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ENVIRONMENTAL RESTORATION
Records Processing Facility
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D-49-LOCATION-USGS

TECH AREA(S)

LIST RELEVANT TECH AREA(S).

36

ADS NO(S)

LIST RELEVANT ADS NO(S).

1130

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CORRECTION DESCRIPTION.: ~

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ENVIRONMENTAL RESTORATION PROGRAM

RCRA FIELD INVESTIGATION

OPERABLE UNIT 1130
TA-36

SITE-SPECIFIC WASTE MANAGEMENT PLAN

Received by ER-RPF
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Los Alamos National Laboratory
ENVIRONMENTAL RESTORATION PROGRAM

SITE-SPECIFIC WASTE MANAGEMENT PLAN
OPERABLE UNIT 1130
TA-36

Prepared by: Kristi Aamodt — 5/23/94
Kristi Aamodt
ICF Kaiser — Date

Approved by: Bob Catherwood — 5/20/94
Bob Catherwood
Waste Management Coordinator — Date

Approved by: Manuel Gonzales — 5/23/94
Manuel Gonzales
CST-7 — Date

Approved by: Pat Shanley — 5/20/94
Pat Shanley
ESH-8 — Date

1 Waste should be determined to be non-RCRA
2 Drums labels should reflect contents of Stacks; if pending analysis indicate what's anticipated

Approved by: T. E. Gene Gould — 5/20/94
T. E. Gene Gould
OU 1130 Project Leader — Date

Table of Contents

Page

1.0 Introduction 1

2.0 Background 1
- 2.1 Site History 1
- 2.2 Solid Waste Management Areas 2
  - 2.2.1 The Sump 2
  - 2.2.2 Aggregate Septic Systems 2
  - 2.2.3 Aggregate Firing Sites 3
  - 2.2.4 Boneyard 3
  - 2.2.5 Photo Outfall 4
- 2.3 Personnel Responsibilities and Training 4

3.0 RFI-Generated Waste Types 5

4.0 Waste Minimization 6
- 4.1 Waste Characterization 6
- 4.2 Waste Segregation 6
- 4.3 Sampling Techniques 7
- 4.4 Return of Materials to Site 7

5.0 Waste Storage 8
- 5.1 Temporary Storage 8
- 5.2 Satellite Accumulation Area 8
- 5.3 Less-Than-90-Day Storage Area 8
- 5.4 Drum Labeling 9

6.0 Waste Disposal 10
- 6.1 Non-Hazardous/Non-Radioactive Waste 10
- 6.2 Radioactive Waste 10
- 6.3 RCRA-Hazardous and Low-Level Mixed Waste 10
- 6.4 Packaging and Transportation 10

7.0 Documentation 11

8.0 References 11

1.0 INTRODUCTION

This Waste Management Plan describes the proper management of waste materials derived from the site characterization activities at Operable Unit (OU) 1130, Technical Area-36(TA-36). Site characterization activities will include sampling of surface soils, subsurface soils, and sediments. Soil and sediment samples will be collected using hand tools, such as stainless steel trowels, shovels, posthole diggers, hand augers, and drill rigs. A back hoe will be used to excavate trenches for sump and berm sampling. A mechanical auger will be used to conduct drilling activities.

The purpose of this phase of the RFI for OU 1130 is to identify if potential release sites (PRS) contain contaminants above the screening action levels (SAL). Field work at OU 1130 is scheduled to begin May 23, 1994.

The purpose of this plan is to manage the RFI-generated waste in accordance with all Laboratory waste management requirements--without harming the environment, or jeopardizing human health. This plan includes a description of: waste-generating activities; waste types and constituents; waste minimization practices; waste disposal practices; and waste documentation procedures. All waste generated onsite will be handled in accordance with the Radiological Materials Management Area (RMMA) Plan and, as applicable, the following requirements and procedures:

- AR 10-1, Radioactive Liquid Waste
- AR 10-2, Low-Level Radioactive Solid Waste
- AR 10-3, Non radioactive Chemical Waste
- AR 10-8, Waste Minimization
- AR 10-9, Waste Profile Form

All decontamination activities that generate waste will comply with the approved site-specific Health and Safety Plan for OU 1130.

