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**Department of Energy**  
National Nuclear Security Administration  
Albuquerque Operations Office  
Office of Los Alamos Site Operations  
Los Alamos, New Mexico 87544

Los Alamos Land Transfer Project Office

May 21, 2002

James Bearzi, Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87502



Dear Mr. Bearzi:

Enclosed for your review are documents prepared by the Department of Energy (DOE), in support of the conveyance or transfer of several tracts of land, pursuant to DOE's mandate under Public Law 105-119. The tracts will either be conveyed to the County of Los Alamos or transferred to the U.S. Department of the Interior, to be held in trust for the Pueblo of San Ildefonso. The enclosed documents relate to the following tracts:

- Tract A-3, part of the Airport Tract (to Los Alamos County)
- Tract A-12, part of the LAAO Tract (to Los Alamos County)
- Tract A-19, part of the White Rock Tract (to Los Alamos County)
- Tract B-2, part of the TA-74 Tract (to San Ildefonso Pueblo)
- Tract B-4, part of the White Rock "Y" Tract (to San Ildefonso Pueblo)
- Tract C-1, part of the White Rock Tract (to the New Mexico Highway Department)

Enclosed for each tract are

- the Environmental Baseline Survey
- the environmental site assessment
- the notice required by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), together with supporting information from the Environmental Restoration Project
- the tract map

Please review the enclosed documents and provide your comments to me within 30 days of receipt of this letter. I would be pleased to meet with you or your staff to discuss these documents. Please let me know if I can be of assistance to you in your reviews.



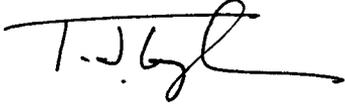
13636

James Bearzi  
May 21, 2002

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Please call me at 665-7203 if you have questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. J. Taylor', with a long horizontal flourish extending to the right.

Theodore J. Taylor  
Project Manager

Enclosures: as stated

Cc w/o enclosure:

T. Taylor, DIR, OLASO

E.D. Martinez, Acting Director, OLASO

E. Romero, Program Manager, OLASO

R. Mayer, EPA

K. Rea, RRES-ECO, UC-LANL, MS M889

LandTran File

# **Environmental Baseline Survey**

**For**

**A-3**

**Airport Tract East**

Pursuant to the US Department of Energy

Cross-Cut Guidance on Environmental Guidance  
for DOE Real Property Transfers

April 25, 2002

# Environmental Baseline Survey

for

## A-3 Airport Tract East

### Executive Summary

This document, "Environmental Baseline Survey for A-3, Airport Tract East", was prepared in accordance with the "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers" in preparation of transferring ownership of the A-3, Airport Tract East parcel (hereafter referred to as "Airport Tract East") at Los Alamos National Laboratory from the US Department of Energy (DOE), National Nuclear Security Administration (NNSA)<sup>1</sup> to Los Alamos County pursuant to Public Law 105-119, Section 632. It discusses NNSA compliance with the environmental requirements associated with real property transfers. It also demonstrates that, although potentially contaminated, Airport Tract East is in such condition that NNSA may issue deeds on the basis that "all remedial action necessary to protect human health and the environment has been taken".

The methodology used to prepare this report was to:

- conduct an environmental site assessment of the Airport Tract East consistent with the American Society of Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to the Airport Tract East,
- perform a physical examination of the Airport Tract East, and
- consult with both University of California and NNSA staff to confirm existing information or develop additional information.

Based on this assessment, it has been determined that the Airport Tract East, although potentially contaminated by activities conducted in the late 1940s and early 1950s at or near this location, has:

- no potential release sites (PRSs) within its boundaries,
- no record that hazardous substances were ever stored at this site, and
- no requirements for future remedial clean-up activities.

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<sup>1</sup> Congress established the National Nuclear Security Administration (NNSA) within the DOE/NNSA to manage the nuclear weapons program for the United States. Los Alamos National Laboratory (LANL or Laboratory) is one of the facilities now managed by the NNSA. The NNSA officially began operations on March 1, 2000. Its mission is to carry out the national security responsibilities of the DOE/NNSA, including maintenance of a safe, secure, and reliable stockpile of nuclear weapons and associated materials capabilities and technologies; promotion of international nuclear safety and nonproliferation; and administration and management of the naval nuclear propulsion program.

Analyses indicate that air quality is good, affected mostly by traffic on Highway 502 immediately south of this site.

There are no known springs or wetlands within the Airport Tract East boundaries, nor do regional aquifer groundwater test or supply wells exist within the tract or within a distance of 0.5 miles of the tract. No surface or groundwater contamination is known to exist at the Airport Tract East, and the Airport Tract East does not lie within the 100-year or 500-year floodplains.

Habitat for threatened and endangered species overlaps the Airport Tract East; however, the DOE/NNSA and the UC consulted with the US Fish and Wildlife Service to assess those affects. The US Fish and Wildlife Service issued a final biological opinion on the effect of land transfer on the Mexican Spotted Owl. This opinion states that land transfer "May affect, likely to adversely affect" the owl on the Airport Tract. However, no further action is required at the Airport Tract East under the provision of the Biological Opinion.

A complete archaeological survey of the Airport Tract East revealed one prehistoric resource that will undergo mitigation during the summer of 2001. No known traditional cultural properties (TCPs) exist.

Based on this information, the University of California and NNSA conclude that, upon completion of the cultural resource mitigation in 2001, there are no outstanding environmental issues to prevent conveyance or transfer of The Airport Tract to Los Alamos County.

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## **1.0 Purpose of the Environmental Baseline Survey**

On November 26, 1997, Congress passed Public Law 105-119. Section 632 of that law directed the Secretary of Energy to convey to the Incorporated County of Los Alamos, New Mexico, or to the designee of the County and transfer to the Secretary of the Interior, in trust for the Pueblo of San Ildefonso, parcels of land under the jurisdictional administrative control of the Secretary at or in the vicinity of Los Alamos National Laboratory. Such parcels, or tracts, of land must meet the suitability criteria established by the law, that is, they are not required for the national security mission before the end of 11/26/2007; can be restored or remediated by 11/26/2007; and are suitable for historic, cultural or environmental preservation, economic diversification, or community self-sufficiency. The DOE<sup>2</sup> identified 10 tracts of land for potential transfer to the County of Los Alamos or to San Ildefonso Pueblo. These 10 tracts of land have been further divided into sub-parcels for transfer purposes.

DOE's "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers (DOE/EH-413/9712) provides guidance on the types of information needed to support real property transfers. Information such as the presence of floodplains and wetlands; critical habitats; historic properties; and hazardous substances must be gathered and provided to the potential recipients of the property. This document provides the relevant environmental information as outlined in the Cross-Cut Guidance and provides references to more detailed information.

### **1.1 Boundaries of Property and Scope of Survey**

The Airport Tract East (Appendix D) consists of approximately 9.2 acres of disturbed land located immediately to the north of Highway 502 in Los Alamos County, NM. The western edge of the parcel lies due south of the eastern end of the runway of the Los Alamos airport, and the parcel extends to the east for approximately another quarter mile.

The legal property boundary description of the Airport Tract itself is provided by the Army Corps of Engineers Title Report, "Airport Tract at Los Alamos, New Mexico", September 15, 1998. The legal property boundary of the Airport Tract East will be contained in the survey reports prepared by the Army Corps of Engineers just prior to transfer.

The scope of this Environmental Baseline Survey was to identify potential environmental issues associated with The Airport Tract East that might impact transfer of ownership.

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<sup>2</sup> Congress established the National Nuclear Security Administration (NNSA) within the DOE to manage the nuclear weapons program for the United States. Los Alamos National Laboratory (LANL or Laboratory) is one of the facilities now managed by the NNSA. The NNSA officially began operations on March 1, 2000. Its mission is to carry out the national security responsibilities of the DOE, including maintenance of a safe, secure, and reliable stockpile of nuclear weapons and associated materials capabilities and technologies; promotion of international nuclear safety and nonproliferation; and administration and management of the naval nuclear propulsion program.

## **2.0 Survey Methodology**

The methodology used to prepare this report was to:

- conduct an environmental site assessment of the Airport Tract East consistent with the American Society of Testing and Materials (ASTM) “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to the Airport Tract East,
- perform a physical examination of the Airport Tract East, and
- consult with both University of California and DOE/NNSA staff to confirm existing information or develop additional information.

## **2.1 Approach and Rationale**

Historical and current information (see 2.1.1 below) for the Airport Tract East was reviewed, and the site was physically visited and surveyed. After determining the nature and quality of available information, UC and DOE/NNSA staff were consulted to confirm existing information or develop new information as needed. Collectively, this survey addressed air quality, water quality (surface and groundwater), soil and sediment contamination, and any structures, waste sites, natural resources or other environmental concerns present at the site.

To conduct this assessment it was assumed that the Airport Tract East boundaries were established and not subject to significant change. Environmental conditions and associated information were evaluated based upon those boundaries. Second, it was assumed that the nature and quality of the document reviews and site surveys were independent of, and unaffected by, the recipients’ intended use as identified in the “Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico” (DOE September 2000). Lastly, it was assumed that a final inspection or “walk-through” of each parcel would occur prior to conveyance or transfer.

### **2.1.1 List and Description of Documents Reviewed**

In addition to the documents listed below, the Environmental Site Assessment (Appendix B) identifies additional resources used in this evaluation.

1. “Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory”, US Department of Energy, DOE/EIS-0238, January 1999.

2. "Final Environmental Impact Statement for the Conveyance and Transfer of Certain Tracts Administered by the US DOE and Located at Los Alamos National Laboratory", US Department of Energy, DOE/EIS-0293, October 1999
3. "Final Environmental Restoration Report to Support Land Conveyance and Transfer under Public Law 105-119", Los Alamos National Laboratory, LA-UR-99-4187, August 1999
4. "Combined Data Report to Congress to Support Land Conveyance and Transfer under Public Law 105-119", US Department of Energy, Unnumbered Report, January 2000.
5. "Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico", U.S. Department of Energy, Report to Congress Under Public Law 105-119, Unnumbered Report, September 2000.
6. "Airport Tract at Los Alamos, New Mexico", U.S. Army Corps of Engineers Title Report, September 15, 1998.
7. LANL Hazardous Waste Facility Permit, NM 0890010515-1, 11/8/89
8. "Environmental Surveillance at Los Alamos During 1999", Los Alamos National Laboratory, LA-13775-ENV, December 2000.
9. "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers", U.S. Department of Energy, DOE/EH-413/9712, October 1997
10. "Threatened and Endangered Species Habitat Management Plan," Los Alamos National Laboratory, August 1998.
11. "A Status Report on Threatened and Endangered Species, Wetlands, and Floodplains for the Proposed Conveyance and Transfer Tracts at Los Alamos National Laboratory, Los Alamos, New Mexico", Los Alamos National Laboratory, July 1998.
12. LANL Draft Watershed Management Plan
13. LANL Environmental Restoration Project Baseline, WBS 1.4.2.6.01.02.24.JG.
14. "Endangered Species Act", United States Code, Washington, D.C., Title 16, Conservation; Chapter 35, Endanger Species Act, December 1973.

### **2.1.2 Inspections of Properties Conducted and Personnel Contacted**

The Environmental Site Assessment (Appendix B) identifies personnel contacted during this evaluation.

### **3.0 Summary of Data**

The Airport Tract itself consists of approximately 205 acres located on the northeastern edge of the mesa above Pueblo Canyon and to the east of the Los Alamos townsite. The bottom of DP and Los Alamos Canyons to the south and the mesa's edge to the north define the tract's boundaries. In its Record of Decision, DOE determined that only a portion of this tract would be transferred at this time. DOE has withheld those lands south of State Road 502 as a buffer zone for tritium operations being conducted at TA-21. Should DOE shut down its tritium activities at TA-21, DOE will reassess the need to retain buffer areas and amend the Record of Decision as appropriate.

