ER ID 0247

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Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

memorandum

TO: Robert L. Gonzales

DATE: July 5, 1990

FROM: Micheline Devaurs

MAIL STOP/TELEPHONE: K481/7-3131

SYMBOL: HSE-DO/ER:90-213

SUBJECT: COMMENTS ON REVISED DRAFT SWMU REPORT FOR TA-21

Attached are sheets for those TA-21 SWMUs I have comments on. My major comments are summarized below.

(1) 21-004(a),(b),(c) and 21-028(a),(b),(c): The first three are above-ground backup tanks from which there have been no releases; the last three are active satellite container storage areas. The regulatory definition of a SWMU is a unit "... solid wastes routinely and systematically released." Although LANL has decided to include "... units intended to store, treat, or dispose of waste materials, regardless of whether they have released...", I believe LANL needs to be certain regarding what we are calling SWMUs, particularly because writing them off requires a major permit modification from EPA.

(2) SWMU 21-030 Guard House Septic Systems was added in the latest version of the SWMU Report. However, neither (a) nor (b) are located at TA-21. According to the grey book they are located at the Meson Facility and at the back gate, respectively.

(3) With regard to TA-21 Appendix C units, it would be helpful if either previous SWMU numbers or CEARP site descriptors for these units were given. No unit is assigned the number C-21-029. Was that number not used, or is there a unit missing?

Additional comments are detailed on the attached pages. I appreciate the opportunity to comment, and look forward to receiving the final SWMU Report for TA-21.

MD:am

Attachments

Cy: J. Nyhan, EES-15, MS J495
B. Drennon, EES-15, MS J495

Received by ER-RPF
JAN 02 1991
JCB

14277

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : CONTAINER STORAGE AREA
UNIT USE : STORAGE
OPERATIONAL STATUS : DECOMMISSIONED
PERIOD OF USE : ? - 1988
HAZARDOUS RELEASE : SUSPECTED
RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SUSPECTED HAZARDOUS WASTE
PAGE : 1

UNIT INFORMATION

These container storage areas were observed during the VSI and by CEARP. Abandoned drums were identified during the VSI. There were several old 55-gallon drums of undefined purpose lying on their sides on the ground inside a fenced area. The drums are believed to be empty. The CEARP notes that additional drums and gas cylinders are stored in several locations through out TA-21, some of which are leaking. One of these was noted in the CEARP: it was a barrel storage area located southeast of TA-21-31; it was removed in 1981 (21-002(a)). A recent field survey found that most of the drums have been removed. Based on the LANL container storage area database, these areas are no longer active.

1966 reference: Engineering database

WASTE INFORMATION

The removed containers were sampled and then disposed of or stored at another area.

RELEASE INFORMATION

Some of the drums were observed to be leaking in the past.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CEARP IDENTIFICATION NUMBER(S)	RFA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-002	TA21-13-CA-A-NW	21.020 21.021 21.029		
21-002(a)	TA21-1-CA-1/A-NW/NW		Tsh 10 - 174	SOUTHEAST OF TA-21-31

this storage area is SE of TA-21-38.

Note that Jack Nyhan may have identified two additional previous drum storage areas north of Bldg 12 and north of Bldg 3, respectively from photos. (reference: phone conversation 7/5/90).

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : CONTAINER STORAGE AREA
UNIT USE : STORAGE
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : 1981 - PRESENT
HAZARDOUS RELEASE : SUSPECTED
RADIOACTIVE RELEASE : SUSPECTED

MATERIALS MANAGED : SOLID WASTE
PCBs

UNIT INFORMATION

This unit consists of drum storage at Building 61 and at a nearby bermed asphalt pad. Up to 20 boxes of capacitors, 9 drain-type transformers and 30 drums of PCB-contaminated oil may be held here. Bulk storage consists of (1) 4000 gallon tank and (1) 2000 gallon tank that contain >50 ppb PCBs. The oil from the bulk storage and capacitors is shipped to Insco in Eldorado, AR for incineration and the transformer oil is shipped to GNL Recovery (Unison) in Ashtabula, Ohio. ~~The container storage area was expected to have been replaced in 1989.~~ PCB storage was moved to Area L in August 1989 (Source: Larry Hupka, HSE-7)

WASTE INFORMATION

The waste consists of oil containing PCBs.