2.0 BACKGROUND

The following sections describe the past operational activities at OU 1130, the sites to be investigated, and the potential contaminants of concern at each site.

2.1 Site History

OU 1130 encompasses TA-36, TA-69, and TA-71. TA-36 consists of five firing sites: Eenie, Meenie, Minie, Lower Slobbovia, and I-J Site. TA-68 and TA-71 have never been used throughout the Laboratory's history. Also known as Kappa Site, TA-36 was established in 1950 as an explosives-testing site by the group known as GMX-8. The explosives tests that were conducted at TA-36 can be grouped into two categories: stationary tests and penetration tests. Shot assemblies typically contained explosives, and various amounts of diverse metals and plastics. The resulting shot waste products may very widely from fine dust to shrapnel.

The kind of explosives used through the years at TA-36 include: 2,4,6-trinitrotoluene, baratol, boracitol, hexanitrosol, cyclotetramethylene, tetranitramine, plastic-bonded explosives, and triaminotrinitrobenzene. A variety of metals have also been used including steel, copper, aluminum, cadmium, mercury, zinc, and depleted and natural uranium.

Current activities are centered primarily at Eenie, Meenie, Minie, Lower Slobbovia, and I-J firing sites. M-8 conducts a total of approximately 1,500 explosives tests annually.

Past waste management practices at TA-36 included burning of firing site debris in pits located near the Lower Slobbovia firing site bunker. Photo wastes were diluted and poured into the sanitary drain in building TA-36-1, which was served by the septic system for that building.

Currently, firing site debris is treated at an open-air burn site on the soil surface near the old burn pits. Depleted-uranium-contaminated metals remaining from firing site experiments are monitored for radiation contamination and then shipped to TA-54 for disposal. Explosives-contaminated materials are either flash-burned or detonated at the Minie firing site, or at TA-16. Solvents and photochemical wastes are stored in satellite accumulation storage areas until they are collected and properly disposed of by CST-7.

The sites discussed in this Waste Management Plan are the sump, aggregate septic systems, Eenie, Meenie, Minie, Lower Slobbovia, and I-J firing sites, the Boneyard, and the photo outfall.

2.2 Solid Waste Management Areas

TA-36 may contain sites contaminated by radioactive and/or hazardous constituents. Residual contamination may remain in or beneath the sump, the septic systems, in surface soils around firing sites, or in outfall drainage channel sediments. Projectiles may also be present in soils around the firing sites.

2.2.1 Sump PRS 36-002

There has been no reported sampling of the sump, so it is not known whether it is contaminated. However, contaminants might have been discharged to the sump through the laboratory sinks. The fact that the sinks were designed to handle chemicals supports the idea that the sump was designed to handle industrial wastes.

Potential contaminants of concern (PCOC) at the Sump include:

- High explosives
- Acetone
- Zinc chloride
- Acids
- Depleted uranium

2.2.2 Aggregate Septic Systems

Two septic systems have been constructed at TA-36, 36-003(a) and 36-003(b). 36-003(a) is comprised of six components: the septic tank, two manholes, a seepage pit, a distribution box, and leach field, as well as the associated drain lines connecting the various parts. Samples will be taken from the tank and the leach field. PCOCs are likely to be in this septic system because, spent photochemicals were discharged to the system for many years.

PCOCs for Septic System 36-003(a) include:

- Photo processing chemicals
- Thiosulfates

- Silver cyanides
- Organic compounds
- High explosives

36-003(b) is a holding tank that was built to handle sanitary wastes from a bathroom and an additional sink in bunker TA-36-55. The bunker houses electronics and instrumentation for the firing site; no explosives assembly is conducted in this bunker. There is no evidence of hazardous or radioactive materials or other PCOCs being discharged to this system. Samples will be collected from the tank and the associated outfall.