The Airport Tract East (see map, Appendix D) consists of approximately 9.2 acres of disturbed land located immediately to the north of Highway 502 in Los Alamos County, NM. The western edge of the parcel lies due south of the eastern end of the runway of the Los Alamos airport, and the parcel extends to the east for approximately another quarter mile. The area is primarily covered in juniper-savannah with open shrub, grasslands, and wildflowers. The tract is adjacent to sensitive wildlife habitat and contains archeological sites.

### **3.1 History and Current Use**

Prior to LANL occupancy (1943), there was little development in this remote area. Farming on the mesa-tops, logging, and a few homesteads were the predominant activities in this area. Aerial photographs, taken in the early 1950s, show the Los Alamos airport landing strip prominently positioned where it currently operates today. There is a cleared area approximately the size of the existing terminal building. There is no development noted on the Airport Tract East parcel in any historic aerial photographs.

### **3.2 Environmental Setting**

Highway 502 to the south, the airport runway to the north, vacant land to the west, and commercial properties to the east surround the Airport Tract East. Vegetation in this tract consists primarily of native grasses, herbs, shrubs, and small trees (pinyon and juniper). Fauna present is limited to those species able to coexist with extensive human development (for example, rats, mice, and songbirds with an occasional deer or coyote). The site is not in a floodplain nor does it support wetlands. Habitat for the Mexican spotted owl overlaps this tract.

Because this tract and other tracts contain areas of environmental interest for the Mexican Spotted Owl that might be affected by the proposed action (property transfer), the DOE/NNSA and the UC consulted with the US Fish and Wildlife Service to assess those affects. The US Fish and Wildlife Service issued a final biological opinion on the effect of land transfer on the Mexican Spotted Owl. This opinion states that land transfer "May affect, likely to adversely affect" the owl on the Los Alamos Area Office, DP Road, TA-

21, Airport, and TA-74 Tracts. However, no further action is required at the Airport Tract East under the provision of the Biological Opinion.

Noise in the vicinity of this tract is from motorized vehicles and business operation in the area. Artificial light sources associated with commercial development and vehicles also are present.

### **3.2.1 Stormwater Runoff Patterns**

The Airport Tract East is located on the mesa top between Pueblo Canyon to the north and DP and Los Alamos Canyons to the south. Both canyons have ephemeral drainages in the vicinity of the tract. Both canyons receive storm water runoff and snowmelt from the mesa top and surrounding areas. One spring, DP Spring, flows from the DP Canyon wall but does not maintain flow down into Los Alamos Canyon.

There are no stream gages or other water monitoring devices within the Airport Tract East.

### **3.2.2 Hazardous Materials and Waste Management**

There is no record of hazardous waste management on this parcel.

### **3.2.3 CERCLA-Related Contamination**

None. There is no record of any CERCLA-related contamination at this site.

### **3.2.4 Storage Tanks and Pipelines**

None. There is no record of any storage tanks or pipelines at this site.

### **3.2.5 Wastewater Treatment and Disposal**

Not applicable. No current or historic wastewater treatment and disposal facilities are associated with this site.

### **3.2.6 Lead in Drinking Water**

Not applicable. There are no water resources available at this site, and there are no known sources of potential lead contamination associated with this site.

### **3.2.7 Oil Water Separator**

Not applicable. No current or historic uses of oil water separators are associated with this site.

### **3.2.8 Asbestos**

Not applicable. There are no records of any use or disposal of asbestos at this site.

### **3.2.9 Air**

Not applicable. Air quality at the Airport Tract is primarily affected by LANL operations at TA-21 and the Los Alamos Neutron Science Center (LANSCE). Pollutant contributions also arise from traffic on Highway 502 and from the airplanes that use the Los Alamos Airport.

The Airport Tract East is part of New Mexico Region 3, an attainment area that meets National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Except for small amounts of carbon monoxide and ozone resulting from hydrocarbons emitted from motor vehicles, and airplanes, there are no sources of criteria pollutants within the tract itself.

### **3.2.10 Lead-Based Paint Surveys and Other Sources of Lead**

Not applicable. There are no known sources of lead at this site.

### **3.2.11 PCBs**

Not applicable. There are no known sources or records of PCBs being used or stored at this site.

### **3.2.12 Pesticides**

Not applicable. There are no records of pesticides being used or stored at this site.

### **3.2.13 Medical Wastes**

Not applicable. There are no records of medical wastes being generated or disposed at this site.

### **3.2.14 Ordnance**

Not applicable. There are no records of ordnance being used, stored, or disposed at this site.

### **3.2.15 Radioactive Materials and Wastes**

Not applicable.

### **3.2.16 Radon**

Not applicable.

### **3.2.17 Groundwater**

Not applicable. There are no supply or monitoring wells located on this site, and there is no known contamination at this site that would impact these resources.

### **3.3 Natural and Cultural Resources**

Because this tract and other tracts contain areas of environmental interest for the Mexican Spotted Owl that might be affected by the proposed action (property transfer), the DOE/NNSA and the UC consulted with the US Fish and Wildlife Service to assess those affects. The US Fish and Wildlife Service issued a final biological opinion on the effect of land transfer on the Mexican Spotted Owl. This opinion states that land transfer "May affect, likely to adversely affect" the owl on the Los Alamos Area Office, DP Road, TA-21, Airport, and TA-74 Tracts. However, no further action is required at the Airport Tract East under the provision of the Biological Opinion.

One hundred percent of the Airport Tract East has been inventoried for historic and prehistoric cultural resources. Survey results indicate that there is a prehistoric site present eligible for the National Register of Historic Places (NRHP). There is a potential for unidentified resources, including subsurface archaeological deposits and unrecorded burials in the Airport Tract East.

A Programmatic Agreement among the DOE, Advisory Council on Historic Preservation, New Mexico Historic Preservation Officer, Incorporated County of Los Alamos, New Mexico, and Pueblo of San Ildefonso, concerning the conveyance of certain parcels of land to Los Alamos County, New Mexico, provides for mitigating these resources prior to transfer.

There are no known traditional cultural properties (TCPs) located in The Airport Tract. Consultations to identify TCP resources have not been conducted. TCPs may be identified during further consultations with Native American and Hispanic groups regarding the traditional uses of this tract.

### **3.4 Identification of Uncontaminated Properties**

The Airport Tract East, though potentially contaminated from activities conducted at TA-1 during the late 1940s and early 1950s, does not have environmental contamination as defined by CERCLA 120(h)(4).

### **3.5 All Other Properties**

Not applicable. There are no other properties associated with this site.

#### **4.0 Summary of Data for Adjacent Properties**

The adjacent properties consist of light industrial, single-family residential, and canyon bottoms. No apparent environmental liabilities were identified in any of the federal or state environmental databases searched for this assessment (see Attachment B). The database search to assess whether environmental conditions on the subject property have been affected by any off-site source or sources identified no mappable<sup>3</sup> sites as being within the designated search radii.

Given the database search results and based on an inspection of the surrounding properties from publicly accessible areas, none of the neighboring operations is believed to pose a significant potential concern for environmental conditions on the subject property.

The environmental database search identified 3 “orphan” sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). Only one of these listed “orphan” sites is located within 1 mile of the subject property: the Los Alamos airport has underground storage tanks that appear on the New Mexico UST registry. There is no regulatory record of leakage from any UST located at the airport and, therefore, this site is not believed to pose a potential concern for environmental conditions on the subject property.

#### **4.1 History and Current Use**

The adjacent property was part of the historic townsite supporting Los Alamos National Laboratory during the late 1940s and early 1950s, or is land that has remained under DOE control in support of the Laboratory. This includes the airport that is leased to Los Alamos County. The townsite was conveyed to Los Alamos County during the late 1950s and early 1960s and subsequently sold to the occupants.

#### **4.2 Environmental Setting**

The adjacent lands consist of light industrial development, single-family dwellings, or undeveloped lands.

#### **4.3 Adjacent Properties with No Known or Suspected Releases**

Not applicable.

#### **4.4 Adjacent Properties with Known or Suspected Releases**

Not applicable.

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<sup>3</sup> The term “mappable” means that the address information provided is sufficient for the database search vendor to pinpoint the site’s location on a street map with a high degree of confidence.

## **5.0 Conclusions and Recommended Courses of Action**

DOE/NNSA and UC health and safety professionals have reviewed environmental conditions at this parcel and have determined that no special precautions are required.

Based on best available environmental information, the University of California and the Department of Energy conclude that there are no outstanding environmental issues to prevent conveyance or transfer of this tract, after the appropriate cultural resource mitigations have been accomplished. DOE/NNSA may issue deeds on the basis that "all remedial action necessary to protect human health and the environment have been taken".

### **5.1 Facility Matrix**

Not applicable. No structures exist on this parcel.

### **5.2 Property Categorization**

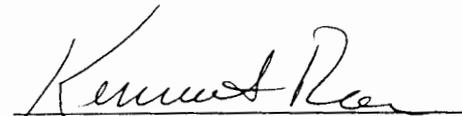
Not applicable. All lands at the Airport Tract East are categorized the same.

### **5.3 Resource Map**

Not applicable. No hazardous materials were identified, and no wells are located on this property.

## **6.0 Certification of Environmental Baseline Survey**

Los Alamos National Laboratory staff and Environmental Contractors conducted this Environmental Baseline Survey under direction and guidance of the Ecology Group. The information contained in this document is accurate to the best of our knowledge.



Kenneth Rea, RRES-ECO  
LANL Land Transfer

**Appendix A**  
**Appendix B**  
**Appendix C**  
**Appendix D**

# **Appendix A**

## **CERCLA 120(h)**

**NOTICE of CERCLA 120(h) INFORMATION FOR PROPERTY SUBJECT TO  
CONVEYANCE AND TRANSFER:**

**A-3, Airport East Tract**

**Purpose:**

The purpose of this document is to meet the reporting requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 120(h) for the conveyance and transfer of the parcel of land identified as the Airport East Tract. *The information contained in this notice is required under authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) 42 U.S.C. section 9620(h).* This report describes the methodology used to evaluate whether any hazardous substances meeting the CERCLA reporting requirements were stored, released, or otherwise managed at the Airport East Tract and identifies those materials.

CERCLA 120(h) and the implementing regulations at 40 CFR 373 require the DOE, when entering into the sale or transfer of real property, to disclose whether any hazardous substances [as defined by CERCLA] have been stored for more than one year in quantities greater than or equal to 1000 kg or the reportable quantity (RQ); any hazardous substances known to be released or disposed of [on the A-3 tract]; and any acutely hazardous wastes stored for one year or more and in quantities greater than or equal to 1 kg.

**Location:**

The Airport East parcel is located immediately to the north of Highway 502 in Los Alamos County, NM. The western edge of the parcel lies due south of the eastern end of the runway of the Los Alamos airport, and the parcel extends to the east for approximately another quarter mile.

**Methodology:**

The information in this report and its attachments is based on a review of available records and interviews. The Environmental Restoration Project's approach to reviews and interviews is detailed in Appendix C. The reviews conducted by the Laboratory's Water Quality Group, the Hazardous and Solid Waste Group, and the Air Quality Group, included a review of Laboratory and group files and databases on chemical inventories and usage; solid and hazardous waste management and storage; releases and spills; emergency response, and PCB equipment.

**Is there any record of a hazardous substance having been stored on site?**

No records of hazardous substances having been used, stored, released, or disposed on the A-3 tract have been observed. See Appendix C for information on Environmental Restoration Project activities and PRSs.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater; and, was the hazardous substance stored for one year or longer?**

No records of hazardous substances having been used, stored, released, or disposed on the A-3 tract have been observed. See Appendix C for information on Environmental Restoration Project activities and PRSs.