RELEASE INFORMATION

Soil around the storage pad is stained and has a sheen.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CEARP IDENTIFICATION NUMBER(S)	RFA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-003	TA21-14-CA-A-NN	21.016		TA-21-61

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : ABOVEGROUND TANK
UNIT USE : STORAGE
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : SEE BELOW
HAZARDOUS RELEASE : NONE
RADIOACTIVE RELEASE : NONE

MATERIALS MANAGED : SUSPECTED RADIOACTIVE WASTE
PAGE : 1

UNIT INFORMATION

Aboveground tank TA-21-339 (21-004(a)) is a 6,000-gallon tank designed to receive any liquids discharged from TA-21-21 in the event of an emergency release, i.e. if the fire sprinklers in the building are used. To date, no liquid has been discharged to this tank. The tank is 8' in diameter and 16' long. It was installed in 1974. In addition to this tank, there are two tanks (21-004(b) and (c)) located in a berned area north of structures TA-21-223 and TA-21-213. These tanks receive liquid from TA-21-223 if the pump is inoperative or there is a similar problem. These tanks were installed in the 1970s. Prior to the installation of these tanks, sump/pump TA-21-223 discharged, if necessary, into DP Canyon via a 61' long, 6"-diameter drain line (21-004(d)). They are surrounded by an asphalt berm.

WASTE INFORMATION

Currently, no waste has been discharged to Tank TA-21-339. When the tank is used, the waste may contain radionuclides. The waste discharged to the tanks from TA-21-223 is industrial waste from DP East. It may contain tritium. Chemical contaminants to these tanks have not been documented.

RELEASE INFORMATION

There has been no release of any kind from any of these tanks.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CERCLA IDENTIFICATION NUMBER(S)	RFA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-004(a)	TA21-5-8-1-HW/RW		Tsk 9 : 27	TA-21-339
21-004(b)	TA21-5-8-1-HW/RW	21.022 ?	Tsk 9 : 114	TA-21-223, -213
21-004(c)	TA21-5-8-1-HW/RW	21.022 ?	Tsk 9 : 114	TA-21-223, -213
21-004(d)	TA21-5-8-1-HW/RW		Tsk 10 : 134	TA-21-223
			Tsk 9 : 81	

? Indicates uncertainty with RFA Unit correlation.

Note: Units a, b, and c above do not fit the definition of SWMUs since they never received anything.

Additionally, this SWMU is entitled aboveground tanks and type of unit is the same. However 21-004(d) is a drainline; does it belong in another SWMU?

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : INCINERATOR
UNIT USE : TREATMENT
OPERATIONAL STATUS : DECOMMISSIONED
PERIOD OF USE : 1960s - 1970s
HAZARDOUS RELEASE : SUSPECTED
RADIOACTIVE RELEASE : KNOWN

MATERIALS HANDLED : RADIOACTIVE WASTE
SUSPECTED HAZARDOUS WASTE

UNIT INFORMATION

In the 1960s and 1970s, several incinerators called salamanders located at DP West were used to burn various types of oils and fats contaminated with radionuclides. The salamanders were associated with the radioactive waste treatment facility. According to LANL staff, the units were long trays used for open burning of waste. These incinerators have been removed.

WASTE INFORMATION

The incinerated waste consisted of oils contaminated with radionuclides.

RELEASE INFORMATION

Oil spills from the salamanders are known to have occurred.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CEARP IDENTIFICATION NUMBER(S)	RFA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-007	TA21-4-IN-1-MN/RN		Tst 10 : 179	TA-21-132

This reference is probably incorrected according to Kelly Bitner and April Dixon
Barry Drennon says it is definitely incorrect.

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : INCINERATOR
UNIT USE : TREATMENT
OPERATIONAL STATUS : DECOMMISSIONED
PERIOD OF USE : ? - 1977
HAZARDOUS RELEASE : UNKNOWN
RADIOACTIVE RELEASE : KNOWN

MATERIALS MANAGED : MIXED WASTE
PAGE : 1

this should be identified as Building 2

UNIT INFORMATION

The plutonium facility at DP West operated a small 'glovebox' incinerator to recover certain elements. During operation the ash was leached for recovery. Spent solutions went to the liquid waste treatment facility. Off-gases were treated for radionuclide removal before they were released to the environment. The incinerator was removed during the building decommissioning.

WASTE INFORMATION

The waste was mixed radioactive and hazardous materials.