PCOCs for Septic System 36-003(b) include:

- Organic compounds
- High explosives
- Depleted uranium
- Metals

2.2.3 Aggregate Firing Sites

The aggregate firing sites are composed of five active firing sites: Eenie, Meenie, Minie, Lower Slobbovia, and I-J sites. All firing sites were put into operation by 1951. The types of explosives experiments conducted at the firing sites include: firing of shoulder-mounted projectiles into targets, firing of shots into embankments, armor-piercing experiments involving metal penetrators shot into canyon walls, underground tests, drop tests, and liquid explosives tests. A radiological survey was conducted at Eenie Site in 1991. Sediment samples from the stream channel that travels from Eenie firing site contained total uranium concentrations ranging from 1.3 to 60.9 ppm, with a mean of 15.1 ppm. A surface radiological survey at I-J Site gave results ranging from 40,000 to 255,000 counts per minute.

PCOCs for the Firing Sites include:

- Asbestos
- Barium
- Beryllium
- Depleted uranium
- Solid and liquid explosives residues
- Lead
- Mercury

2.2.4 The Boneyard

The Boneyard is a surface storage area located near the Minie firing site. Until the 1970s the area was used as a parking area for trailers and large non-waste items. From the late 1970s to the 1980s the area was used as a surface storage area for large waste items that had been exposed to explosives tests. The Boneyard underwent a major cleanup in 1986, and is currently used for storing usable non-waste items. A radiological survey was conducted in 1988, and four locations in the Boneyard had above-background levels of radioactivity ranging from 31 to 100 mR/h.
PCOCs for the Boneyard include:

- Asbestos
- Beryllium

- Chromium
- Copper
- Gamma emitters
- Lead
- Silver
- Uranium-238/236
- Zinc
- Explosives and explosives residues
- Organic compounds

2.2.5 Photo Outfall

The Photo Outfall is a permitted outfall located north of office and laboratory building TA-36-1. The outfall extends out a few feet over the steeply sloping edge of Threemile Canyon. It is believed that at one time spent photo processing fluids were discharged to this outfall. Water sampling performed in support of the NPDES permit indicated very low levels of cyanide at 0.125 ppm. The levels of silver have ranged from 0.004 ppm to 0.119 ppm.

PCOCs at the Photo Outfall include:

- Photo processing chemicals
- Cyanide
- Silver
- Thiosulfate
- Organic compounds

It is assumed that RFI-generated waste will be contaminated at a level no greater than that contained in any field sample taken during waste generation activities. Should field sample analyses indicate the presence of contaminants, waste samples may be submitted for laboratory analysis to better characterize the waste.

2.3 Personnel Responsibilities and Training

All field personnel have completed HAZWOPER training. Personnel responsible for managing RFI-generated waste at OU 1130, their waste management responsibilities and necessary training are listed in Table 1:

TABLE 1 OU 1130 Personnel Responsible for RFI-Generated Wastes

Name/Group	Title	Waste Management Responsibilities	Training
T. E. Gene Gould (ESA-4)	Waste Generator (OUPL or designee)	Ensure that all Laboratory waste management policies and procedures are followed. Assist in the identification of the waste generated per waste acceptance criteria. Will sign Waste Profile Form (WPF), Chemical Waste Disposal Request (CWDR), and Radioactive Solid Waste Disposal (RSWD) forms, as appropriate.	Waste Gen. Overview (#8477); Waste Doc. Forms (#8504 #8506)
Bob Catherwood (ESA-4)	Waste Management/Spill Coordinator	Serves as a technical liaison for site documentation between OU 1130 and ESH-8. Knowledgeable about waste contents and disposal requirements. Will sign WPF, CWDR, or RSWD forms.	Waste Gen. Overview (#8477); Waste Doc. Forms (#8504-6); RCRA Personnel Training (#7488)
Mike Henke (ESA-4) Peter Gram (ICF KE)	Field Team Leader	Ensure that field team implements the Waste Management Plan, including waste minimization practices. Ensure that proper storage containers are used and properly labeled. Ensure that temporary storage area is regularly inspected and safe. Ensure storage inspection records are complete and correct. Submit necessary transportation and disposal records to CST-7.	No training requirement for waste management. Recommended training includes RCRA Personnel Training and DOT training requirements.
John Taylor (EDI)	Radiological Control Technician	Perform field screening for gross alpha, beta/gamma radiation.	No waste training requirements

3.0 RFI-GENERATED WASTE TYPES

Types of waste generated through the RFI field activities are listed below:

- Soil Cuttings
- Disposable equipment
- Decontamination waste
- Administrative waste

Soil cuttings are generated during drilling activities. Soil cuttings will be non-hazardous/non-radioactive, radioactive, hazardous, or mixed waste.