**Was the amount disposed of or released greater than or equal to the RQ?**

No records of hazardous substances having been used, stored, released, or disposed on the A-3 tract have been observed. See Appendix C for information on Environmental Restoration Project activities and PRSs.

**Current Regulatory Status:** The Airport East (A-3) tract does not currently have any operations that are included in the Laboratory's Hazardous Waste Facility Permit. However, any potential release sites (PRS) are subject to RCRA corrective action requirements and associated conditions in Module VIII of the Permit. See Appendix C for more information on PRSs.

**Appendix B**  
**Environmental**  
**Assessment**

# **ENVIRONMENTAL ASSESSMENT**

## **Land Transfer Parcel, Airport East**

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**Prepared For: THE DEPARTMENT OF  
ENERGY**

**April 12, 2002**

## **EXECUTIVE SUMMARY**

This report presents a findings summary for an assessment of the actual and potential environmental concerns associated with the portion of the Airport parcel being conveyed to the County of Los Alamos. The Airport East parcel is located immediately to the north of Highway 502 in Los Alamos County, NM. The western edge of the parcel lies due south of the eastern end of the runway of the Los Alamos airport, and the parcel extends to the east for approximately another quarter mile. For linguistic ease, the portion of the Airport parcel that is the subject of this report is simply referred to as the Airport East parcel for the remainder of this report. Exhibit 1 (at the end of this executive summary) provides a descriptive summary for the Airport East parcel and Exhibit 2 (also at the end of this executive summary) summarizes the known history of this site. Los Alamos National Laboratory conducted its first assessment on August 28, 2000 and a subsequent assessment on April 4, 2002, at the request of the U.S. Department of Energy. The LANL site assessors for this assignment were Ms. Jennifer Pope and Ms. Virginia Smith.

This assessment (hereafter referred to as an environmental site assessment (ESA)) was conducted pursuant to a scope of work consistent with the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-00); along with an additional off-site disposal practices review (including evaluating whether the subject site is listed as a potentially responsible party (PRP) at an off-site waste disposal site); and an examination of possible asbestos-containing materials (ACMs). A specific discussion of the tasks undertaken is set forth in Attachment A. LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this assessment.

It is LANL's understanding and agreement that the DOE may provide this report to the recipient of the subject parcel, as well as to the public. The parcel recipient may provide this report to third parties and other financing institutions and institutional lenders connected with the contemplated transaction (including, without limitation, any such party providing financing on or after consummation of the contemplated transaction and all assignees and participants of any of the foregoing), and that these parties may rely on the information in the report to the same extent as and subject to the same restrictions agreed to by DOE.

## **1.2           LIMITATIONS**

All the information contained in this report, including any engineering conclusions, is based on the information made available to LANL's site assessor during the investigation, which we assume to have been provided in good faith. This report represents an assessment of the Airport East parcel performed in accordance with generally accepted industry standards regarding environmental assessments. LANL makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to ownership of any property or the application of any law to the facts set forth herein. Except as otherwise may be requested by DOE, LANL disclaims any obligation to update the report for events taking place after the time during which we conducted our assessment.

**Exhibit 1. Airport East Parcel Description Summary**

<b># of Acres</b>	<b># of Buildings (approx. total sq. ft)</b>	<b># of Potential Release Sites (and remediation status)</b>	<b>Current Activities</b>
Approximately 9.2.	None.	None.	No LANL operations are undertaken at this parcel.

**Exhibit 2. Airport East Parcel Site History Summary**

<b>Site History Prior to LANL Occupancy</b>	Prior to LANL occupancy (1943), there was little development in this remote area. Farming on the mesa-tops, logging, and a few homesteads were the predominant activities in this area.
<b>Site History After LANL's Occupancy</b>	Aerial photographs, taken in the early 1950s, show the Los Alamos airport landing strip prominently positioned where it currently operates today. There is a cleared area approximately the size of the existing terminal building. There is no development noted on the Airport East parcel, which is adjacent to the Los Alamos airport, in any aerial photograph.

**ATTACHMENT A**

**ASSESSMENT METHODOLOGY**

This environmental assessment, consistent with the ASTM Practice E 1527-00 (with added evaluations of ACMs, and possible wetland areas), consisted, in general, of the following steps:

- We met with the following individuals at LANL to discuss parcel-specific environmental and occupational health and safety (EH&S) issues:
  - Mr. Albert Dye, ESH-19, PCB Database Manager;
  - Ms. Debra Archuleta, ESH-17, Asbestos Program Manager;
  - Mr. David Ortiz and Ms. Josie Encinias, ESH-5, Asbestos Management Program;
  - Ms. Louann Romero, ESH-19, HSTD Database Manager;
  - Mr. Harvey Decker, ESH-18, SPCC and SWPPP Plans;
  - Mr. William Flor, HAZMAT Spills Database Manager; and
  - Ms. Jean Dewart, ESH-17, Air Quality Program.
  
- We visited the facility on August 28, 2000, and again on April 4, 2002 to gather more detailed information concerning possible on-site contamination, and to determine the compliance status of the parcel. Before, during and after the first visit, we interviewed site personnel about past and present site operations, raw materials and waste management practices, and significant environmental liability problems, if any. We did not conduct additional interviews after the second site visit, because there are no ongoing LANL operations at the subject parcel. We also observed actual site conditions in an attempt to identify and assess the status of potential liabilities such as past disposal areas, waste management units and systems, and sites of environmental releases.
  
- We reviewed ES&H-related files, correspondence, and other documents supplied by LANL.
  
- We visited the Los Alamos County Archives office in Los Alamos, NM to review aerial photographs of the area and to collect information on site use prior to the Manhattan Project.
  
- We performed a walk-by and drive-by survey of the immediate neighboring properties in August 2000 and April 2002 from publicly accessible areas for obvious signs of environmental concerns and how those concerns may have environmentally degraded the property under study, and to assess the proximity of the subject property to sensitive ecological areas (e.g., wetlands).
  
- We reviewed a search of the following computerized environmental databases in April 2002 to determine if hazardous sites or serious local environmental problems may exist on or immediately adjacent to the facility (see radius specifications):<sup>1</sup>

---

<sup>1</sup>The environmental database searches were completed for LANL by Environmental Data Resources. The database-specific radii specified for these searches either match the ASTM E 1527-00 requirements or are larger than specified in E 1527-00.

*Federal ASTM Records*

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) (subject site and 0.5-mile radius);
- Emergency Response Notification System (subject site);
- National Priority List (NPL) and proposed NPL (subject site and 1-mile radius);
- RCRA Corrective Action Sites (CORRACTS) list (subject site and 1-mile radius);
- Resource Conservation and Recovery Information System (RCRIS) (subject site and 0.25-mile radius for generators and 0.5-mile radius for treatment, storage, and disposal facilities); and
- CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP) (subject site and 0.25-mile radius).

*Additional Federal Records*

- Biennial Reporting System (subject site only);
- PCB Activity Database System (subject site only);
- RCRA Administrative Action Tracking System (RAATS) list (subject site only);
- Toxic Release Inventory System (subject site only);
- Facility Index Data Base System (FINDs) (subject site only);
- Consolidated Docket Enforcement System (subject site and company name only);
- Hazardous Materials Incident Reporting System (subject site only);
- Delisted NPL Sites (subject site and 1-mile radius);
- Federal Superfund Liens (subject site only);
- Superfund Consent Decrees (subject site and 1-mile radius);
- Toxic Substances Control Act data base (subject site only);
- Materials License Tracking System (subject site only);
- Mines Master Index File (subject site and 0.25-mile radius);
- Records of Decision data base (subject site and 1-mile radius); and
- FIFRA/TSCA Tracking System (FFTS) (subject site only).

*State ASTM Records*

- New Mexico State leaking underground storage tank (UST) database list (subject site and 0.5-mile radius);
- New Mexico State permitted solid waste facilities/landfill sites (subject site and 0.5-mile radius); and
- New Mexico State registered USTs (subject site and 0.25-mile radius).

*Additional State Records*

- New Mexico State Aboveground Storage Tanks (subject site only).

- We attempted to obtain and review historical Sanborn Fire Insurance land use maps in August 2000 to establish past land uses of the subject property and the surrounding area consistent with the requirements of ASTM Practice E 1527-00. Sanborn Fire Insurance land use maps were not available for this facility or the surrounding area.
- We reviewed historical aerial photographs available from public agency sources to establish past land uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. Aerial photographs dated 1924, 1958, 1974, and 1991 were available from the Environmental Restoration and Los Alamos County photographic archives.
- We located and reviewed abstracts of available historical city directories in August 2000 to establish past uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. A search of the county archives in Los Alamos yielded no historical or current city directories for Airport East that gave addresses for the subject site. In most cases, older city directories listed names and phone numbers without the benefit of the listing address.
- We assessed possible issues of current or future environmental liability. This assessment evaluated operations, both past and present, with respect to: air pollution control (including, but not limited to, applicable requirements of the 1990 Clean Air Act Amendments); asbestos management; water supply and pollution control, including stormwater management; nonhazardous solid waste management; hazardous solid waste management; USTs; materials, products, and pesticide storage and handling practices (including Superfund Amendments and Reauthorization Act (SARA) Title III programs); polychlorinated biphenyls (PCBs) inventory management; past on-site or off-site waste disposal practices; and occupational safety and health (including hazards communication).
- We completed an assessment of the facility's potentially significant liabilities under the Superfund statute and related state statutes pertaining to potential on-site contamination and related to the off-site disposal of wastes.
- LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this environmental assessment. LANL did, however, review environmental surveillance, monitoring, and sampling results that have been collected over time and that were relevant to the parcel.

***ATTACHMENT B***

***ISSUES SUMMARY***

**EXHIBIT 3**

**Summary of Environmental Assessment Results for Airport East  
Adjacent to Highway 502, Los Alamos NM**

AREA	ISSUE	COMMENT/RECOMMENDATION/LIABILITY/COST
Air Pollution Control	There is no historical record of air pollutants being emitted from any operation or facility within this parcel.	None.
Asbestos Management	There appear to be no environmental liability issues associated with asbestos management on this parcel.	There are no facilities or structures located on this land parcel.
Water Supply and Pollution Control, Including Stormwater Management	There appear to be no environmental liability issues concerning water supply to or wastewater discharges from this parcel.	There exists no potable water supply to the subject parcel. There is no evidence or record of historical or current-day wastewater discharge from or onto this parcel.
Nonhazardous Solid Waste Management	There appear to be no environmental liability issues associated with LANL's nonhazardous waste management practices within the parcel.	No LANL operations are conducted on this parcel, and so no nonhazardous wastes are being generated. There is no record of historical generation of nonhazardous wastes.
Hazardous Solid Waste Management	There appear to be no environmental liability issues associated with LANL's hazardous waste management practices within the parcel.	No LANL operations are conducted on this parcel, and so no hazardous wastes are being generated. There is no record of historical generation of hazardous wastes.
Underground Storage Tanks	There appear to be no environmental liability issues associated with USTs at this facility.	There is no historical record, employee recollection, or visible indication that there are or were USTs in service on this property. There is no plan to install any USTs.
Materials, Products, and Pesticide Handling and Storage Practices	There appear to be no environmental liability issues associated with current materials, products, and pesticide handling and storage practice at this parcel.	No materials, products or pesticides are handled or stored on the subject parcel.
PCB Inventory Management	There appear to be no environmental liability issues associated with PCB inventory management at this land parcel.	LANL's PCB database shows that no PBC-containing equipment was used, stored or disposed on this parcel. During the site visits there was no staining or other indications of oil releases to the environment.
Potential On-Site	There is no record, employee recollection, or visible	On the days of the site visits, there was no unusually altered