RELEASE INFORMATION

A small amount of radioactivity and oxides of nitrogen were released as off-gases and particulates from the stack.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CEARP IDENTIFICATION NUMBER(S)	DOE UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-008	TA21-4-IN-1-HW/RW	21.044	Tab 10 : 175	

LA-9513-MS refers to this as a scrap incinerator (p.13); not a glovebox incinerator

LA-9513-MS ≡ "Los Alamos DP West Plutonium Facility Decontamination Project 1978-1981"
R. Garde, E.J. Cox, A.M. Valentine
Sept. 1982

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : WASTE TREATMENT PLANT
UNIT USE : TREATMENT
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : 1967 - PRESENT
HAZARDOUS RELEASE : KNOWN
RADIOACTIVE RELEASE : KNOWN

MATERIALS MANAGED : MIXED WASTE
PAGE : 1

UNIT INFORMATION

After the waste treatment plant at TA-21-35 was closed in 1967, a new waste treatment facility began operation at TA-21-257 (21-011(a)). Waste lines link DP East with DP West which ties to the new waste treatment facility. Sump TA-21-223 (21-011(b)), built in 1963 serves as the pump house for transporting DP East waste to the treatment plant. A 3"-diameter drainline connects sump/pump TA-21-223 with the TA-21-257 treatment facility. Before TA-21-257 was built, this same line connected the TA-21-223 sump/pump with the old treatment facility (TA-21-35, 21-010). The sump/pump is connected to buildings TA-21-152, -155, and -209 via a 6"-diameter drainline. The plant includes a clarifier, a flocculator tank, four vertical storage tanks, a pumping station, several pumps that are part of NPDA-1 TA-27-129 (21-011(c)), several aboveground acid tanks TA-21-110, -111, -112, -113, -256, -200, -209 (21-011(d), (e), (f), (g), (h), (i), and (j), respectively), and several chemical holding tanks. Raw waste storage tanks and a cement silo were moved from the old waste treatment plant (see 21-009). Tanks TA-21-110, -111, -112, -113, and -120 were acid holding tanks that were installed in 1952 at old waste treatment plant and moved to TA-21-257 in 1967. Tank TA-21-120 has a 4000 gallon capacity. Tanks TA-21-200 (1000 gallon) and -209 (1600 gallon) were installed in 1968. Drainlines that connect buildings TA-21-2 and -3 to the TA-21-257 treatment plant are 1.5"-diameter stainless steel pipe. The drainline from building TA-21-3 was previously split and also discharged to acid tank TA-21-256, until the tank was relocated in 1967-1968. Presently the liquids are piped to TA-50 for release; however, an outfall from the plant can discharge to the canyon. The outfall is under a NPDES permit and is designated 050.

WASTE INFORMATION

The treatment plant handles radioactive-mixed waste.

The grey book states that DP-256 and -120 are acid tanks. Although unclear as written DP-120 is considered different than the other acid tanks in this write-up.

RELEASE INFORMATION

Before the liquids were delivered to TA-50, an outfall into the canyon north of the site discharged the liquids from the plant. The receiving canyon contains a radionuclide and chemical inventory from this practice. Sump TA-21-223 may have discharged to the canyon on occasion through a drain pipe before the holding tanks were installed.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CHAMP IDENTIFICATION NUMBER(S)	NPA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-011(a)	TA21-10-WB1-A/1-RU/NU		Tsk 9 : 95 96 97	TA-21-257
21-011(b)	TA21-5-6-1-NU/NU		Tsk 9 : 31	TA-21-223
21-011(c)	88	21.006 21.009 21.012		TA-21-120
21-011(d)	88		Tsk 9 : 116	TA-21-110
21-011(e)	88		Tsk 9 : 116	TA-21-111
21-011(f)	88		Tsk 9 : 116	TA-21-112
21-011(g)	88		Tsk 9 : 116	TA-21-113
21-011(h)	88		Tsk 9 : 97	TA-21-256
21-011(i)	88		Tsk 9 : 116	TA-21-200
21-011(j)	88		Tsk 9 : 116	TA-21-209

88 No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : SURFACE DISPOSAL
UNIT USE : DISPOSAL
OPERATIONAL STATUS : INACTIVE
PERIOD OF USE : ?
HAZARDOUS RELEASE : UNKNOWN
RADIOACTIVE RELEASE : UNKNOWN

