

TA 48

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

memorandum

Handwritten notes and signatures at top right.

TO John Krueger, HSE-13, MS K481 DATE October 31, 1990

THRU Roger Ferenbaugh, HSE-8, MS K490 MAIL STOP/TELEPHONE K490/7-0815
RF

FROM Phil Fresquez, HSE-8 *PF* SYMBOL HSE-8:90-1107

SUBJECT AN ENVIRONMENTAL RESTORATION INTERIM ACTION (ERIA)
RECONNAISSANCE SURVEY OF A PROPOSED PARKING LOT JUST EAST OF
TA-48-1.

A parking lot to accommodate two new facilities, the Advanced Radiochemical Diagnostic Facility (AWRD) and the Weapons Diagnostics Instrument Development (WDID) Laboratory, is planned to be located on the east side of TA-48-1 (Figure 1). This location, however, sits adjacent to and downgradient from Solid Waste Management Units (SWMU's) 48-002 (e) (a container storage area), 48-007 (a) and (d) (drains and outfalls), and 48-009 (a compressor storage area). Solvents (cutting oils), water treatment chemicals (containing Hg and Pb) and compressor oil have all been reported at one time or another to have migrated over parts of the proposed parking lot area before spilling into Mortandad Canyon (LANL 1990). Therefore, in order to ascertain the nature and degree of contamination, if any, the Environmental Protection Group (HSE-8) is proposing to collect soil surface and subsurface samples from in and around the proposed parking lot site.

Sampling Plan

A total of five soil surface and five subsurface soil samples [i.e., below the level of excavation (91 cm) Audoro Espinoza, World Services, personal communication, October, 1990] will be systematically collected over the entire area using stainless steel scoops and/or soil corers. The area of the parking lot is approximately 1000 sq. yards. In addition, two soil surface and two subsurface samples will be collected along the length of a run-off diversion channel that borders the northern edge of the proposed parking lot. This channel is approximately 100 ft. long.

Soil samples will be screened for gross alpha, beta and gamma radioactivity and then submitted to the Health and Environmental Chemistry Group (HSE-9) for the analysis of Toxicity Characteristic Leaching Procedure (TCLP) metals (Ag, As, Ba, Cd, Cr, Hg, Pb and Se), Resource Conservation and Recovery Act (RCRA) target volatiles (VOC), semivolatiles

Received by EM-RAP
SEP 10 1991
Signature



October 31, 1990

(SVOC) and Polychlorinated Biphenyl (PCB) compounds. In the event that above background levels of radioactivity are detected, a more detailed analysis of radionuclides (i.e., ^3H , ^{137}Cs , ^{238}Pu , $^{239,240}\text{Pu}$ and total U) will be conducted.

Quality Assurance/Quality Control (QA/QC)

Quality Assurance/Quality Control (QA/QC) for soil collection, handling and storage, and chemical analysis follow EPA guidelines and specifications found in the Environmental Protection Group's Quality Assurance Project Plans (LANL report LA-UR-87-1076), and Quality Assurance for Health and Environmental Chemistry (LANL report LA-11637-MS), respectively.

Site Safety and Health Plan

The following elements will be communicated to site workers prior to entering the site.

- A. Hazard Analysis. Up to three gallons of compressor oil has leaked from SWMU 48-009; however, the oil was sampled for PCB's in 1989 and found to contain none (LANL 1990). Also, no radiological hazards were identified as a result of a soil surface survey performed by the Chemistry Health Protection Group (HSE-10) (Beraldo Montoya, HSE-10, Los Alamos National Laboratory, personal communication, October, 1990). Consequently, the type and amount of contamination from solvents (other than cutting oil) and water treatment chemicals (other than Hg and Pb) that may have passed over the proposed site (in runoff water) are not known and appear to be the only constituents of concern. Levels of contamination, however, are suspected to be very low (i.e., ppb levels). All electric, telephone, sewer, and acid waste lines have been located and marked for identification (excavation permit enclosed).
- B. Employee Training. All Environmental Restoration Interim Action (ERIA) supervisors and team personnel associated with the Solid Waste Assessment Team have had HAZWOPER-Supervisor (8 hr.) and/or 40 hr. of Hazardous Waste Operation and Emergency Response training.
- C. Personal Protective Equipment. The absence of potentially hazardous liquids eliminates the need for protective clothing to prevent absorption of liquids through the skin of workers. However, the nature and extent of

