NM.07-1 3/3/86 NM.7

2658

MEMORANDUM

(Same as NM.9)

TO: FILE

FROM: S. Jones

SUBJECT: Elimination Report - Los Alamos Land Areas

SITE NAME: A, B, C, E, K, L, N, Pipeline Parcels ALTERNATE NAME: See last page

CITY: Los Alamos County STATE: NM

OWNER(S)
Past: AEC Current: _____
Owner contacted ☐ yes ☐ no; if yes, date contacted _____

TYPE OF OPERATION
☒ Research & Development
- ☐ Production scale testing
- ☐ Pilot Scale
- ☐ Bench Scale Process
- ☐ Theoretical Studies
- ☐ Sample & Analysis

☐ Facility Type
- ☐ Manufacturing
- ☐ University
- ☐ Research Organization
- ☐ Government Sponsored Facility
- ☐ Other _____

☐ Production
☐ Disposal/Storage

TYPE OF CONTRACT

☐ Prime
☐ Subcontractor
☐ Purchase Order

☐ Other information (i.e., cost + fixed fee, unit price, time & material, etc) _____

Contract/Purchase Order # _____

CONTRACTING PERIOD: early 1940's -

OWNERSHIP:

	AEC/MED OWNED	AEC/MED LEASED	GOVT OWNED	GOVT LEASED	CONTRACTOR OWNED	CONTRACTOR LEASED
LANDS	☒	☐	☐	☐	☐	☐
BUILDINGS	☐	☐	☐	☐	☐	☐
EQUIPMENT	☐	☐	☐	☐	☐	☐
ORE OR RAW MATL	☐	☐	☐	☐	☐	☐
FINAL PRODUCT	☐	☐	☐	☐	☐	☐
WASTE & RESIDUE	☐	☐	☐	☐	☐	☐

5,500 acres

AEC/MED INVOLVEMENT AT SITE

Control:

- [x] AEC/MED managed operations
- [ ] AEC/MED responsible for accountability
- [ ] AEC/MED overviewed operations
- [ ] Contractor had total control
- [ ] unknown

- [ ] Health Physics Protection
  - [ ] Little or None
  - [ ] AEC/MED responsibility
  - [ ] Contractor responsibility

MATERIALS HANDLED:

Type (on basis of records reviewed)

- [ ] No Radioactive
- [ ] Natural Radioactive from Feed Materials Production
- [ ]
  - [ ] Ore
  - [ ] Refined Source Material
  - [ ] Residue
- [ ] Natural Radioactive Material from Non-Nuclear Activities
- [x] Man-Made
- [ ] Other

Comment AEC/MED conducted Nuclear R+D activities, later LASL took over under sponsorship of the AEC

Quantities (on the basis of records reviewed)

- [ ] None
- [ ] Production Quantities
- [x] Small Amounts

Comment

OTHER PERTINENT FACTS:

- [ ] Facility was Licensed
  - [ ] During AEC/MED-Related Operations
  - [ ] For Similar Activities
  - [ ] For Other Activities

Comment

- [ ] Commercial Production Involving Radioactive Material during AEC/MED Operations
- [ ] Facility was Decontaminated and Released
  - [ ] Availability of Close Out Records
    - [ ] None
    - [ ] Some
    - [ ] Sufficient
- [x] Radioactive Status:

	YES	MAYBE	PROBABLY NOT	NO
Contaminated	___	___	___	X
Potential for Exposure (accessible)	___	___	___	___

QUANTITY OF RECORDS AVAILABLE:

☐ Very Little ☐ Some ☒ Sufficient

PROBABILITY OF FINDING ADDITIONAL RECORDS:

☒ Low ☐ Possible ☐ High

RECOMMENDATIONS:

☒ Eliminate
☐ Consider for Remedial Action
☐ Collect More Data

Comment Tritium levels in vegetation were higher near the laboratory. Plutonium levels appear to be an order of magnitude higher than background.