Disposable equipment includes used PPE, such as Tyvek™ coveralls, gloves, booties, and filter cartridges. Sampling spoons, bowls, tarps, and cloth coveralls will not be considered waste until they become unserviceable. Disposables will be non-hazardous/non-radioactive, radioactive, hazardous, or mixed wastes.

Decontamination wastes are generated by the washing and rinsing of PPE and sampling equipment. Decontamination wastes will be non-hazardous/non-radioactive, radioactive, hazardous, or mixed wastes.

Administrative wastes include office trash from support activities, and any other wastes that have not come in contact with potentially contaminated materials. Administrative wastes will be non-hazardous and non-radioactive.

4.0 WASTE MINIMIZATION

Within the constraints demanded by worker health and safety and project quality assurance/quality control, the generation of RFI-generated waste will be minimized, as required in the LANL AR-10-8. Each aspect of the site investigation will be continuously evaluated to identify areas where waste generation can be minimized. Techniques to minimize waste generation through characterization and segregation are described in the following sections.

4.1 Waste Characterization

Radioactive, RCRA-hazardous, and mixed waste will be minimized by using the waste characterization techniques listed below:

- Field screening of personnel
- Analytical results of associated samples
- Knowledge of process

If the RFI-generated waste meets the criteria of a hazardous waste under 40 CFR 261.3, RCRA requirements for packaging, labeling, transporting, storing, training, and record keeping will be followed.

Radiological screening of wastes with the potential for surface contamination will be conducted before they are removed from the exclusion zone will help to characterize PPE and equipment as radioactive or non-radioactive. These potentially-contaminated wastes (other than fluids or soil) will be characterized as radioactive or non-radioactive using knowledge of process (KOP), field screening and laboratory analyses, or equivalent methods based on the waste samples or environmental samples associated with the wastes. KOP can be used to determine if the wastes are potentially radioactive based on the types and properties of the PCOCs and the site history.

Laboratory analyses will be used to classify soil and fluid wastes (bulk wastes) as radioactive, non-radioactive, hazardous, non-hazardous, or mixed using techniques described in LANL-ER-SOP-01.06 (3/92).

Knowledge of process will also be used to characterize wastes by considering the potential for wastes to be contaminated. Factors such as PCOCs present at the site, the exposure potential, and the exposure time will be considered.

4.2 Waste Segregation

RFI-generated waste will be segregated by non-hazardous/non-radioactive, radioactive, hazardous, mixed, suspect radioactive, suspect hazardous, or suspect mixed, and by waste type. Solid wastes (except bulk wastes) associated with distinct sampling activities, will be placed in plastic bag(s) before placement into storage drums. All wastes will be labeled with the corresponding sample numbers.

Waste segregation will be conducted using the following criteria:

- Radiological screening

- Visual inspection
- Sample and sample site screening
- Analytical results of associated samples

PPE and sampling equipment will be screened for gross alpha, beta, and gamma activity, as described in Section 4.1, for waste characterization. Once characterized, radioactive wastes will be segregated from other wastes.

Visual inspection of wastes will be conducted before they are removed from the exclusion zone. If the waste is obviously contaminated with soil or liquid, it may be segregated from waste that is not visually contaminated.

Screening of the samples and sample locations will be conducted with an organic vapor analyzer (OVA) and radiological monitoring instruments. Screening will be conducted before the sample is collected, after the sample is collected, before decontamination of sample containers, and after decontamination has occurred. Radiological screening instruments include a Ludlum 43-10 Alpha Tray counter, which has a detection limit of less-than-20 *disentegrations per minute* (dpm), and a Ludlum 44-9 Pancake GM model probe attached to a Ludlum 2221 portable scaler/rate meter, which has a detection limit of less-than-1,000 dpm. If sample screening indicates the presence of these types of contamination, the associated waste may also be segregated. Wastes are classified as radioactive or non-radioactive on-site. Isotopic analysis will be conducted once wastes or associated samples are confirmed to be radioactive.