<p>Contamination and Waste Disposal</p>	<p>indication that waste materials have been disposed on the subject property. The site address is currently not listed on the proposed or final NPL, in the CERCLIS or CERCLIS-NFRAP databases, or on the State's list of designated potential hazardous waste disposal sites. In addition, the site address is currently not listed in the state or federal reportable spills databases.</p>	<p>topography, unusually stressed vegetation, soil staining, unusual ground depressions, or other visible indications of past spills, releases, or waste disposal. Site contacts reported experiencing no reportable spills.</p>
<p>Past Off-Site Waste Disposal</p>	<p>To the best of LANL ESH-19 staff's knowledge, no issues or concerns have been raised regarding past off-site waste disposal practices from wastes generated on this parcel. LANL has not received or filed notifications under the Comprehensive Environmental Response, Compensation, and Liability Act related to the disposal of any hazardous substances.</p>	<p>None of the off-site disposal facilities known to have received hazardous or nonhazardous wastes from LANL is currently listed on the proposed or final NPL, in the federal CERCLIS or CERCLIS-NFRAP databases, or in the respective state databases that are the equivalent of the federal CERCLIS and NPL databases.</p>
<p>Environmental Data Base Search Results</p>	<p>No apparent environmental liabilities were identified in any of the federal or state environmental databases searched for this assessment (see Attachment A). The database search to assess whether environmental conditions on the subject property have been affected by any off-site source or sources identified no mappable sites as being within the designated search radii. (NOTE: The term "mappable" means that the address information provided is sufficient for the database search vendor to pinpoint the site's location on a street map with a high degree of confidence.)</p>	<p>Given the database search results and based on an inspection of the surrounding properties from publicly accessible areas, none of the neighboring operations is believed to pose a significant potential concern for environmental conditions on the subject property.</p> <p>The environmental database search identified 3 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). Only one of these listed "orphan" sites is located within 1 mile of the subject property: the Los Alamos airport has underground storage tanks that appear on the New Mexico UST registry. There is no regulatory record of leakage from any UST located at the airport and, therefore, this site is not believed to pose a potential concern for environmental conditions on the subject property.</p>

**Appendix C**  
**Environmental**  
**Restoration**  
**CERCLA Report**



## Memorandum

Environmental Science and Waste Technology (E)  
Environmental Restoration (ER) Project, MS M992

To/MS: K. Rea, ESH-SWI, MS M889  
D. Garvey, ESH-SWI, MS M889  
From/MS: P. Schumann, E/ER, MS M992  
Phone/FAX: 7-0808/5-4747  
Symbol: ER2002-0243  
Date: April 4, 2002

**SUBJECT: ENVIRONMENTAL RESTORATION (ER) PROJECT  
COMPREHENSIVE ENVIRONMENTAL RESPONSE,  
COMPENSATION, AND LIABILITY ACT (CERCLA) 120(h) REPORT  
INFORMATION IN SUPPORT OF THE TRANSFER OF THE AIRPORT-  
1 EAST SUB-PARCEL [MAP DESIGNATION A-3] TO LOS ALAMOS  
COUNTY**

The purpose of this document is to transmit CERCLA 120(h) information to support the transfer of the Airport-1 East Sub-parcel (Map Designation A-3) to Los Alamos County.

The ER Project has not submitted any previous documentation concerning CERCLA 120(h) requirements specific to this Sub-parcel.

Please note that the CERCLA 120(h) reports provided herein are based on the review of the four maps (Thiel, Vigil, Merrick and Thatcher/Vigil) provided to the ER Project in 1998, and the most current topographic and PRS information maintained by the Laboratory's Facility for Information Management, Analysis, and Display.

In addition, please note that the CERCLA 120(h) information provided relates only to the status of the PRS; other information relevant to current operations and activities, or other regulations at the parcel included in the transfer, are the responsibility of other Los Alamos National Laboratory organizations and is not included herein. The Site-Wide Issues Program Office is the source for this other information necessary to complete the CERCLA 120(h) report.

If you have any questions, please call me at (505) 667-5840 or Kim Birdsall at (505) 665-3486.

PS/KB/vn

Enclosure: ER Project Supporting Documentation for the Airport-1 East Sub-parcel [Map Designation A-3] CERCLA 120(h) Report



K. Rae  
D. Garvey  
ER2002-0243

-2-

April 4, 2002

Cy (w/enc.):

K. Birdsall, E/ER, MS M992  
M. Kirsch, E/ER, MS M992  
E. Louderbough, LC-GL, MS A187  
W. Neff, E/ET, MS M992  
V. Smith, E/ER, MS M992  
P. Wardwell, LC-GL, MS A187  
L. Cummings, LAAO, MS A316  
D.Gregory, LAAO, MS A316  
M. Johansen, LAAO, MS A316  
E/ER File, MS M992  
IM-5, MS A150  
RPF, MS M707

Cy (w/o enc.):

J. Canepa, E/ER, MS M992

**ER Project Supporting Documentation  
For The Airport-1 East Sub-parcel [Map Designation A-3]  
CERCLA 120(h) Report**

**Location:** Los Alamos Townsite

**Description:** The Airport-1 East Sub-parcel (Map Designation A-3) occupies approximately 9.2 acres of undeveloped land bounded by privately-owned land to the east, New Mexico Highway 502 and its right-of-way to the west and south, and the Airport-5 Central Sub-parcel and Los Alamos County land to the north.

**History:** The Airport-1 East Sub-parcel does not contain any solid waste management units (SWMUs) or areas of concern (AOCs) within its boundaries.

**Is there any record of a hazardous substance having been stored on site?**

No. There is no information that suggests that hazardous substances were stored on site.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater?**

Not applicable.

**Was the amount disposed of or released greater than or equal to the RQ?**

Not applicable.

**Current Regulatory Status:** The Airport-1 East Sub-parcel contains no SWMUs or AOCs within its boundaries. Therefore, this Sub-parcel meets the Comprehensive Environmental Response, Compensation and Liability Act Section 120(h) requirements because all necessary remedial action (none in this case) has been taken prior to transfer.

**Future Actions Required:** None

**References:** *"Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico, Report to Congress Under Public Law 105-119,"* United States Department of Energy, September 2000.

*"Combined Data Report to Congress to Support Land Conveyance and Transfer Under Public Law 105-119,"* United States Department of Energy, January 2000.

*"Environmental Restoration Report to Support Land Conveyance and Transfer Under Public Law 105-119,"* Environmental Restoration Project, August 1999, LA-UR-99-4187.

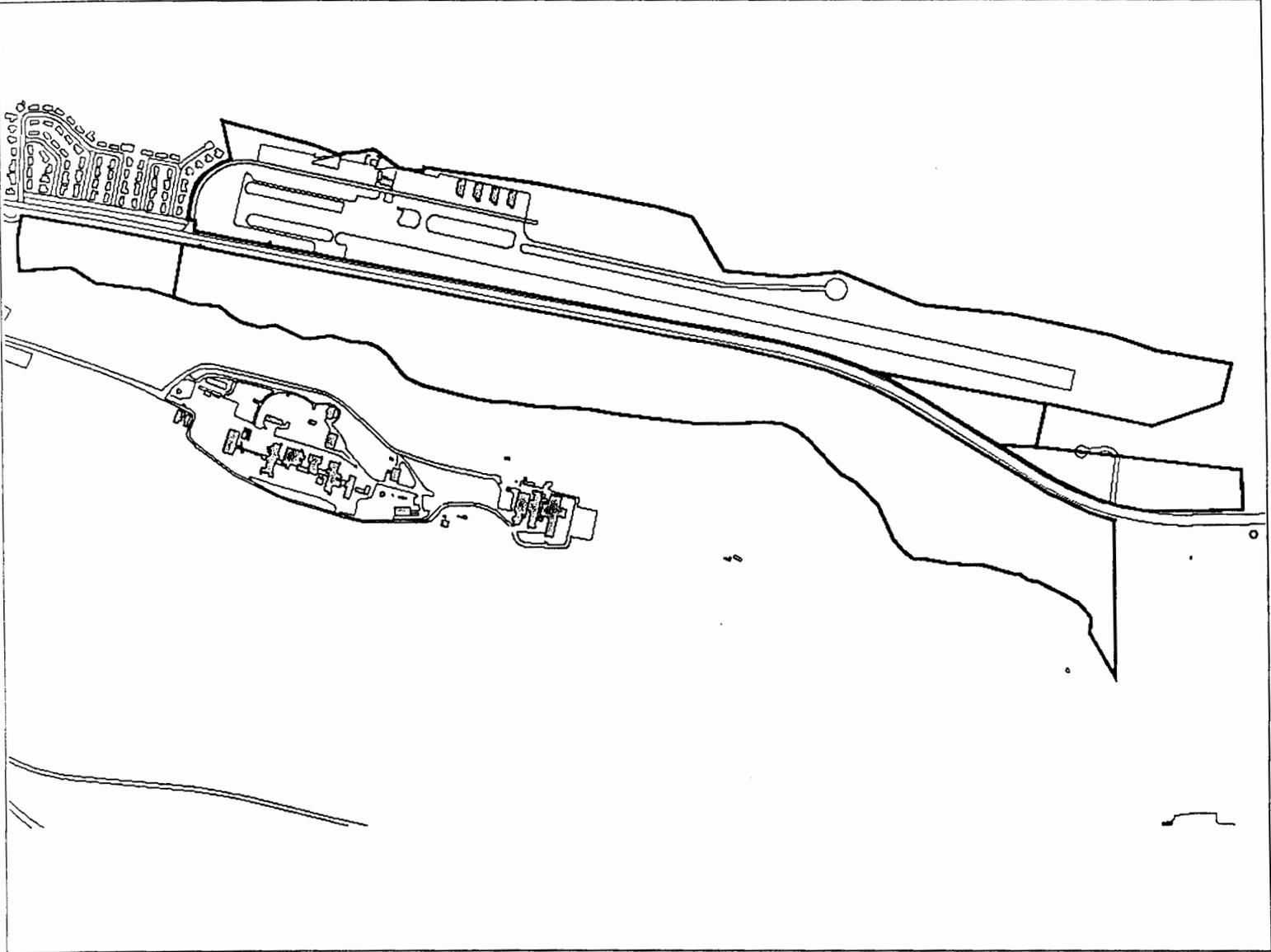
*"RFI Work Plan for Operable Unit 1071,"* Environmental Restoration Project, October 1992, LA-UR-92-0810.

*"Summary of ER Activities to Support Land Conveyance and Transfer at Los Alamos National Laboratory Under Public Law 105-119,"* Environmental Restoration Project, August 1999, LA-UR-99-1018.