MATERIALS MANAGED : UNKNOWN
SOLID WASTE

should specify: southern edge of DP Canyon

UNIT INFORMATION

There is a small surface disposal area (21-013(g)) possibly consisting of sand from the drying beds, TA-21-230, of the sanitary waste treatment plant. This area is located near the north edge of the canyon near the plant. Normally the sludge from the plant is taken to the contaminated disposal facility at TA-54. A second disposal area (21-013(b)) was noted in Los Alamos Canyon near MDA-V during the CEARP field reconnaissance. The area contained building debris. A third possible disposal area (21-013(c)) is northeast of TA-21-209, just south of the road to the sanitary treatment plant. During an ER Program site visit on 12/14/88, this surface disposal was located approximately 122 ft from LASL Marker XI 1968 and 85 ft from the DP East fence where it makes right angles east of MDA-U. Another possible disposal area (21-013(d)) is the disturbed area north of TA-21-20 and DP road, referred to as the "cold dump." This was identified by the DOE Environmental Survey as Problem 22. Geophysical surveys and the ER Program site visit noted that the area has been scraped and that the cold dump may have been removed. A fifth possible disposal area (21-013(e)) northwest of the "cold dump" may have been used for construction refuse. Construction debris, soil piles, and drain pipes were observed during the ER Program site visit on 12/14/88. This site is 300 ft east of fence adjacent to the Cable Lift building and 175 ft north of the fence along DP Road. A sixth possible disposal area (21-013(f)) was identified on a 1949 aerial photo (photo 12244) as a series of mounds. Another aerial photo (15927), taken in 1950, shows the mounds had been removed and replaced by TA-21-61. No information is available on the contents of the mounds, or whether they were waste material. No physical evidence of this disposal area was found during an ER site visit on 12/14/88. Two drainlines were observed during an ER Program site visit, located immediately south of MDA-V (21-013(g)). These drainlines appeared to have been disposed of and are not associated with drainage from MDA-V. These drainlines may have been left in this location when the old acid waste line was replaced.

WASTE INFORMATION

The waste in the area at the north canyon edge probably consists of sand from the drying beds at the sanitary waste treatment plant. Further information characterizing the waste is not available. The surface disposal area in Los Alamos Canyon contained asphalt, concrete pipe, reinforcing rods, bottles, and a tank. The area by TA-21-209 is disturbed and appears to contain building debris. It is unknown if there is subsurface burial here. Waste contents of the "cold dump" are unknown; however, analytical results suggest that 1,1,1-trichloroethane may have been present in the waste. The disposal area northwest of the "cold dump" appears to contain construction debris. Contents of the mounds in the 1949 aerial photo are unknown.

RELEASE INFORMATION

There is no information available indicating the release of hazardous waste from most of these surface disposal areas. However, soil gas sampling in the "cold dump" location detected an estimated 0.5 to 1.0 mg/cubic meter of 1,1,1-trichloroethane in the 1.7- to 4-ft depth interval.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CEARP IDENTIFICATION NUMBER(S)	RFA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-013(a)	TA21-12-OL-1-MU/MU	21.024 ?	Tsk 8 : 14	TA-21-230
21-013(b)	TA21-12-OL-1-MU/MU	21.024 ?	Tsk 8 : 13	NEAR MDA-V
21-013(c)	TA21-11-L-1-MU/MU/SU	21.024 ?	Tsk 8 : 7	NORTHEAST OF TA-21-209
21-013(d)	‡‡	21.024 ?	Tsk 8 : 8	NORTH OF TA-21-20 AND DP ROAD
21-013(e)	‡‡	21.024 ?	Tsk 8 : 11	NORTHWEST OF TA-21-20 AND DP ROAD
21-013(f)	‡‡	21.024 ?	Tsk 8 : 12	SITE OF TA-21-61
21-013(g)	‡‡	21.024 ?	Tsk 9 : 107 108	SOUTH OF MDA-V

? Indicates uncertainty with RFA Unit correlation.
‡‡ No corresponding E. R. Program unit.

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : BUILDING/STRUCTURE
UNIT USE : TREATMENT
OPERATIONAL STATUS : ACTIVE/INACTIVE
PERIOD OF USE : 1950 - PRESENT
HAZARDOUS RELEASE : SUSPECTED
RADIOACTIVE RELEASE : KNOWN

MATERIALS MANAGED : SUSPECTED MIXED WASTE
RADIOACTIVE WASTE

UNIT INFORMATION

There are several filter houses and exhaust stacks that are used to treat the radioactive off-gases in TA-21. The effluents from the active units are sampled monthly for radionuclides. In some labs, filters are in use before the gases discharge to the main filter houses.