REFERENCES: Los Alamos Land Areas, Environmental Radiation Survey, 1972 LA-5097-MS

Memo - Voely to Blackwell dated 9/11/72, "Survey of Unneeded Real Property at Los Alamos"

Summary: During survey in 1972, records searches did not reveal any indication of disposal or storage of radioactive material on these properties. The survey showed only background levels. The survey report states that there are not abnormal environmental hazards existing on these parcels of land (Parcels)

Enclosures:

Land Excess to Programmatic Requirements

Tract	Description	Acreage
A	Western and Northern Perimeter Tract, Los Alamos Community	3,477.913
B	North Mesa Tract	458.959
C	Pueblo Canyon Tract No. 1	94.946
E	Rio Grande Tract, East of White Rock and Pajarito Developments	1,120.940
F	Tract K, Western Area No. 1	1.294
N	Tract J, Eastern Area No. 1	10.622
K	Tract AA, Eastern Area No. 2. Contains underground utilities and overhead power line. Easement rights will be reserved.	4.532
L	Tract Y, Eastern Area No. 2. Contains underground fuel storage tanks and chain link fencing which will be included in the excess report.	5.335
	Total	5,174.541

Tract F was included as part of Tract A

ALTERNATE NAMES

P. M.

Los Alamos Land Areas
Radiological Summary

Introduction

The Los Alamos Land Areas consists of about 5,500 acres of U.S. Atomic Energy Commission -- owned real property. The land is entirely within Los Alamos County and near the boundaries of the Los Alamos National Laboratory (LANL) technical area. Nuclear research and development activities have been conducted at this locality since the early 1940's as a Manhattan District project installation and later as directed by the Los Alamos Scientific Laboratory (now called LANL) under the sponsorship of the USAEC. Radiological surveys were conducted (1972) of unneeded land parcels designated as A, B, C, E, K, L, N and PL (pipe line). The general location and relative size of each land area are shown in Figure 1.