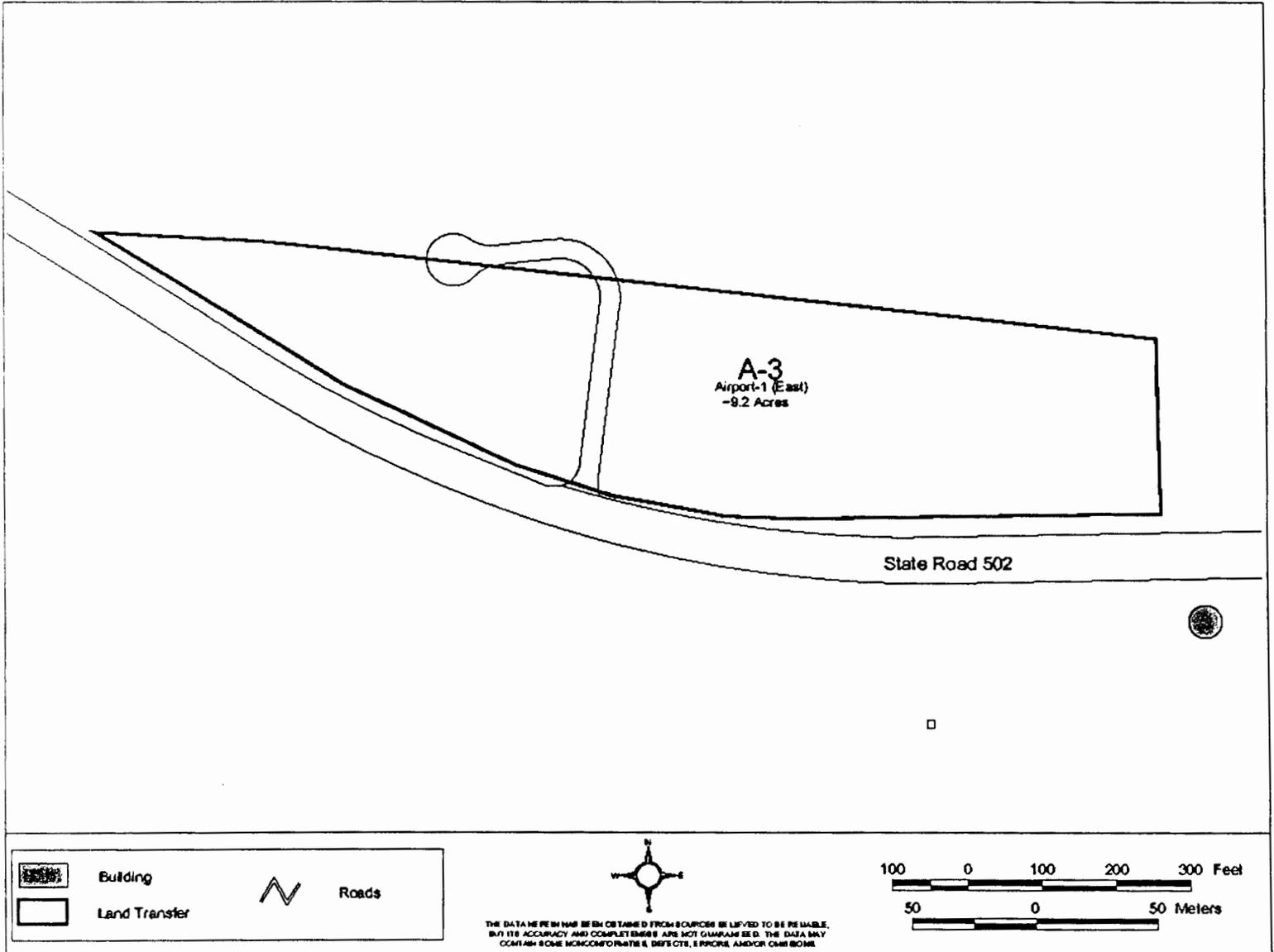
# **Appendix D**

## **Site Map**

# AIRPORT TRACT



# AIRPORT EAST





*Environmental, Safety & Health Division*

**Site-Wide Issues Program Office**

P.O. Box 1663, Mail Stop M889  
Los Alamos, New Mexico 87545  
5-8969/Fax 5-8970

Date: February 21, 2002  
Refer To: ESH-SWI:02-013

Ted Taylor  
U.S. Department of Energy  
Los Alamos Area Office  
528 35<sup>th</sup> Street  
Los Alamos, NM 87544

**SUBJECT: Environmental Baseline Survey for A-12, LAAO-1 (East)**

Dear Ted:

Please find enclosed (8) copies of the Environmental Baseline Survey for **A-12, LAAO-1 (East)** Tract. This document is being provided to DOE as information for the projected transfer of land in accordance with Public Law 105-119.

If we can be of further assistance, please do not hesitate to call me at 505-665-8969.

Sincerely,

A handwritten signature in black ink, appearing to read 'Doris Garvey'.

Doris Garvey  
Program Manager

DG:pm

Enclosures: a/s

Cy:  
P. Wardwell, LC-GL, A187  
K. Rea, ESH-SWI, M889  
SWI Admin File

**Environmental Baseline Survey**

**for**

**A-12  
LAAO-1 (East)**

Pursuant to the US Department of Energy  
Cross-Cut Guidance on Environmental Guidance  
for DOE Real Property Transfers

February 13, 2002

# Environmental Baseline Survey

for

## A-12 LAAO-1 (East)

### Executive Summary

This document, "Environmental Information for Real Property Transfer", was prepared in accordance with the "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers" in preparation of transferring ownership of a portion of the LAAO Tract (hereafter referred to as LAAO Tract East<sup>1</sup>) at Los Alamos National Laboratory from the US Department of Energy (DOE) to Los Alamos County pursuant to Public Law 105-119, Section 632. It discusses DOE compliance with the environmental requirements associated with real property transfers. It also demonstrates that, although potentially contaminated, LAAO Tract East is in such condition that DOE may issue deeds on the basis that "all remedial action necessary to protect human health and the environment has been taken".

The methodology used to prepare this report was to:

- conduct an environmental site assessment of LAAO Tract East consistent with the American Society of Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to LAAO Tract East,
- perform a physical examination of LAAO Tract East, and
- consult with both University of California and DOE staff to confirm existing information or develop additional information.

Based on this assessment, it has been determined that LAAO Tract East has:

- one potential release site (PRS) that requires no further action,
- no structures, and
- no requirements for future remedial clean-up activities.

Air quality at the LAAO Tract East is good, affected mostly by traffic on nearby Trinity Drive (several thousand vehicles per hour can pass along this thoroughfare during busy times of the day). Air quality is also affected, to a lesser extent, by emissions from the nearby Human Resources Laboratory (HRL) and LANL as a whole. The LAAO Tract East is part of New Mexico Region 3, an attainment area that meets National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Except for small amounts of

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<sup>1</sup> Because of an agreement with Los Alamos County on subdivision of the various tracts into separate parcels, this tract is now designated as A-12.

carbon monoxide and ozone resulting from hydrocarbons emitted from motor vehicles, there are no sources of criteria pollutants within the tract itself.

The LAAO Tract East is located on the mesa top above Los Alamos Canyon, which is an ephemeral drainage in the vicinity of the tract. There are neither known springs within the tract nor any known wetlands. There are no National Pollutant Discharge Elimination System (NPDES)-permitted outfalls within the tract. There are no stream gages or established surface water stations located within the LAAO Tract East. The closest environmental monitoring locations maintained by the LANL Environmental Surveillance and Compliance Program are for surface water and shallow groundwater in Los Alamos Canyon and do not pertain to water quality or quantity associated with this tract.

Because this tract contains an area of interest for the Mexican Spotted Owl that may be affected by the proposed action (property transfer) the DOE and the UC consulted with the US Fish and Wildlife Service to assess those affects. The DOE and the FWS agreed that the Spotted Owl was not likely to be adversely affected by the proposed action and therefore, under Section 7 of the Endangered Species Act, no further action was required (i.e., no formal consultation was necessary).

One hundred percent of the LAAO Tract East has been inventoried for historic and prehistoric cultural resources. There are no prehistoric cultural sites recorded within the tract. There is a potential for unidentified resources, including subsurface archaeological deposits and unrecorded burials.

Based on this information, the University of California and DOE conclude that there are no outstanding environmental issues to prevent conveyance or transfer of LAAO Tract East to Los Alamos County.

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## **1.0 Purpose of the Environmental Baseline Survey**

On November 26, 1997, Congress passed Public Law 105-119. Section 632 of that law directed the Secretary of Energy to convey to the Incorporated County of Los Alamos, New Mexico, or to the designee of the County and transfer to the Secretary of the Interior, in trust for the Pueblo of San Ildefonso, parcels of land under the jurisdictional administrative control of the Secretary at or in the vicinity of Los Alamos National Laboratory. Such parcels, or tracts, of land must meet the suitability criteria established by the law, that is, they are not required for the national security mission before the end of the 11/26/2007; can be restored or remediated by 11/26/2007; and are suitable for historic, cultural or environmental preservation, economic diversification, or community self-sufficiency. The DOE identified 10 tracts of land for potential transfer to the County of Los Alamos or to San Ildefonso Pueblo.

DOE's "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers (DOE/EH-413/9712) provides guidance on the types of information needed to support real property transfers. Information such as the presence of floodplains and wetlands; critical habitats; historic properties; and hazardous substances must be gathered and provided to the potential recipients of the property. This document provides the relevant environmental information as outlined in the Cross-Cut Guidance and provides references to more detailed information.

### **1.1 Boundaries of Property and Scope of Survey**

The DOE Los Alamos Area Office (LAAO) Tract consists of approximately 15 acres and is located within the Los Alamos townsite between Los Alamos Canyon and Trinity Drive. Single- and multiple-family residential areas and professional services offices facing onto Trinity Drive bound the tract to the north and northwest. The tract is bounded to the south, east, and west by the edge of Los Alamos Canyon at the border with Technical Area (TA) 43 (see map, Appendix D). A paved road extending from Trinity Drive provides access into the site.

The legal property boundary description of this tract is provided by the Army Corps of Engineers Title Report, "Los Alamos Area Office, TA-43, at Los Alamos, New Mexico", September 15, 1998.

This EBS addresses only the eastern portion of this tract (LAAO Tract East, approximately 4.5 acres, designated as A-12) that is being considered for immediate transfer to Los Alamos County (see map Appendix D).

The scope of this Environmental Baseline Survey was to identify potential environmental issues associated with LAAO Tract East that might impact transfer of ownership.

## **2.0 Survey Methodology**

The methodology used to prepare this report was to:

- conduct an environmental site assessment of LAAO Tract East consistent with the American Society of Testing and Materials (ASTM) “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to LAAO Tract East,
- perform a physical examination of LAAO Tract East, and
- consult with both University of California and DOE staff to confirm existing information or develop additional information.

## **2.1 Approach and Rationale**

Historical and current information (see 2.1.1 below) for LAAO Tract East was reviewed, and the site was physically visited and surveyed. After determining the nature and quality of available information, UC and DOE staff were consulted to confirm existing information or develop new information as needed. Collectively, this survey addressed air quality, water quality (surface and groundwater), soil and sediment contamination, and any structures, waste sites, natural resources or other environmental concerns present at the site.

To conduct this assessment it was assumed that LAAO Tract East parcel boundaries were established and not subject to significant change. Environmental conditions and associated information were evaluated based upon those boundaries. Second, it was assumed that the nature and quality of the document reviews and site surveys were independent of, and unaffected by, the recipients’ intended use as identified in the “Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico” (DOE September 2000). Lastly, it was assumed that a final inspection or “walk-through” of each parcel would occur prior to conveyance or transfer.

### **2.1.1 List and Description of Documents Reviewed**

In addition to the documents listed below, the Environmental Site Assessment (Appendix B) identifies additional resources used in this evaluation.

1. ACOE September 1998: “Los Alamos Area Office, TA-43, at Los Alamos, New Mexico”, U.S. Army Corps of Engineers Title Report, September 15, 1998.
2. DOE August 1999: “Final Environmental Restoration Report to Support Land Conveyance and Transfer under Public Law 105-119”, Los Alamos National Laboratory, LA-UR-99-4187, August 1999
3. DOE January 1999: “Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory”, US Department of Energy, DOE/EIS-0238, January 1999.