STRUCTURE	SWMU NO.	STATUS	FAN NO.	SAMPLED FOR
TA-21-[illegible]	21-019(a)	active	FE-A	U235
TA-21-[illegible]	21-019(b)	active	FE-1	Pu, mixed fission products
TA-21-[illegible]	21-019(c)	active	FE-3	U238
TA-21-146	21-019(c)	inactive(?)		
TA-21-[illegible]	21-019(d)	active	FE-1	Pu
TA-21-[illegible]	21-019(e)	active	FE-3	tritium gas, tritium oxide
TA-21-[illegible]	21-019(f)	active	FE-1,-10,-12	tritium gas
TA-21-[illegible]	21-019(g)	active	FE-4	Pu
TA-21-[illegible]	21-019(h)	active	FE-2	Pu
TA-21-[illegible]	21-019(i)	active	FE-1,-7	Pu
TA-21-[illegible]	21-019(j)	active	FE-1	Pu
TA-21-[illegible]	21-019(k)	inactive (?)		
TA-21-[illegible]	21-019(l)	inactive (?)		
TA-21-324	21-019(m)	active	FE-1	Pu

There are two stacks here with the same SWMU number. Is that a problem?

TA-21-146 is a filter house built between 1950 and 1960 of pumice block with a steel deck roof; it is about 40'8" x 18' x 13'11.5". TA-21-324 is also a filter house that is about 18' x 50' x 10'. In 1959 a filter in TA-21-5 caught fire and considerable contamination was spread outside the building.

WASTE INFORMATION

The off-gases contain radionuclides and possibly hazardous chemicals.

RELEASE INFORMATION

Detailed data on any releases other than radionuclides is lacking. The extent of clean-up after the TA-21-5 filter fire is unknown.

(continued)

0022 1 22 77 99

0004 1 JAN 90

SUMMARY

LOCATION : TA-21
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
MIXED WASTE

UNIT INFORMATION

The following are active storage areas. All of these units are based on 10/88 and 1/90 versions of the LANL container storage area database, except 21-020(d).

LOCATION	SWMU NO.	FACILITY TYPE	MATERIALS STORED
TA-21-121	21-020(a)	satellite	alcohol, acetone, freon, inactive as of 1/90/88
TA-21-150	21-020(b)	satellite	solvents, miscellaneous chemicals; 3 satellite storage areas
TA-21-3	21-020(c)	satellite	solvents, miscellaneous chemicals; halogenated organics, non-halogenated organics, possible radioactive contamination; 4 different satellite storage areas
TA-21-209	21-020(d)	<90 day storage	radioactive-contaminated waste
TA-21-210	21-020(e)	satellite	solvents, freon, waste oil; 3 satellite storage areas

The less than 90 day storage area at TA-21-209 loading dock was noted during a November 1988 field survey. These drums were awaiting transport to TA-54.

WASTE INFORMATION

TA-21-121 stored alcohol, acetone and freon; TA-21-150, TA-21-3 and TA-21-210 store solvents and miscellaneous chemicals. TA-21-209 stores waste containing radionuclides. One of the storage areas at TA-21-3 may store mixed waste.

RELEASE INFORMATION

TA-21-121 and the TA-21-209 storage areas are located outside on loading docks. The TA-21-150 storage areas are located in the building and the storage areas at TA-21-3 are located in the building and in an outside cabinet. No releases from these units are known.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CEARP IDENTIFICATION NUMBER(S)	RFA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-020(a)	**			TA-21-121
21-020(b)	**			TA-21-150
21-020(c)	**			TA-21-3
21-020(d)	**			TA-21-209
21-020(e)	**			TA-21-210

** No corresponding E. R. Program unit.

I do not believe that satellite storage areas are SWMUs. Units (d) and (e) may be SWMUs.

SUMMARY

LOCATION : TA-21
TYPE OF UNIT(s) : SEPTIC SYSTEM
UNIT USE : DISPOSAL
OPERATIONAL STATUS : ACTIVE
PERIOD OF USE : SEE BELOW
HAZARDOUS RELEASE : NONE
RADIOACTIVE RELEASE : NONE

MATERIALS HANDLED : SANITARY WASTE
PAGE : 1

UNIT INFORMATION

Two septic systems in TA-21 are known to receive only sanitary waste. A tank identified by the number TA-0-190 (21-030(a)) was installed in 1967 and serves an office trailer. It is located near RDA-B. The tank is constructed of metal, measures 4'4" in diameter x 5' deep, and has a capacity of 500 gallons. The tank is periodically pumped. A second tank, TA-0-14 (21-030(b)) was installed in 1950 and served a guard house. It is located south of RDA-B. The tank is built of reinforced concrete and its dimensions are 4' x 4' x 7'. This septic tank had a distribution box (TA-0-15) that was about 2' x 2' x 7'.

WASTE INFORMATION

These tanks are believed to handle only sewage.

RELEASE INFORMATION

There have been no hazardous releases from these tanks.

NOTES

This SWMU was formerly SWMU No. 0-211.