Once laboratory analytical results are received confirming the presence or absence of contamination, suspect wastes will be further classified and segregated accordingly.

4.3 Sampling Techniques

The following sampling techniques will be used to help minimize the generation of decontamination and disposable wastes.

Sampling will be conducted to minimize excess sampled material and to ensure that only the amount of sample media requested by CST-9 will be sent to the Sample Coordination Facility (SCF).

Only materials needed for the sampling activity will be brought into the exclusion zone.

Only one sampler will take samples while the team is in the exclusion zone. All others will avoid contact with potentially contaminated materials. Contamination avoidance is the best way to prevent the spread of contaminants. Direct contact with contaminants will be minimized by not leaning against objects and not kneeling or sitting on the ground.

During all field activities, measures will be taken to minimize waste generation by maximizing the use of reusable equipment and materials. To minimize the amount of solid wastes generated during decontamination activities, reusable tarps will be used for decontamination. Cloth coveralls, which can be laundered rather than disposed, will be used instead of Tyvek™. Obviously contaminated coveralls will not be laundered, but will be held pending analysis of the associated samples. Chemical-resistant boots that can be decontaminated with soap and water (rather than disposable booties) will be used during sampling. However, disposable booties may be worn during sampling activities in radioactively contaminated areas, and by occasional site workers or observers.

To minimize the generation of liquid waste during decontamination activities, decontamination techniques such as brushing, scraping, or the use of CO_2 pellets may be used. Drip or squirt bottles will be used for washes and rinses whenever possible.

4.4 Return of Materials to Site

In accordance with LANL-ER-SOP-1.06 (3/92), borehole cuttings and sample residues may be returned to the SWMU from which the sample was taken immediately upon completion of sampling, with approval of the OUPL and the FTL. Borehole cuttings and other wastes may be returned to the SWMU if the OUPL and the FTL jointly determine that the sampling area is unlikely to be contaminated, or if returning the borehole cuttings or other wastes will not increase the likelihood of contaminant migration or increase the cost of eventual corrective action. This method of disposal will be used whenever possible to minimize the amount of wastes needing storage and disposal.

Decontamination liquids will be handled under a Notice of Intent (NOI) agreement with the State of New Mexico to discharge less than 100 gallons/day for non-radioactive and non-hazardous liquid waste.

5.0 WASTE STORAGE

Waste management will conform to the Laboratory's Spill Prevention Control and Countermeasure (SPCC) Plan, and to RCRA storage requirements specified in 40 CFR.262, Subtitle C. Any additional RCRA requirements specified in 40 CFR 260-270, including training and a contingency plan, will be followed.

Solid waste will be stored in DOT-approved 55-gallon open-head steel drums secured by a bolt ring. The drums will be good condition and compatible with the waste. Liquid waste will be stored in DOT-approved 55-gallon steel "bung-type" drums or open-head steel drums with plastic liners. Liquid and solid wastes will not be mixed. Waste storage areas will be designated to hold wastes until site activities are completed. Waste storage areas include:

- Temporary storage areas
- Satellite accumulation areas
- Less-than-90-day storage areas

Storage areas will have secondary containment consisting of heavy-duty plastic sheeting spread on the ground and berms using timbers, piping, or similar materials around the entire area. Pallets will be used to hold 55-gallon drums. Drums will be placed on pallets before they are filled and the drums sealed with lids and bolt-rings after they are filled. A minimum of two feet of aisle space will allow for inspection of the drums and labels. The waste drums will be covered with tarps or plastic sheeting and maintained to protect them from weather during the storage period. The entire storage area will be free of obstacles and ignition sources.

5.1 Temporary Storage

A temporary storage area will be designated to provide a secure and controlled storage for drums of non-hazardous waste. Radioactively-contaminated waste drums, if any, will be segregated from the other storage drums.

5.2 Satellite Accumulation Area

A satellite accumulation area may be used for collecting RCRA-hazardous or mixed wastes until a total volume of 55 gallons is reached, or until site activities are completed. If a volume of 55-gallons is reached prior to the completion of field activities, the field team has a limit of three days before the drum must be moved to the less-than-90-day storage area. The Laboratory's Environmental Protection Group, (ESH-8) will be consulted for assistance in setting up such areas.