4. DOE January 2000: "Combined Data Report to Congress to Support Land Conveyance and Transfer under Public Law 105-119", US Department of Energy, Unnumbered Report, January 2000.
5. DOE October 1997: "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers", U.S. Department of Energy, DOE/EH-413/9712, October 1997
6. DOE October 1999: "Final Environmental Impact Statement for the Conveyance and Transfer of Certain Tracts Administered by the US DOE and Located at Los Alamos National Laboratory", US Department of Energy, DOE/EIS-0293, October 1999
7. DOE September 2000 "Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico", U.S. Department of Energy, Report to Congress Under Public Law 105-119, Unnumbered Report, September 2000.
8. ESA December 1973: "Endangered Species Act", United States Code, Washington, D.C., Title 16, Conservation; Chapter 35, Endanger Species Act, December 1973.
9. LANL August 1998: "Threatened and Endangered Species Habitat Management Plan," Los Alamos National Laboratory, August 1998.
10. LANL December 2000: "Environmental Surveillance at Los Alamos During 1999", Los Alamos National Laboratory, LA-13775-ENV, December 2000.
11. LANL ER Baseline: LANL Environmental Restoration Project Baseline, WBS 1.4.2.6.01.02.24.JG.
12. LANL July 1998: "A Status Report on Threatened and Endangered Species, Wetlands, and Floodplains for the Proposed Conveyance and Transfer Tracts at Los Alamos National Laboratory, Los Alamos, New Mexico", Los Alamos National Laboratory, July 1998.
13. LANL November 1989: LANL Hazardous Waste Facility Permit, NM 0890010515-1, 11/8/89
14. LANL Unpublished Report: LANL Draft Watershed Management Plan

### **2.1.2 Inspections of Properties Conducted and Personnel Contacted**

The Environmental Site Assessment (Appendix B) identifies personnel contacted during this evaluation.

### **3.0 Summary of Data**

#### **3.1 History and Current Use**

The LAAO Tract East parcel is vacant land surrounded by business and residential construction.

Beginning in 1949, the former steam plant (TA -43-40), located immediately west of the LAAO Tract East parcel, was placed into service and the plant continued operating until it was removed from service in 1990. Concurrent with the construction of the steam plant, a barracks facility for military personnel was constructed immediately southwest of the LAAO Tract East parcel. This facility is the current LAAO building (TA-43-39). There is no evidence that any industrial operations were ever conducted on the LAAO Tract East parcel (see map Appendix D).

As discussed in Appendix C, the only man-made structure on this tract was a septic tank installed during the early 1940s. It was in use until about 1947 when the Central Wastewater Treatment Plant was completed and placed into operation. The ER Project conducted a clean-up of this site, and received concurrence that no further remedial action is required.

#### **3.2 Environmental Setting**

The LAAO Tract East parcel is primarily ponderosa pine forest. There are no identified streams, wetlands, or floodplains present within the tract. However, floodplains, surface water, and wetlands are present at the floor of the adjacent Los Alamos Canyon. Flora and fauna in the undeveloped portions of the tract are characteristic of the region.

The site contains suitable foraging habitat and is within the Los Alamos Canyon area of environmental interest (AEI) for the Mexican Spotted Owl. Because of the adjacent LAAO Site Office Building, and because of the parcel's location within the Los Alamos townsite, lunchtime picnickers, and general recreation walkers actively use the area. Road noise is evident from passenger vehicles and a variety of light and heavy delivery trucks driving by the parcel and from vehicle traffic on Trinity Drive. Lighting sources adjacent to the parcel include security lighting and lighting from residential and commercial developments.

##### **3.2.1 Stormwater Runoff Patterns**

The LAAO Tract East is located on the mesa top above Los Alamos Canyon, which is an ephemeral drainage in the vicinity of the tract. There are neither known springs within the tract nor any known wetlands. There are no National Pollutant Discharge Elimination System (NPDES)-permitted outfalls within the tract. There are no stream gages or

established surface water stations located within the LAAO Tract East. The closest environmental monitoring locations maintained by the LANL Environmental Surveillance and Compliance Program are for surface water and shallow groundwater in Los Alamos Canyon and do not pertain to water quality or quantity associated with this tract. The LAAO Tract East drains into Los Alamos Canyon.

### **3.2.2 Hazardous Materials and Waste Management**

Not applicable. No hazardous wastes have historically been or are currently managed by LANL at LAAO Tract East.

### **3.2.3 CERCLA-Related Contamination**

There is one potential release sites on this parcel. Other CERCLA contamination is not known to exist. This PRS was remediated by the ER Project, and confirmation from DOE has been received that no further remedial action is necessary (see Appendix C).

### **3.2.4 Storage Tanks and Pipelines**

Not applicable. There is no historical record, employee recollection, or visible indication that there are or were USTs in service on this property. There is no plan to install any USTs.

### **3.2.5 Wastewater Treatment and Disposal**

Not applicable. There is no historical record, employee recollection, or visible indication of any wastewater treatment or disposal on LAAO Tract East.

In addition, no water supply wells are or have been located at this site. There was one septic system located at this site. The drainlines associated with the outfall from the septic tank were removed by the ER Project in 1995, and the septic tank was removed in 1996.

### **3.2.6 Lead in Drinking Water**

Not applicable. There are and have been no water supply wells located on this sub parcel, nor are there any sources of lead contamination at this site.

### **3.2.7 Oil Water Separator**

Not applicable. No current or historic use of oil water separators are associated with this site.

### **3.2.8 Asbestos**

Not applicable. No construction has occurred on this site, and there are no historical records, employee recollection, or visible indication that asbestos was ever used, stored, or disposed at this site.

### **3.2.9 Air**

Air quality at the LAAO Tract East is good, affected mostly by traffic on nearby Trinity Drive; several thousand vehicles per hour can pass along this thoroughfare during busy times of the day. Air quality is also affected, to a lesser extent, by emissions from the nearby Human Resources Laboratory (HRL) and LANL as a whole. The LAAO Tract East is part of New Mexico Region 3, an attainment area that meets National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Except for small amounts of carbon monoxide and ozone resulting from hydrocarbons emitted from motor vehicles, there are no sources of criteria pollutants within the tract itself.

The office activities at the LAAO Tract East result in no emissions of hazardous and other chemical pollutants, so that concentrations of these chemicals at the tract are the result of other LANL activities. Analyses performed for the LANL SWEIS (DOE 1999c) estimate that risk from concentrations of any chemical air pollutant does not exceed health-based standards of one million excess latent cancer fatalities (LCFs) for any point beyond the LANL boundary, including the Los Alamos Medical Center. Because the LAAO Tract East is about 900 feet (275 meters) more distant from HRL than the Medical Center is, it can be concluded that concentrations of chemical pollutants at the tract also are likely to be below health-based standards.

Finally, analyses for doses from radioactive air pollutants indicate that air concentrations at the LAAO Tract East would deliver a dose of approximately 1.0 millirem per year to people residing there year-round, or about 10 percent of the EPA standard (DOE 1999c). There are no emissions of radioactive air pollutants from activities at the tract itself.

### **3.2.10 Lead-Based Paint Surveys and Other Sources of Lead**

Not applicable. There are no known sources of lead at this site.

### **3.2.11 PCBs**

Not applicable. LANL's PCB database shows that no PBC-containing equipment was used, stored or disposed on this parcel.

### **3.2.12 Pesticides**

Not applicable. There are no records of pesticides being used or stored at this site.

### **3.2.13 Medical Wastes**

Not applicable. There are no records of medical wastes being generated or disposed at this site.

### **3.2.14 Ordnance**

Not applicable. There are no records of ordnance being used, stored, or disposed at this site.

### **3.2.15 Radioactive Materials and Wastes**

Not applicable.

### **3.2.16 Radon**

Not applicable.

### **3.2.17 Groundwater**

Not applicable. There are no supply or monitoring wells located on this site, and there is no known contamination at this site that would impact these resources.

## **3.3 Natural and Cultural Resources**

One hundred percent of the LAAO Tract East has been inventoried for historic and prehistoric cultural resources. There are no prehistoric cultural sites recorded within the tract. There is a potential for unidentified resources, including subsurface archaeological deposits and unrecorded burials.

There are no known traditional cultural properties (TCPs) located within the LAAO Tract East. Consultations to identify TCP resources have not been conducted, but it is unlikely that resources are present due to past development.

## **3.4 Identification of Uncontaminated Properties**

LAAO Tract East, though potentially contaminated from activities conducted at TA-1 during the late 1940s and early 1950s, does not have environmental contamination as defined by CERCLA 120(h)(4).

## **3.5 All Other Properties**

Not applicable. There are no other properties associated with this site.

## **4.0 Summary of Data for Adjacent Properties**

LAAO Tract East is bound to the north and northwest by single- and multiple-family residential areas and professional services offices facing onto Trinity Drive. The tract is

bounded to the south and east by the edge of Los Alamos Canyon. The tract is bounded to the west and south west by DOE lands housing the DOE Office of Los Alamos Operations Building, and an old power plant. Los Alamos Canyon is undeveloped land containing mature ponderosa pine forest. The remaining adjacent properties are fully developed residential areas.

#### **4.1 History and Current Use**

The residential areas were constructed in the 1950s and subsequently sold to private interests. These lands are constantly being used for new businesses and multiunit housing.

#### **4.2 Environmental Setting**

The adjacent lands are mostly residential units with lawns and gardens. Los Alamos Canyon remains undeveloped due to the steep terrain.

#### **4.3 Adjacent Properties with No Known or Suspected Releases**

Not applicable. Though not identified as having environmental contamination as defined by CERCLA 120 (h)(4), these lands were part of the historic operations of Los Alamos National Laboratory during the late 1940s and early 1950s. Though significant clean-up activities have taken place, the potential for residual contamination still remains wherever past LANL operations took place.

#### **4.4 Adjacent Properties with Known or Suspected Releases**

See 4.3 above.

#### **5.0 Conclusions and Recommended Courses of Action**

DOE and UC health and safety professionals have reviewed environmental conditions at this parcel and have determined that no special precautions are required.

Based on best available environmental information, the University of California and the Department of Energy conclude that there are no outstanding environmental issues to prevent conveyance or transfer of this tract. DOE may issue deeds on the basis that "all remedial action necessary to protect human health and the environmental have been taken".

#### **5.1 Facility Matrix**

Not applicable. There are no structures at this site.

#### **5.2 Property Categorization**

Not applicable. All lands at LAAO Tract East are categorized the same.

### **5.3 Resource Map**

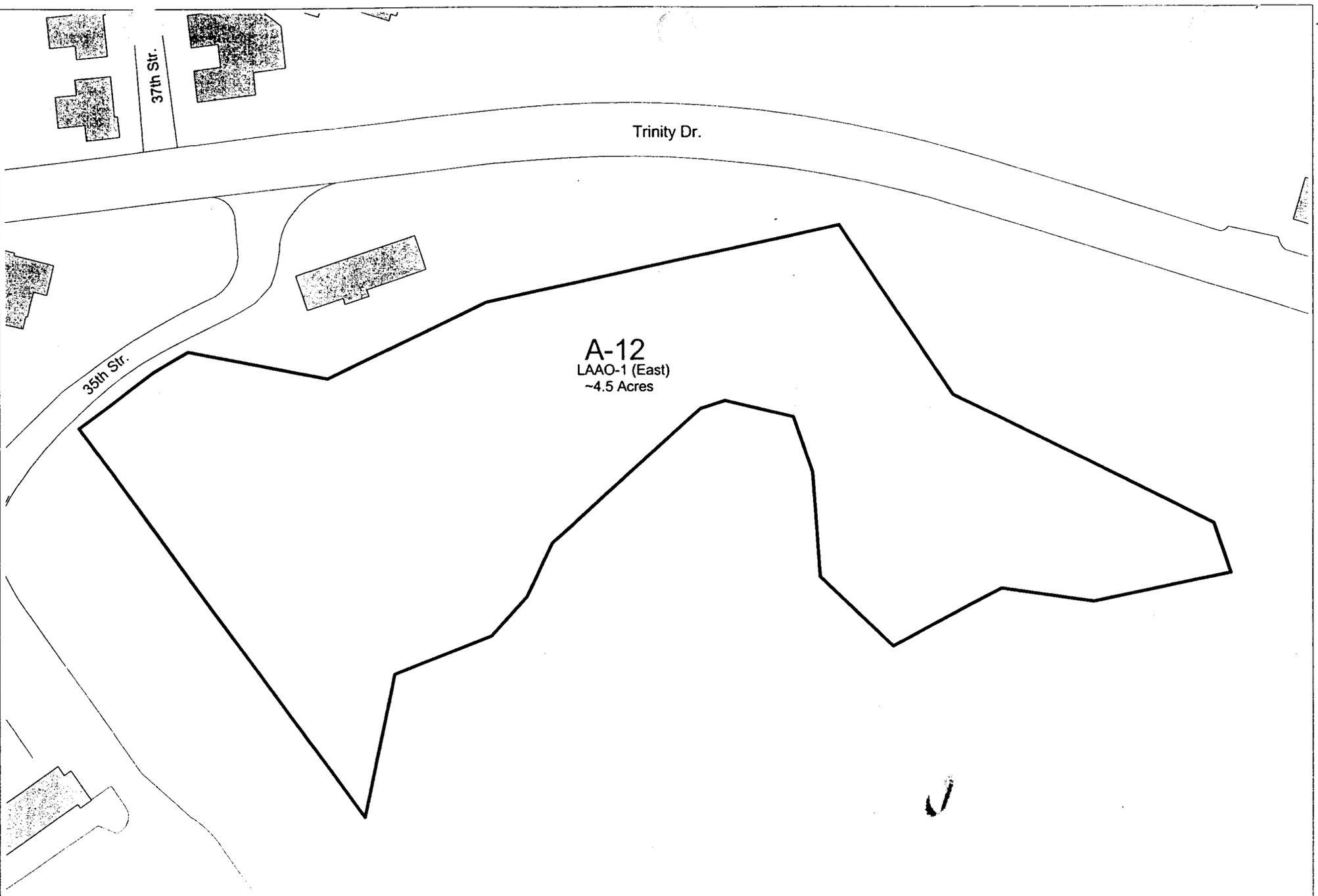
Not applicable. No hazardous materials were identified, and no wells are located on this property.