SWMU CROSS-REFERENCE LIST

SWMU NUMBER	CROSS IDENTIFICATION NUMBER(S)	RCA UNIT	E.R. RELEASE SITE INFO.	ASSOCIATED STRUCTURES
21-030(a)	TA0-22-ST-1/A-MW		Tsk 27 : 1014	TA-0-190
21-030(b)	TA0-22-ST-1/A-MW		Tsk 27 : 1015	TA-0-14, -15

Note: This SWMU was added to TA-21 in this version of the SWMU report. However 21-030(a), TA-0-190 is located at the Meson Facility (Grey book states it is at N-6, E-10). 21-030(b) is located at S-8, W-5; this is a building near the back gate at the intersection of SR-4 and West Jemez Road. Obviously neither of these locations is at TA-21.

STRUCTURE NUMBER	STRUCTURE DESIGNATION	STRUCTURE NOMENCLATURE	REMARKS	APPROXIMATE GRID LOCATION
TA-0-1	ULR-1	MANHOLE, WATER PRV		N-9 E-9
TA-0-2	ULR-2	GUARD HOUSE	REMOVED 1952	
TA-0-3	ULR-3	ROADBLOCK	REMOVED 1952	
TA-0-4	ULR-4	STREAM DEBRIS BARRIER		N-8 E-6
TA-0-5	ULR-5	WATER TANK		N-5 N-2
TA-0-6	ULR-6	WATER TANK		N-8 W-1
TA-0-7	ULR-7	SEPTIC TANK	ABANDONED 1955	N-11 E-8
TA-0-8	ULR-8	WATER TANK	REM & REHUM TA-3-268	
TA-0-9	ULR-9	MANHOLE, WATER	REMOVED 1968	
TA-0-10	ULR-10	GUARD HOUSE	REMOVED 1968	
TA-0-11	ULR-11	GUARD HOUSE	TRANS TO ZIA 1950	S-8 W-5
TA-0-12	ULR-12	GUARD HOUSE	REMOVED 1959	
TA-0-13	ULR-13	WATER TANK		N-2 W-4
TA-0-14	ULR-14	SEPTIC TANK, SANITARY		S-8 W-9
TA-0-15	ULR-15	DISTRIBUTN BOX, SANITARY		S-8 W-5
TA-0-16	ULR-16	MANHOLE, WATER		N-8 W-1
TA-0-17	ULR-17	WOODEN TANK, WATER	REMOVED 1950	
TA-0-18	ULR-18	MANHOLE, GAS PRV		N-3 E-5
TA-0-19	ULR-19	GUARD HOUSE	REMOVED 1950	
TA-0-20	ULR-20	MANHOLE, WATER PRV	ABANDONED 1952	
TA-0-21	ULR-21	RADIO COMMUNICATIONS	TRANS TO ZIA 1953	N-3 E-5
TA-0-22	ULR-22	CHLORINATION STATION	TRANS TO ZIA 1943	N-3 W-4
TA-0-23	ULR-23	MANHOLE, STEAM		S-8 W-3
TA-0-24	ULR-24	MANHOLE, STEAM		S-8 W-2
TA-0-25	ULR-25	MANHOLE, STEAM		S-1 W-3
TA-0-26	ULR-26	MANHOLE, STEAM		S-1 W-2
TA-0-27	ULR-27	MANHOLE, STEAM		S-1 W-3
TA-0-28	ULR-28	MANHOLE, STEAM		N-1 W-3
TA-0-29	ULR-29	WATER TANK	REMOVED 1946	
TA-0-30	ULR-30	INTAKE STRUCTURE	ABANDONED 1956	N-3 W-4
TA-0-31	ULR-31	MANHOLE, SANITARY		N-2 W-2
TA-0-32	ULR-32	MANHOLE, WATER PRV		N-2 W-3
TA-0-33	ULR-33	MANHOLE, ACID	ABANDONED 1963	
TA-0-34	ULR-34	MANHOLE, ACID WASTE	REMOVED 1967	
TA-0-35	ULR-35	MANHOLE, ACID	REMOVED 1967	
TA-0-36	ULR-36	MANHOLE, ACID	REMOVED 1966	
TA-0-37	ULR-37	MANHOLE, ACID	REMOVED 1967	
TA-0-38	ULR-38		CANCELLED	
TA-0-39	ULR-39	MANHOLE, WATER PRV		S-1 E-8
TA-0-40	ULR-40	LOS ALAMOS CANYON BRIDGE	TRANS TO ZIA 1950	N-9 E-2
TA-0-41	ULR-41	MANHOLE, SANITARY	ABANDONED 1954	
TA-0-42	ULR-42	MANHOLE, SANITARY	ABANDONED 1954	
TA-0-43	ULR-43	MANHOLE, ELECTRICAL		N-9 E-2
TA-0-44	ULR-44	MANHOLE, ELECTRICAL		N-9 E-2
TA-0-45	ULR-45	MANHOLE, ELECTRICAL		N-9 E-2
TA-0-46	ULR-46	MANHOLE, ELECTRICAL		N-9 E-3
TA-0-47	ULR-47	MANHOLE, ELECTRICAL		N-9 E-3
TA-0-48	ULR-48	MANHOLE, ELECTRICAL		N-8 E-4
TA-0-49	ULR-49	MANHOLE, ELECTRICAL		N-8 E-4
TA-0-50	ULR-50	MANHOLE, ELECTRICAL		N-8 E-4
TA-0-51	ULR-51	MANHOLE, ELECTRICAL		N-8 E-4
TA-0-52	ULR-52	MANHOLE, ELECTRICAL		N-8 E-4
TA-0-53	ULR-53	MANHOLE, ELECTRICAL		N-9 E-5
TA-0-54	ULR-54	MANHOLE, ELECTRICAL		N-9 E-5
TA-0-55	ULR-55	MANHOLE, ELECTRICAL		N-9 E-5
TA-0-56	ULR-56	MANHOLE, ELECTRICAL	TRFD TO LA CNTY 1967	N-10 E-8
TA-0-57	ULR-57	MANHOLE, ELECTRICAL	TRFD TO LA CNTY 1967	N-10 E-8
TA-0-58	ULR-58	TRANSFORMER STATION	TRFD TO LA CNTY 1967	
TA-0-59	ULR-59	ROCK-UP LAB	REMOVED 1952	
TA-0-60	ULR-60	MANHOLE, ACID	ABANDONED 1963	
TA-0-61	ULR-61	MANHOLE, ACID	ABANDONED 1963	
TA-0-62	ULR-62	MANHOLE, ACID	REMOVED 1964	
TA-0-63	ULR-63	MANHOLE, ACID	REMOVED 1964	
TA-0-64	ULR-64	MANHOLE, ACID	REMOVED 1964	
TA-0-65	ULR-65	MANHOLE, ACID	REMOVED 1964	
TA-0-66	ULR-66	MANHOLE, ELECTRICAL	ABANDONED 1963	N-10 E-4
TA-0-67	ULR-67	WATER TANK		S-24 E-18
TA-0-68	ULR-68	GUARD HOUSE	STATION 362	N-6 W-7
TA-0-69	ULR-69	SEPTIC TANK SANITARY		N-6 W-3
TA-0-70	ULR-70	MANHOLE, WATER		N-5 W-2
TA-0-71	ULR-71	PUMPHOUSE, WATER		N-10 E-1
TA-0-72	ULR-72	MANHOLE, WATER		N-8 W-1
TA-0-73	ULR-73	MANHOLE, WATER		N-10 E-1
TA-0-74	ULR-74	GUARD TOWER	REMOVED 1960	
TA-0-75	ULR-75	GUARD TOWER	REMOVED 1960	
TA-0-76	ULR-76	GUARD HOUSE	REMOVED 1950	
TA-0-77	ULR-77			
TA-0-78	ULR-78			