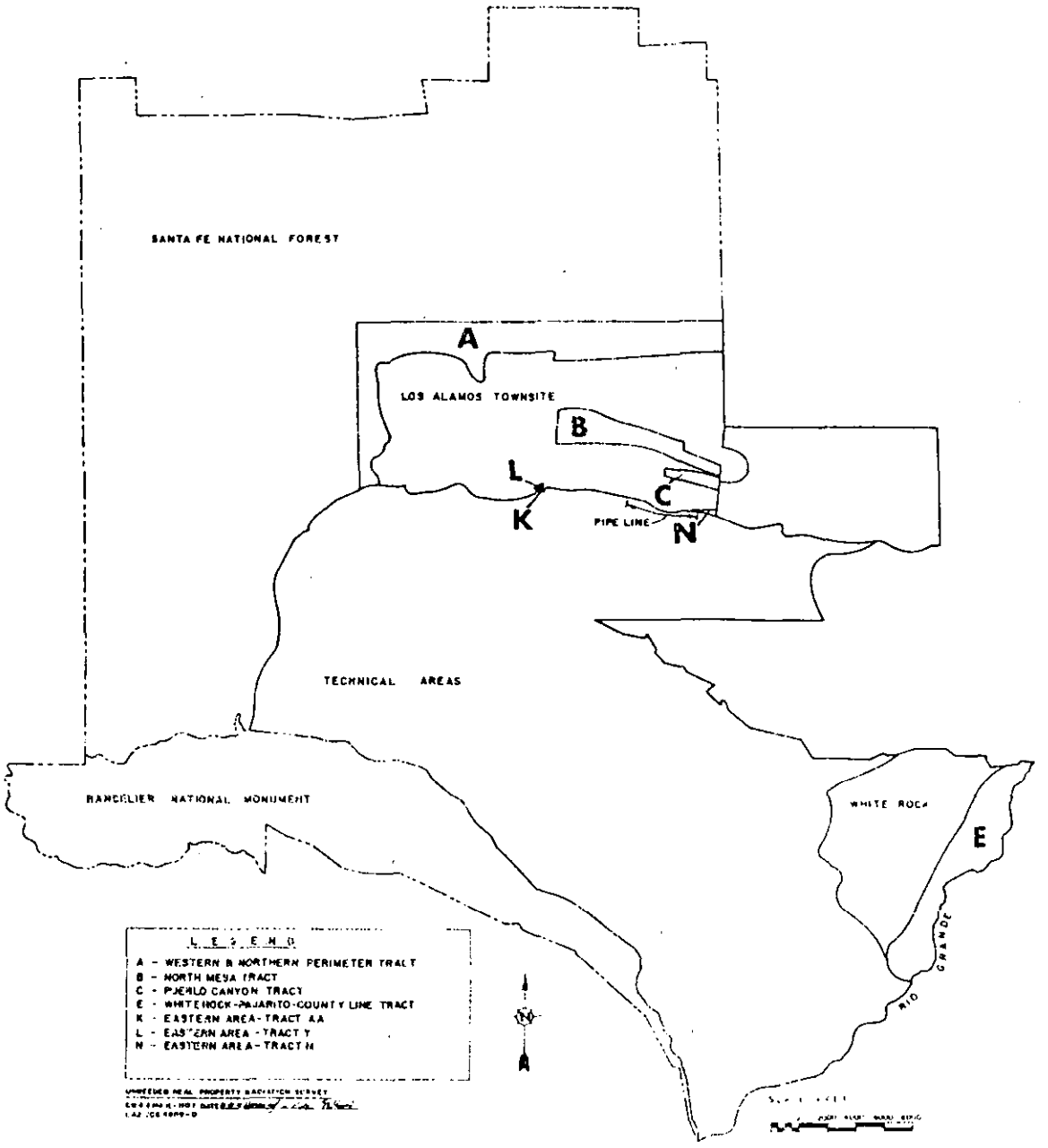

Fig. 1. Relative size and location of the Los Alamos land areas surveyed.

Radiological Status

According to a 1972 report, entitled "Los Alamos Land Areas Environmental Radiation Survey 1972" (LA-5097-MS), measured values of radionuclides in the soil and vegetation samples were found comparable to reported worldwide levels. In addition, it was concluded that no decontamination is needed to release the property since no radiation or radioactive contamination observations were encountered that are of radiological health or environmental concern.

It was noted, however, that compared to the Northern New Mexico background samples, the tritium in vegetation values in pci/ml appear to be measureably higher on the land parcels surveyed. The measured tritium concentration in the moisture of vegetation was about 0.1 percent of the current standard for tritium concentration in water for uncontrolled areas (this standard is 3×10^{-3} pci/ml). Average values of Cesium-137 measured on the land parcels appeared to be about equal to the background values obtained in the survey. Plutonium values measured in soil ranged in activity up to an order of magnitude larger than the average background values measured. Laboratory plutonium effluent from a research facility adjacent to the pipeline strip appears to have elevated the soil's plutonium concentration in this area by an average factor of 2 to 3 over worldwide fallout levels. However, measured plutonium values were an order of magnitude below the EPA proposed screening level of 200 nCi/m^2 or 15 pCi/g in the top 1 cm. layer of soil. The average concentration of Plutonium-239 in vegetation samples in parcels E and PL were significantly above world-wide fallout levels indicated in the background samples obtained in Northern New Mexico by as much as a factor of ten. The report recommended that disposal of these real properties proceed without environmental restriction or concern due to radioactive materials.

Current Use

The real properties designated as tracts A, B, C, E, K, L, N and PL (pipeline) were declared excess property. Tract A was transferred to the General Services Administration (GSA) and may now be a part of the Santa Fe National Forest as it was originally. Tract B was transferred to GSA, then to the Bureau of Outdoor Recreation (BOR) and finally to Los Alamos County. The property is currently a recreational area. Tract C is still DOE property that was decontaminated in accord with the criteria of the Formerly Utilized Manhattan Engineer District/Atomic Energy Commission Sites Program. Tract E was transferred to GSA, then the Bureau of Outdoor Recreation (BOR) and finally to Los Alamos County. Presently, the property is used as a recreational area. Tract K was similarly transferred to Los Alamos County. A lodge located on Tract K and designated as a historical building is currently used for meetings and receptions. Tract L like Tracts E and K was eventually transferred to Los Alamos County. A historical museum is located on the Tract L property. The pipeline (PL) was transferred to Southern Union Gas Company which is presently called the Gas Company of New Mexico.

Bibliography

1. Los Alamos Land Areas Environmental Radiation Survey 1972 prepared by LaMar J. Johnson of Los Alamos Scientific Laboratory (LA-5097-MS)