### **6.0 Certification of Environmental Baseline Survey**

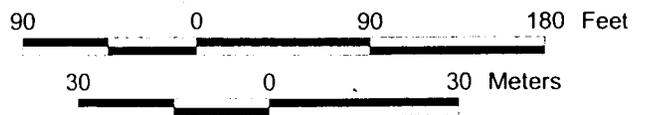
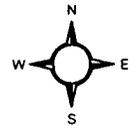
Los Alamos National Laboratory staff and Environmental Contractors conducted this Environmental Baseline Survey under direction and guidance of the Site-Wide Issues Program Office. The information contained in this document is accurate to the best of our knowledge.

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Doris Garvey, Program Manager



	Building
	Land Transfer
	Roads



THE DATA HEREIN HAS BEEN OBTAINED FROM SOURCES BELIEVED TO BE RELIABLE. BUT ITS ACCURACY AND COMPLETENESS ARE NOT GUARANTEED. THE DATA MAY CONTAIN SOME NONCONFORMITIES, DEFECTS, ERRORS, AND/OR OMISSIONS

**Appendix A**  
**CERCLA 120(h)**

## **CERCLA 120(h) Report**

### **A-12 LAAO-1 (East)**

#### **Location:**

The DOE Los Alamos Area Office (LAAO) Tract consists of approximately 15 acres and is located within the Los Alamos townsite between Los Alamos Canyon and Trinity Drive. Single- and multiple-family residential areas and professional services offices facing onto Trinity Drive bound the tract to the north and northwest. The tract is bounded to the south, east, and west by the edge of Los Alamos Canyon at the border with Technical Area (TA) 43. A paved road extending from Trinity Drive provides access into the site.

Parcel A-12 (LAAO-1 [East])(hereafter referred to as LAAO Tract East), is the eastern portion of this tract, consisting of approximately 4.5 acres, that is being considered for immediate transfer to Los Alamos County.

#### **Description:**

LAAO Tract East is that portion of the original LAAO tract (see Conveyance and Transfer Plan) located east of the roadway entrance to the Department of Energy (DOE) Office of Los Alamos Site Operations (OLASO) offices (formerly called LAAO), north of Los Alamos Canyon and south of Trinity Drive. LAAO Tract East is approximately 4.5 acres in area and is separated from Trinity Drive by privately owned land that fronts onto this public right-of-way.

#### **History:**

LAAO Tract East is vacant land surrounded by business and residential construction.

Beginning in 1949, the former steam plant (TA -43-40), located immediately west of the LAAO Tract East parcel, was placed into service and the plant continued operating until it was removed from service in 1990. Concurrent with the construction of the steam plant, a barracks facility for military personnel was constructed immediately southwest of the LAAO Tract East parcel. This facility is the current LAAO building (TA-43-39). There is no evidence that any industrial operations were ever conducted on the LAAO Tract East parcel (see map Appendix D).

The only man-made structure on this tract was a septic tank installed during the early 1940s. It was in use until about 1947 when the Central Wastewater Treatment Plant was completed and placed into operation. The ER Project conducted a clean-up of this site, and received concurrence that no further remedial action is required.

#### **Is there any record of a hazardous substance having been stored on site?**

No. There is no information that suggests that hazardous substances were used, stored, or disposed on LAAO Tract East. However, the ER Project has identified one PRSs that has been remediated and received concurrence that no further remedial action is required.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater; and, was the hazardous substance stored for one year or longer?**

No. There is no information that suggests that hazardous substances were used, stored, or disposed on LAAO Tract East.

**Was the amount disposed of or released greater than or equal to the RQ?**

No. There is no information that suggests that hazardous substances were used, stored, or disposed on LAAO Tract East.

**Current Regulatory Status:** The LAAO-1 East sub-parcel contains one PRS within its boundaries. PRS 00-030(i) is not currently on the Hazardous and Solid Waste Amendments (HSWA) module of Los Alamos National Laboratory's (LANL's) Resource Conservation and Recovery Act permit; therefore, it is regulated under DOE's authority. A Voluntary Corrective Action (VCA) Report recommending no further action was submitted to DOE in July 2001. In February 2002, the DOE concurred with the ER Project's recommendation that no further remedial action is required for this PRS. Therefore, this parcel meets the Comprehensive Environmental Response, Compensation and Liability Act Section 120(h) requirements because all necessary remedial action has been taken prior to transfer.

**Future Actions Required: None.**

**Appendix B**  
**Environmental**  
**Assessment**

# **ENVIRONMENTAL ASSESSMENT**

## **Land Transfer Parcel, Los Alamos Area Office (LAAO) East**

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**Prepared For: THE DEPARTMENT OF  
ENERGY**

**February 11, 2002**

## **EXECUTIVE SUMMARY**

This report presents a findings summary for an assessment of the actual and potential environmental concerns associated with the eastern portion of the LAAO parcel located adjacent to Trinity Drive in Los Alamos, NM. The eastern portion of the LAAO parcel consists of approximately 4.5 acres, and is bounded to the north and to the east by private property. It is bounded to the south by DOE lands, and to the west by the remainder of the LAAO parcel, which includes the LAAO Building. For linguistic ease, the subject parcel will heretofore be called LAAO East. Exhibit 1 (at the end of this executive summary) provides a descriptive summary for the LAAO East parcel and Exhibit 2 (also at the end of this executive summary) summarizes the known history of this site. Los Alamos National Laboratory conducted its assessment on August 28, 2000 and subsequently on January 4, 2002, at the request of the U.S. Department of Energy. The LANL site assessors for this assignment were Ms. Jennifer Pope and Ms. Virginia Smith.

This assessment (hereafter referred to as an environmental site assessment (ESA)) was conducted pursuant to a scope of work consistent with the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-00); along with an additional off-site disposal practices review (including evaluating whether the subject site is listed as a potentially responsible party (PRP) at an off-site waste disposal site); and an examination of possible asbestos-containing materials (ACMs). A specific discussion of the tasks undertaken is set forth in Attachment A. LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this assessment.

It is LANL's understanding and agreement that the DOE may provide this report to the recipient of the subject parcel, as well as to the public. The parcel recipient may provide this report to third parties and other financing institutions and institutional lenders connected with the contemplated transaction (including, without limitation, any such party providing financing on or after consummation of the contemplated transaction and all assignees and participants of any of the foregoing), and that these parties may rely on the information in the report to the same extent as and subject to the same restrictions agreed to by DOE.

## **1.2            LIMITATIONS**

All the information contained in this report, including any engineering conclusions, is based on the information made available to LANL's site assessor during the investigation, which we assume to have been provided in good faith. This report represents an assessment of the LAAO East parcel performed in accordance with generally accepted industry standards regarding environmental assessments. LANL makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to ownership of any property or the application of any law to the facts set forth herein. Except as otherwise may be requested by DOE, LANL disclaims any obligation to update the report for events taking place after the time during which we conducted our assessment.

**Exhibit 1. LAEO East Parcel Description Summary**

# of Acres	# of Buildings (approx. total sq. ft)	# of Potential Release Sites (and remediation status)	Current Activities
Approximately 4.5 acres	None	One. PRS 00-030 (i) was a septic tank that was installed during the early 1940s. Two Voluntary Corrective Actions (VCAs) were conducted at this PRS by LANL's Environmental Restoration (ER) Project. During the first VCA, conducted in June 1996, the septic tank itself was removed. During the second, conducted in July 2000, the inlet and outlet lines were removed and confirmation samples were collected. Results showed that the PRS does not pose an unacceptable risk to either human health or to the ecological system, and the PRS was recommended for No Further Action (NFA). The DOE, which is the Administrative Authority for this PRS, concurred with the recommendation for NFA in February 2002. This parcel meets the requirements of CERCLA 120(h) because all remedial action is complete prior to transfer.	There is no activity related to LANL operations on this parcel.

**Exhibit 2. LAAO Parcel Site History Summary**

<b>Site History Prior to LANL Occupancy</b>	Prior to LANL occupancy, there was little development in this remote area.
<b>Site History After LANL's Occupancy</b>	The only activity known to have been conducted on the LAAO-East parcel was the treatment of sanitary wastewater in a septic tank that served the administration and dormitory buildings located on the LAA)-West parcel. The ER Project conducted two VCAs during which the septic tank and its inlet and outlet pipes were removed. Confirmatory sampling showed that residual contamination posed no unacceptable risk to human health or to the environment. No further action is required.

**ATTACHMENT A**

**ASSESSMENT METHODOLOGY**

This environmental assessment, consistent with the ASTM Practice E 1527-00 (with added evaluations of ACMS, and possible wetland areas), consisted, in general, of the following steps:

- We met with the following individuals at LANL to discuss parcel-specific environmental and occupational health and safety (EH&S) issues:
  - Mr. Albert Dye, ESH-19, PCB Database Manager;
  - Ms. Debra Archuleta, ESH-17, Asbestos Program Manager;
  - Mr. David Ortiz and Ms. Josie Encinias, ESH-5, Asbestos Management Program;
  - Ms. Louann Romero, ESH-19, HSTD Database Manager;
  - Mr. Harvey Decker, ESH-18, SPCC and SWPPP Plans;
  - Mr. William Flor, HAZMAT Spills Database Manager;
  - Mr. Terry Rust, Environmental Restoration, Potential Release Sites; and
  - Ms. Jean Dewart, ESH-17, Air Quality Program.
  
- We visited the parcel on August 28, 2000 and again on January 4, 2002, to gather more detailed information concerning possible on-site contamination, and to determine the compliance status of the parcel. Before, during and after the visit, we interviewed site personnel about past and present site operations, raw materials and waste management practices, and significant environmental liability problems, if any. We did not repeat these interviews in January 2002 because there are no ongoing LANL operations on or near the parcel. We also observed actual site conditions in an attempt to identify and assess the status of potential liabilities such as past disposal areas, waste management units and systems, and sites of environmental releases.
  
- We reviewed ES&H-related files, correspondence, and other documents supplied by LANL.
  