STRUCTURE NUMBER	STRUCTURE DESIGNATION	STRUCTURE NOMENCLATURE	REMARKS	APPROXIMATE GRID LOCATION
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		N-6 E-1
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		N-4 E-4
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		N-7 E-3
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		N-8 E-6
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		S-1 E-8
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		S-4 E-10
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		N-4 W-1
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		N-8 W-3
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		N-1 W-2
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		S-6 W-3
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, WATER METER		N-1 W-3
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, ELECTRICAL		N-10 E-6
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, ELECTRICAL		N-10 E-6
TA-0-1[illegible]	VAO-1[illegible]	MANHOLE, ELECTRICAL		N-10 E-6
TA-0-170	VAO-170	MANHOLE, ELECTRICAL		N-10 E-6
TA-0-171	VAO-171	MANHOLE, ELECTRICAL		N-10 E-6
TA-0-172	VAO-172	WATER TANK		N-8 W-1
TA-0-173	VAO-173	WATER TANK		N-8 W-1
TA-0-174	VAO-174	MANHOLE, WATER VALVE		S-4 E-10
TA-0-175	VAO-175	WATER TANK		S-6 E-10
TA-0-176	VAO-176	PUMPING STATION		S-4 E-10
TA-0-177	VAO-177	CHLORINATION STATION		
TA-0-1[illegible]	VAO-1[illegible]	CABLE SUBSTATION	[illegible] 2	S-7 E-11
TA-0-1[illegible]	VAO-1[illegible]	WELL HOUSE		
TA-0-1[illegible]	VAO-1[illegible]	CABLE SUBSTATION	[illegible] WELL 8	S-11 E-14
TA-0-1[illegible]	VAO-1[illegible]	PUMPING STATION		
TA-0-1[illegible]	VAO-1[illegible]	CABLE SUBSTATION	[illegible] 1	
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		N-5 W-8
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		N-3 E-7
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		N-5 E-11
TA-0-1[illegible]	VAO-1[illegible]	[illegible]	[illegible] TA-53-410	
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		N-8 E-6
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		N-7 E-8
TA-0-1[illegible]	VAO-1[illegible]	[illegible]	AT TA-53	S-1 E-13
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		N-8 E-10
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		S-1 E-7
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		N-8 E-1
TA-0-1[illegible]	VAO-1[illegible]	[illegible] STATION		N-8 W-1
TA-0-1[illegible]	VAO-1[illegible]	[illegible] STATION		
TA-0-1[illegible]	VAO-1[illegible]	[illegible] OFFICE	[illegible] TA-46-100	N-11 E-9
TA-0-1[illegible]	VAO-1[illegible]	[illegible]		
TA-0-1[illegible]	VAO-1[illegible]	[illegible] OFFICE	[illegible] TA-53-411	
TA-0-1[illegible]	VAO-1[illegible]	[illegible] OFFICE	[illegible] TA-53-412	
TA-0-1[illegible]	VAO-1[illegible]	[illegible] OFFICE	[illegible] TA-3-1[illegible]	
TA-0-1[illegible]	VAO-1[illegible]			
TA-0-2[illegible]	VAO-2[illegible]	[illegible] STATION	[illegible] TA-3	N-8 E-1