5.3 Less-Than-90-Day Storage

If RCRA hazardous or mixed waste is generated at a volume greater than 55-gallons, ESH-8 and ESH-1 will be notified and a less-than-90-day storage area will be established at the site. Refer to Figure 1 for the location of the less-than-90-day storage area. Management of the less-than-90-day storage area will include the following procedures.

- Drums will be labeled "Hazardous Waste" and the hazardous constituents will be included on the label. If drums contain mixed waste, they must also be labeled as "Radioactive Waste" in accordance with AR 3-7, "Radiation Exposure Control."
- An accumulation start date will be marked on all drums.
- Warning signs with the legend "Danger - Unauthorized Personnel Keep Out" will be legible and prominently posted.
- The storage area will be identified by a sign that reads "Hazardous Waste Less-than-90 Days Storage Area." In addition, signs warning of radiation hazard will also be posted, if appropriate.
- The storage area will be inspected weekly, as required in 40 CFR.262.
- Hazardous waste leaks or spills will be cleaned up immediately and any spill residue handled as a hazardous waste, until classified as non-hazardous. All spills or leaks will be handled in accordance with the LANL SPCC Plan.

Inspections will be conducted weekly, and spilled or leaked waste will be cleaned up immediately. For information on preventing and handling leaks or spills, AR 9-4, "Accidental Oil, Chemical, and Airborne Releases," will be referred to. If a spill occurs, the following actions will be taken:

- The SSO or FTL will be notified immediately
- Immediate measures will be taken to control and contain the spill within site boundaries
- *Unnecessary personnel will not* be allowed in the area
- Personnel should stay upwind and keep out of low-lying areas
- No flares, smoking, or flames will be allowed in the area
- Liquids and combustibles will be kept away from the spilled material

5.4 Drum Labeling

In addition to the labeling requirements identified in Section 5.3, waste containers will be identified with site-specific labels (Appendix A) containing the following information:

- OU 1130, TA-36 and date of sampling
- "Wastes in this container are pending analysis" for proper disposal
- Contents of the container (soil, water, mud, PPE, etc.)
- Sample numbers associated with sampling activities from which the waste was generated
- Name and phone number of the OUPL and the Field Team Manager
- Copy of the Chain of Custody Forms associated with the waste

The site-specific label will be placed in a waterproof, sealable pouch and affixed to the outside of the drum. Each drum will be numbered sequentially with a permanent marker or stenciled on the drum itself (not on drum lids).

All drums stored on site that are empty will be labeled with "Empty" labels with lettering at least 2 inches high and visible against the background of the drum.

6.0 WASTE DISPOSAL

Procedures for disposal of non-hazardous/non-radioactive, radioactive, hazardous, and low-level mixed waste are detailed in the following sections.

6.1 Non-Hazardous/Non-Radioactive Waste

Waste that is not RCRA-hazardous or radioactive will be handled and disposed of following CST-7's guidance and procedures or returned to the site.

Administrative wastes (that have never been in contact with potential contaminants) will be handled and disposed of in county dumpsters as sanitary waste. Estimated volume of waste does not include administrative waste.

Arrangements will be made with CST-7 for disposal of non-hazardous/non-radioactive PPE. A waste profile form (WPF) will be signed by the OUPL or designee and the Waste Management Coordinator and submitted to ESH-8 for review and approval.

Estimated Volume: A maximum of two 55-gallon drums.

6.2 Radioactive Waste

Containers holding liquid or solid radioactive wastes will be handled in accordance with AR 10-1, and AR 10-2. WPF will be completed for each distinct waste stream. The Radioactive Solid Waste Disposal (RSWD) form will be completed, signed by the OUPL or designee, and submitted to CST-7. The Radioactive Materials Transfer Form (RMTF) will then be sent to BUS-6.

Estimated Volume: A maximum of 2 drums of liquids, and 1 drum of solids.