October 31, 1990

contamination from "solvents" (other than cutting oil) and "water treatment chemicals" (other than Hg and Pb) is not known. Therefore, personnel associated with the sampling team will be required to wear level C personnel protection equipment (Susan Rector, HSE-5, Los Alamos National Laboratory, personal communication, October, 1990). This will include coveralls, safety boots, hard hat and full face respirators.

- D. Medical Surveillance Requirements. Although, LANL does not have a medical surveillance program specific to the requirements of 29 CFR 1910, personnel associated with this study have had a baseline medical examination performed by the Occupational Medicine Group (HSE-2).
- E. Site Monitoring. Site safety officers from HSE-8 and from the Industrial Hygiene Group (HSE-5) will be present during the sampling operation to monitor radiological and organic hazards, respectively. Monitoring for radiological hazards will consist of evaluating the soil sample before it is placed into a sample container. Organic monitoring will consist of evaluating the presence of organic vapors, primarily at the deeper depths (subsurface soil samples) with a photoionizing detector (PID) and/or a flame ionizing detector (FID). If gases emanating from the sample hole to the breathing zone exceeds 5 ppm over a 1-minute time period work will cease. Work will only be continued after consultations with HSE-5 and an upgrade to the appropriate level of protection.
- F. Site Control. No entry by unauthorized personnel will be allowed during the ERIA survey.
- G. Decontamination. NA
- H. Emergency Response. Emergency response procedures as defined in the Laboratory's Environment, Safety, and Health Manual will be followed.
- I. Confined Space. NA
- J. Spill Containment. NA

October 31, 1990

Estimated Costs

Group HSE-8 is prepared to carry out the sampling survey during the week of the 29 of November. The estimated costs of the project are:

Personnel Effort *X months used Sullivan's team*
2x1 = 2 tech
2x1 = 2 tech
2 Staff-days (0.10 staff months) @ \$12,900 \$ 1,290
2 Tech-days (0.10 tech months) @ \$7,400 740
Survey points 73 x 7
Materials 577
100
Analysis of 16 samples (14 + 2 (QA/QC))
(VOA, SVOA, PCB's and TCLP-metals). 23,920
Total estimated costs ~~\$25,050~~ 26,561.00

References:

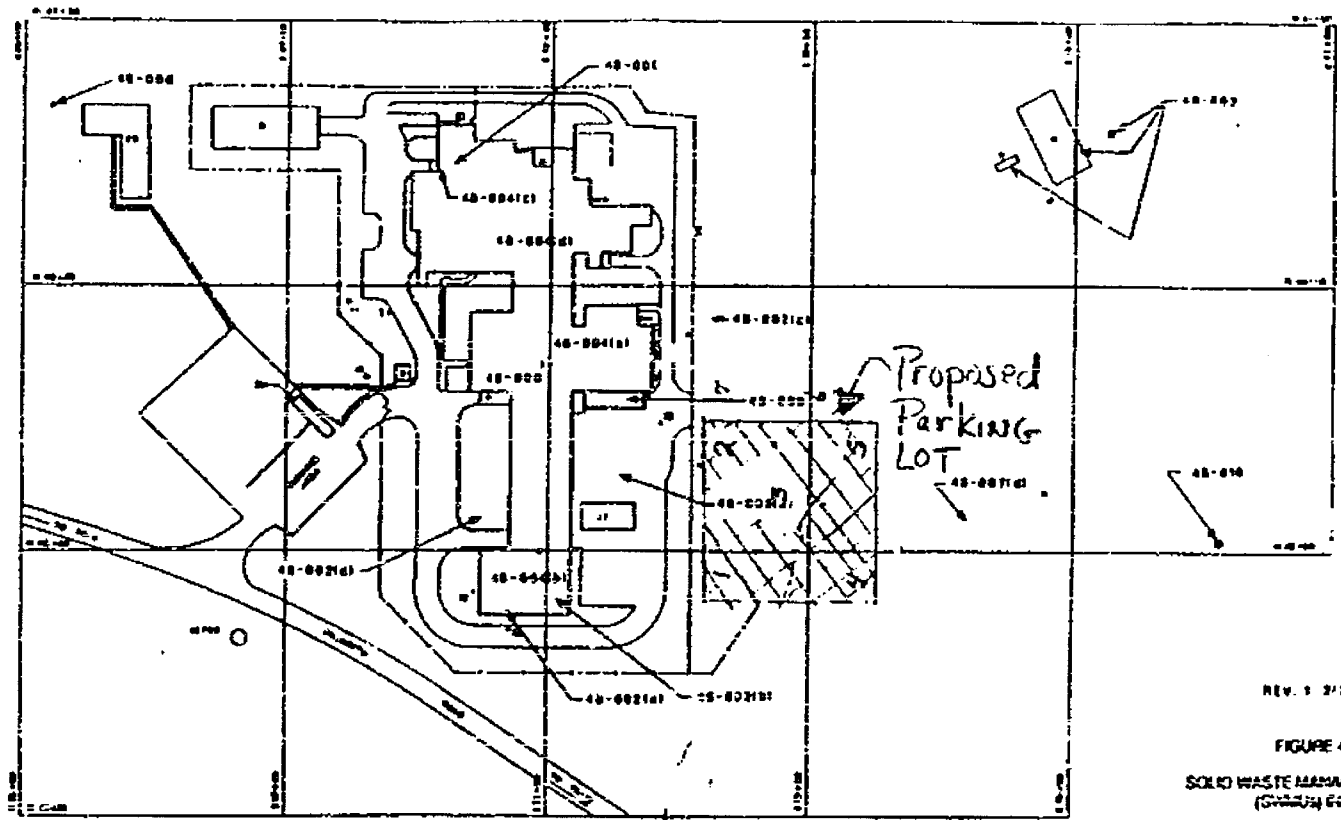
LANL, 1990. Solid Waste Management Unit (SWMU) Report for TA-48. Working Draft, EES-13. Los Alamos National Laboratory report.

PF:RW:bjh

Enclosure: Figure 1

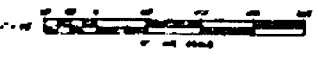
Cy: L. Sohlt, HSE-13, MS K481
T. Norris, HSE-13, MS K481
M. Salisbury, HSE-3, MS K489
B. Hargis, HSE-5, MS K486
S. Rector, HSE-5, MS K486
P. Wiemann, HSE-5, MS K494
D. McInroy, HSE-8, MS K490
R. Romero, HSE-8, MS K490
C. Rzeszutko, HSE-9, MS K484
Circ. File

DATE OF REVISION



EXPLANATION:
 48-001 SYMBOL LOCATION

NOTES:
 48-026 UNIT IS LOCATED NORTHEAST OF TA-40



UNCLASSIFIED

LEGEND: AROUND SITE SYMBOLS
 △ OCCUPIED
 ○ UNOCCUPIED

REV. 1 2/27/98

FIGURE 48-1

SOLID WASTE MANAGEMENT UNITS
 (CONTINUED) OF TA-40

UNIVERSITY OF CALIFORNIA Los Alamos	
FACILITIES ENGINEERING DIVISION	
STRENGTHENING LEADERSHIP PLAN	
DATE: 1-27-98	REVISIONS: 010
DRAWN BY: [Signature]	CHECKED BY: [Signature]
APPROVED BY: [Signature]	TITLE: [Signature]

Figure 1. Proposed parking lot east of TA-48-1.