-54-38	A sump for receiving liquids that drain onto the floor at TA-54-38. The sump drain will discharge to a canyon outfall on the north side of the building. Facility built in 1989. (Interview with LANL employee)

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TA-55

Site No.	Associated Structure	Description
C-55-001	TA-55-4	Methyl ethyl ketone and other organic solvents were present in core samples taken during drilling at the southwest side of this building in 1984. This contamination was from a one-time inadvertent release (CEARP ID No. TA55-6-CA-I-PP). Addressed under 55-010.

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TA-59

Site No.	Associated Structure	Description
C-59-001	TA-59-184	Transformer has no active leak; however, old stains are visible around bushing and gaskets; PCB ID No. 5550. (LANL Transformer Assessment Sheet)

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TA-60

Site No.	Associated Structure	Description
C-60-001	TA-3-382-2 (formerly located near TA-60-1)	Former location of decommissioned underground storage tank for diesel fuel; 10,152 gallon capacity. A volumetric test conducted in 1986 indicated that the tank may have been leaking, but no visible signs of contamination were apparent at decommissioning. (Installed in 1978 and removed in July 1989.) (Task 19, Record 184)
C-60-002	TA-3-318, located on Sigma Mesa near the decommissioned communications bunker TA-3-219	Former location of the decommissioned underground storage tank for diesel fuel; 5000 gallon capacity; abandoned in 1976 and removed in 1986. (Task 19, Record 183)
C-60-003	TA-60-29	In January 1989, a spill occurred at the Pesticide Storage Shed, TA-60-29, on Sigma Mesa east of the Test Rack Facility TA-60-17. A water line into the storage shed froze and ultimately ruptured, spilling between 2,000 and 10,000 gallons of water onto the floor of the storage shed and outside onto the soil. Pesticides may have been dissolved in the water that was released into the surrounding soil. Soil samples were taken near the shed, but pesticide levels were below the detection limit. (Task 19, Record 46)
C-60-004	Near TA-60-1 (formerly TA-3-382-2)	Former location of a tank near TA-60-1 was leaking with a loss rate of .2-.3 gal./hour according to a volumetric test performed in 1986. The tank had a capacity of 10,152 gal. It was installed in 1978 and removed in 1989. (CEARP ID No. TA3-3-CA/UST/SST-AI-PP; Task 19, Record 184)

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TA-61

Site No.	Associated Structure	Description
C-61-001	TA-61-23 (formerly TA-3-282)	Soil beneath transformer was stained; no active leak when inspected on 6/12/86. (CEARP ID No. TA3-1-CA-A/I-HW/RW; RFA Unit 3.067)

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TA-73

Site No.	Associated Structure	Description
C-73-001	TA-73-1-1 (formerly TA-0-195-1)	Underground storage tank for black iron, 2,000 gallon tank installed in 1965. Owned by a private aviation club, but located on DOE property. (Task 27, Record 1073) Addressed as part of 73-001, Airport Landfill.
C-73-002	TA-73-1-2 (formerly TA-0-195-2)	Underground storage tank for gasoline; black iron, 6,000 gallon tank installed in 1965. Owned by a private aviation club, but located on DOE property. (Task 27, Record 1074) Addressed as part of 73-001, Airport Landfill.
C-73-003	TA-73-1-3 (formerly TA-0-195-3)	Underground storage tank for gasoline; black iron, 4,000 gallon tank installed in 1965. Owned by a private aviation club, but located on DOE property. (Task 27, Record 1075) Addressed as part of 73-001, Airport Landfill.
C-73-004	TA-73-1-4 (formerly TA-0-195-4)	Underground storage tank for gasoline; black iron, 6,000 gallon tank installed in 1965. Owned by a private aviation club, but located on DOE property. (Task 27, Record 1076) Addressed as part of 73-001, Airport Landfill.

APPENDIX D

LOS ALAMOS NATIONAL LABORATORY TECHNICAL AREA PROPERTY OWNERSHIP

TA- 0: Various owners
TA- 1: Private and Los Alamos County
TA- 2: DOE
TA- 3: DOE
TA- 4: DOE
TA- 5: DOE
TA- 6: DOE
TA- 7: DOE
TA- 8: DOE
TA- 9: DOE
TA-10: Los Alamos County
TA-11: DOE
TA-12: DOE (Abandoned 8/10/51)
TA-13: DOE (in TA-16)
TA-14: DOE
TA-15: DOE
TA-16: DOE
TA-17: Planned, but never built.
TA-18: DOE
TA-19: DOE (in TA-72)
TA-20: DOE (East Jemez Road)
TA-21: DOE
TA-22: DOE
TA-23: DOE (in TA-9)
TA-24: DOE (in TA-16)
TA-25: DOE (in TA-16)
TA-26: DOE (in TA-73)
TA-27: DOE (Pajarito Road)
TA-28: DOE
TA-29: DOE
TA-30: DOE (in TA-3)
TA-31: Private (Homes)
TA-32: Los Alamos County (County Annex)
TA-33: DOE
TA-34: Planned, but never built.
TA-35: DOE
TA-36: DOE
TA-37: DOE
TA-38: Planned, but never built.
TA-39: DOE
TA-40: DOE
TA-41: DOE
TA-42: DOE
TA-43: DOE
TA-44: Los Angeles, California (Abandoned 8/10/57)
TA-45: Los Alamos County (Aquatic Center)
TA-46: DOE

APPENDIX D

**LOS ALAMOS NATIONAL LABORATORY
TECHNICAL AREA PROPERTY OWNERSHIP
(CONTINUED)**

TA-47: Downtown Santa Fe (Abandoned in 1958)
TA-48: DOE
TA-49: DOE
TA-50: DOE
TA-51: DOE
TA-52: DOE
TA-53: DOE
TA-54: DOE
TA-55: DOE
TA-56: DOE
TA-57: DOE
TA-58: DOE
TA-59: DOE
TA-60: DOE
TA-61: DOE
TA-62: DOE
TA-63: DOE
TA-64: DOE
TA-65: DOE
TA-66: DOE
TA-67: DOE
TA-68: DOE
TA-69: DOE
TA-70: DOE
TA-71: DOE
TA-72: DOE
TA-73: DOE
TA-74: DOE