6.3 RCRA Hazardous Waste or Low-Level Mixed Waste

Containers holding RCRA hazardous wastes or mixed waste will be handled according to AR 10-3. All applicable procedures (i.e., DOE Orders) identified in AR 10-3, will be followed. WPFs will be completed for each distinct waste stream. The WPF will be signed by the OUPL or designee and the Waste Management Coordinator and submitted to ESH-8 for review and approval. The Chemical Waste Disposal Request (CWDR) will be

completed, signed by the OUPL or designee, and submitted to CST-7. The HMTF and RMTF will then be sent to BUS-6.

For known or suspect mixed waste drums, the dose rate will be monitored by the Laboratory's Health Physics Operations Group (ESH-1) prior to transporting for disposal.

Estimated Volume: No hazardous or low-level mixed wastes are expected to be generated at this site. A maximum of 1 drum each.

6.4 Packaging and Transportation

Bags and drums holding RFI-generated waste may be moved within TA-36 without shipping papers, labels, or special containers. All radioactive or mixed waste will be transported offsite by JCI, and hazardous waste will be transported by CST-7. Radioactive, hazardous or mixed waste packaging and transportation will comply with applicable DOT regulations.

The HMTF and RMTF for radioactive and hazardous shipments will be completed before transporting the waste. For packaging and transportation requirements, BUS-6 (667-4127) will be consulted for information regarding packaging and transportation of radioactive and hazardous materials. Shipment will not proceed until BUS-6 has reviewed and returned the shipping papers. When all the paperwork is complete and correct, arrangements will be made to remove the waste.

7.0 DOCUMENTATION

The following forms will be used for waste management purposes:

Waste Profile Form
Chemical Waste Disposal Request
Radioactive Solid Waste Disposal
Hazardous Materials Transfer Form
Radioactive Materials Transfer Form
Weekly Inspection records
ER Waste Generation Certification
Shipping Manifests

8.0 REFERENCES

Los Alamos National Laboratory Environmental (LANL), Safety, and Health AR Manual

Los Alamos National Laboratory Administrative Requirements (AR)

AR 3-5 Shipment of Radioactive Materials
AR 3-7 Radiation Exposure Controls
AR 3-8 ALARA Program
AR 9-4 Accidental Oil, Chemical, and Airborne Releases
AR 10-1 Radioactive Liquid Waste
AR 10-2 Low-Level Radioactive Solid Waste
AR 10-3 Hazardous and Mixed Waste
AR 10-8 Waste Minimization
AR 10-9 Waste Profile Form

Environmental Restoration Program, Standard Operating Procedures

LANL-ER-SOP-1.06 (3/92), Management of RFI-Generated Wastes

TB 302 ALARA Guide

Los Alamos National Laboratory, "RFI Work Plan for Operable Unit 1130," Environmental Restoration Program

Los Alamos National Laboratory, "LANL Radiological Control Manual," LM107-01

Los Alamos National Laboratory, " Environmental Restoration Program, Standard Operating Procedures (SOP)"

Los Alamos National Laboratory, Waste Acceptance Criteria

Los Alamos National Laboratory, Site Specific Health & Safety Plan for OU1130

Los Alamos National Laboratory, "Spill Prevention Control and Countermeasure Plan"

40 CFR (Code of Federal Regulations for the Protection of the Environment) 260-270

Appendices:

APPENDIX A - Waste Container Label

Figures:

FIGURE 1 - Location of the Less-than-90-Day Storage Area

Appendix A

0830-5-5758 • 2

SITE SPECIFIC LABEL
(Sample)

OU 1130, TA 36, RCRA Field Investigation
THE WASTE IN THIS CONTAINER IS: PPE, USED OR BROKEN SAMPLING EQUIPMENT, GLASSWARE OR OTHER SOLID WASTE. THE WASTE IS AWAITING DISPOSAL OR CHARACTERIZATION OF SAMPLES TAKEN ON THE DATE THIS WASTE WAS GENERATED. THE WASTE IS THE RESPONSIBILITY OF T. E. GENE GOULD, CST-6, 667-0402.