REMARKS	APPROXIMATE GRID LOCATION
[illegible] ABANDONED 1983	
[illegible]	N-7 E-17
[illegible]	N-6 E-17
[illegible]	N-11 E-13
[illegible]	N-11 E-9
[illegible] ABANDONED 1983	
[illegible] ABANDONED 1983	
[illegible]	N-7 E-11
[illegible] ABANDONED 1983	
[illegible]	N-12 E-4
REMOVED 1987	
[illegible]	[illegible]
REMOVED 1983	
REMOVED 1983	
[illegible]	[illegible]
REMOVED 1983	
REMOVED 1983	
REMOVED 1983	

UNIVERSITY OF CALIFORNIA

Los Alamos

LOS ALAMOS NATIONAL LABORATORY
LOS ALAMOS, NEW MEXICO [illegible]

FACILITIES ENGINEERING DIVISION

INDEX SHEET
STRUCTURE LOCATION PLAN
TA-0 UNASSIGNED LAND RESERVE

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Appendix C

TA-21
(Continued)

Site No.	Associated Structure	Description
C-21-015	TA-21-46	A safety training building. Building and soil were removed down to tuff.
C-21-016	TA-21-23	A storage hutment that was removed in 1954.
C-21-017	TA-21-24	A storage hutment that was removed in 1954.
C-21-018	TA-21-25	A storage hutment that was removed in 1954.
C-21-019	TA-21-26	A storage hutment that was removed in 1954.
C-21-020	TA-21-27	A storage hutment that was removed in 1954.
C-21-021	TA-21-28	A storage hutment that was removed in 1954.
C-21-022	TA-21-44	This was a guard house southwest of DP-1 A ~~laboratory building~~ that was demolished and disposed of in TA-54, Area G.
C-21-023	TA-21-54	A laboratory building that was demolished and disposed o in TA-54, Area G.
C-21-024	TA-21-22	A warehouse that was demolished and disposed of in TA-54; Area G, Pit No. 4.
C-21-025	TA-21-19	A corridor that was demolished in 1968.
C-21-026	TA-21-151	An administrative building with shops that was removed in 1968.
C-21-027	TA-21-143	A chilled water recirculator which is still active.
C-21-028	TA-21-47	A 12,788 gallon aboveground fuel tank that was removed.
C-21-029	C-21-029 is missing	
C-21-030	TA-21-60	A 3,000 gallon steel oil tank that was removed.
C-21-031	TA-21-64	A 320 gallon propane tank that was removed.