(Unique Sample Numbers) (Date Sampled)

FIGURES

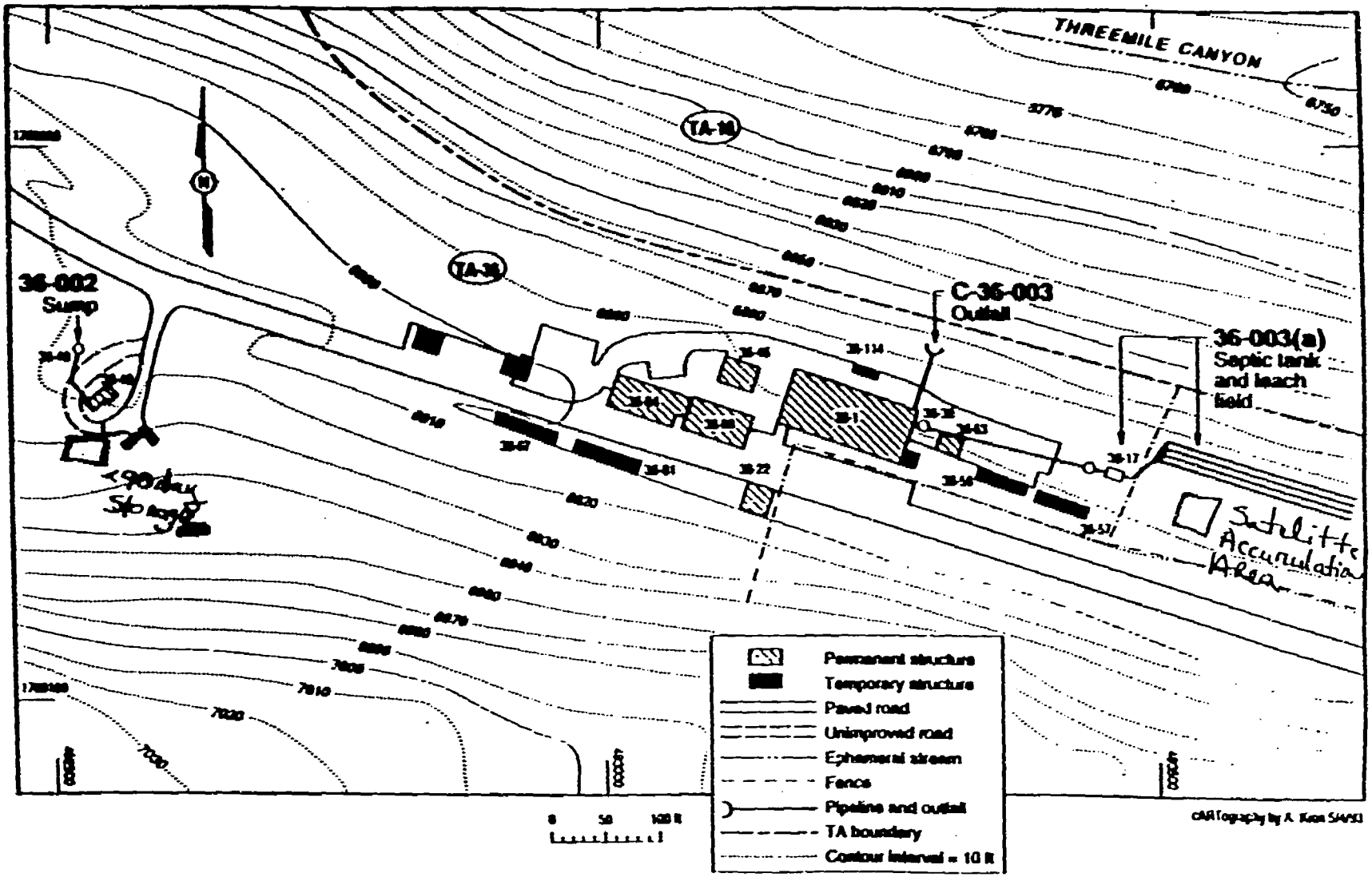

THREEMILE CANYON
TA-16
TA-36
36-002
Sump
C-36-003
Outfall
36-003(a)
Septic tank and leach field
Solid Accumulation Area
Permanent structure
Temporary structure
Paved road
Unimproved road
Ephemeral stream
Fence
Pipeline and outfall
TA boundary
Contour interval = 10 ft
0 50 100 ft

Figure 1