- We visited the Los Alamos County Archives office in Los Alamos, NM to review aerial photographs of the area and to collect information on site use prior to the Manhattan Project.
  
- We performed a walk-by and drive-by survey of the immediate neighboring properties from publicly accessible areas for obvious signs of environmental concerns and how those concerns may have environmentally degraded the property under study, and to assess the proximity of the subject property to sensitive ecological areas (e.g., wetlands).
  
- We reviewed a search of the following computerized environmental databases to determine if hazardous sites or serious local environmental problems may exist on or immediately adjacent to the facility (see radius specifications):<sup>1</sup>

*Federal ASTM Records*

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) (subject site and 0.5-mile radius);

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<sup>1</sup>The environmental database searches were completed for LANL by e Data Resources. The database-specific radii specified for these searches either match the ASTM E 1527-00 requirements or are larger than specified in E 1527-00.

- Emergency Response Notification System (subject site only);
- National Priority List (NPL) (subject site and 1-mile radius);
- RCRA Corrective Action Sites (CORRACTS) list (subject site and 1-mile radius);
- Resource Conservation and Recovery Information System (RCRIS) (subject site and 0.25-mile radius for generators and 0.5-mile radius for treatment, storage, and disposal facilities); and
- CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP) (subject site and 0.25-mile radius).

#### *Additional Federal Records*

- Biennial Reporting System (subject site only);
- PCB Activity Database System (subject site only);
- RCRA Administrative Action Tracking System (RAATS) list (subject site only);
- Toxic Release Inventory System (subject site only);
- Facility Index Data Base System (FINDs) (subject site only);
- Consolidated Docket Enforcement System (subject site and company name only);
- Hazardous Materials Incident Reporting System (subject site only);
- Delisted NPL Sites (subject site and 1-mile radius);
- Federal Superfund Liens (subject site only);
- Superfund Consent Decrees (subject site and 1-mile radius);
- Toxic Substances Control Act data base (subject site only);
- Materials License Tracking System (subject site only);
- Mines Master Index File (subject site and 0.25-mile radius);
- Records of Decision data base (subject site and 1-mile radius); and
- FIFRATSCA Tracking System (FFTS) (subject site only).

#### *State ASTM Records*

- New Mexico State leaking underground storage tank (UST) database list (subject site and 0.5-mile radius);
- New Mexico State permitted solid waste facilities/landfill sites (subject site and 0.5-mile radius); and
- New Mexico State registered USTs (subject site and 0.25-mile radius).

#### *Additional State Records*

- New Mexico State Aboveground Storage Tanks (subject site only).
- We attempted to obtain and review historical Sanborn Fire Insurance land use maps to establish past land uses of the subject property and the surrounding area consistent with the requirements of ASTM Practice E 1527-00. Sanborn Fire Insurance land use maps were not available for this facility or the surrounding area.
- We reviewed historical aerial photographs available from public agency sources to establish past land uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. Aerial

photographs dated 1951,1953,1958,1974, and 1991 were available from the Environmental Restoration and Los Alamos County photographic archives.

- We located and reviewed abstracts of available historical city directories to establish past uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. A search of the county archives in Los Alamos yielded no historical or current city directories for LAAO East that gave addresses for the subject site. In most cases, older city directories listed names and phone numbers without the benefit of the listing address.
- We assessed possible issues of current or future environmental liability. This assessment evaluated operations, both past and present, with respect to: air pollution control (including, but not limited to, applicable requirements of the 1990 Clean Air Act Amendments); asbestos management; water supply and pollution control, including stormwater management; nonhazardous solid waste management; hazardous solid waste management; USTs; materials, products, and pesticide storage and handling practices (including Superfund Amendments and Reauthorization Act (SARA) Title III programs); polychlorinated biphenyls (PCBs) inventory management; past on-site or off-site waste disposal practices; and occupational safety and health (including hazards communication).
- We completed an assessment of the facility's potentially significant liabilities under the Superfund statute and related state statutes pertaining to potential on-site contamination and related to the off-site disposal of wastes.
- LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this environmental assessment. LANL did, however, review environmental surveillance, monitoring, and sampling results that have been collected over time and that were relevant to the parcel.

**ATTACHMENT B**

**ISSUES SUMMARY**

**Summary of Environmental Assessment Results for LAAO East  
Adjacent to Trinity Road, Los Alamos, NM**

AREA	ISSUE	COMMENT/RECOMMENDATION/LIABILITY/COST
Air Pollution Control	There appear to be no environmental liability issues associated with air pollution control on this parcel.	None.
Asbestos Management	There appear to be no environmental liability issues associated with asbestos on this parcel.	There are no structures on the LAAO East parcel.
Water Supply and Pollution Control, Including Stormwater Management	There appear to be no environmental liability issues concerning the water supply to or the wastewater discharges from this parcel.	There are and have been no water supply wells located on-site. There was one septic system located at this site. The drainlines associated with the outfall from the septic tank were removed by the ER Project in 1995, and the septic tank was removed in 1996. The inlet and outlet pipes were removed in 2000. There are no water monitoring wells located on this parcel.
Nonhazardous Solid Waste Management	There appear to be no environmental liability issues associated with LANL's nonhazardous waste management practices within the parcel.	None.
Hazardous Solid Waste Management	There appear to be no environmental liability issues associated with LANL's hazardous waste management practices within the parcel.	No hazardous wastes have historically been or are currently managed by LANL on this parcel.
Underground Storage Tanks	There appear to be no environmental liability issues associated with USTs at this facility.	There is no historical record, employee recollection, or visible indication that there are or were USTs in service on this property. There is no plan to install any USTs.
Materials, Products, and Pesticide Handling and Storage Practices	There appear to be no environmental liability issues associated with current materials, products, and pesticide handling and storage practice at this parcel.	LANL handles no materials, products or pesticides within this parcel.
PCB Inventory Management	There appear to be no environmental liability issues associated with PCB inventory management at this land	LANL's PCB database shows that no PBC-containing equipment was used, stored or disposed on this parcel.

	parcel.	There is a transformer station, not associated with LANL, located on this parcel.
Potential On-Site Contamination and Waste Disposal	Other than the one Potential Release Site discussed in Section 1.2, Exhibit 1 of this report, there is no record or visible indication that waste materials have been disposed on the subject property. The site address is currently not listed on the proposed or final NPL, in the CERCLIS or CERCLIS-NFRAP databases, or on the State's list of designated potential hazardous waste disposal sites. No USTs are known to have been located on this property. In addition, the site address is currently not listed in the state or federal reportable spills databases.	On the days of the site visits, there was no unusually altered topography, unusually stressed vegetation, soil staining, unexplained cuts in the pavement, unusual ground depressions, or other visible indications of past spills, releases, or waste disposal. Site contacts reported experiencing no reportable spills.
Past Off-Site Waste Disposal	To the best of LANL ESH-19 staff's knowledge, no issues or concerns have been raised regarding this facility's past off-site waste disposal practices. LANL has not received or filed notifications under the Comprehensive Environmental Response, Compensation, and Liability Act related to the disposal of any hazardous substances.	None of the off-site disposal facilities known to have received hazardous or nonhazardous wastes from LANL is currently listed on the proposed or final NPL, in the federal CERCLIS or CERCLIS-NFRAP databases, or in the respective state databases that are the equivalent of the federal CERCLIS and NPL databases.
Environmental Data Base Search Results	No apparent environmental liabilities were identified in any of the federal or state environmental databases searched for this assessment (see Attachment A). The database search to assess whether environmental conditions on the subject property have been affected by any off-site source or sources identified 11 mappable sites as being within the designated search radii. (NOTE: The term "mappable" means that the address information provided is sufficient for the database search vendor to pinpoint the site's location on a street map with a high degree of confidence.). Because the LAAO Building is the address to which regulatory correspondence involving LANL is sent, it was identified as a mappable site in the CERCLIS, CORRACTS, RCRIS-TSD, and RCRIS-LQG federal databases. The CERCLIS listing indicated that LANL was investigated under CERCLA, but not listed on the National Priorities List. The CORRACTS listing indicates that various sites at LANL are being remediated under the RCRA corrective action program. The RCRIS-TSD and LQG listings simply indicate that there are permitted treatment, storage, or disposal units	Given the database search results and based on an inspection of the surrounding properties from publicly accessible areas, none of the neighboring operations is believed to pose a significant potential concern for environmental conditions on the subject property.  The environmental database search also identified 31 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). Based on the area tour, none of these listed "orphan" sites is located sufficiently close to the subject property to have the potential to cause an environmental impact.

at LANL, and that LANL is classified regulatorily as a large-quantity generator of hazardous waste.

The remaining mappable sites consist of 4 leaking underground storage tanks and 3 registered underground storage tanks. The 3 registered underground storage tanks show no history of leaking and are not deemed to pose any potential concern to the subject property. Three of the 4 leaking underground storage tanks (LUST) have been investigated and require no further action. The fourth LUST, located at the former Chevron station on Diamond Drive, had a confirmed release reported in May 2000. This unit is sufficiently distant from the subject parcel that it is not believed to pose a potential for adverse impact.

**Appendix C**  
**Environmental**  
**Restoration**  
**CERCLA Report**

**ENVIRONMENTAL  
RESTORATION  
PROJECT**

**Memorandum**

Environmental Science and Waste Technology (E)  
Environmental Restoration (ER) Project, MS M992

To/MS: D. Garvey/ESH-SWI, MS M889  
From/MS: P. Schumann, E/ER, MS M992  
Phone/FAX: 7-0808/5-4747  
Symbol: ER2002-0121  
Date: February 13, 2002

**SUBJECT: CORRECTION TO MEMORANDUM ER2002-0107: ENVIRONMENTAL  
RESTORATION (ER) PROJECT SUPPORTING DOCUMENTATION  
FOR THE LAAO-1 EAST SUB-PARCEL**

Please discard the attachment to the ER Project's memorandum referenced  
above and replace it with the attached.

If you have any questions, please call me at (505) 667-5840 or  
Kim Birdsall at (505) 665-3486.

PS/ch

Attachment: 1) ER Project Supporting Documentation for the LAAO-1 East  
Sub-parcel CERCLA 120(h) Report

Cy (w/enc.):

K. Birdsall, E/ER, MS M992  
M. Kirsch, E/ER, MS M992  
E. Louderbough, LC-GL, MS A187  
W. Neff, E/ET, MS M992  
V. Smith, E/ER, MS M992  
P. Wardwell, LC-GL, MS A187  
L. Cummings, LAAO, MS A316  
D. Gregory, LAAO, MS A316  
M. Johansen, LAAO, MS A316  
E/ER File, MS M992  
IM-5, MS A150  
RPF, MS M707

Cy (w/o enc.):

J. Canepa, E/ER, MS M992

**ER Project Supporting Documentation  
For The LAAO-1 East Sub-parcel [Map Designation A-12]  
CERCLA 120(h) Report**

**Location:** Los Alamos Townsite

**Description:** The LAAO-1 East (Map Designation A-12) sub-parcel is that portion of the original LAAO tract (see Conveyance and Transfer Plan) located east of the roadway entrance to the Department of Energy (DOE) Office of Los Alamos Site Operations (OLASO) offices (formerly called LAAO), north of Los Alamos Canyon and south of Trinity Drive. The sub-parcel is approximately 4.5 acres in area and is separated from Trinity Drive by privately owned land that fronts onto this public right-of-way.

**History:** The LAAO-1 East sub-parcel contains one potential release site, PRS 00-030(i), within its boundaries. PRS 00-030(i), a septic tank, was part of SWMU Group O-3 that consisted of 13 septic systems that were installed during the early 1940s. Most of these systems remained in use until the Central Wastewater Treatment Plant was completed in late 1947. Engineering drawings showing the facilities connected to this septic tank are not available; however, it is believed that the PRS 00-030(i) served the West Mess Hall and buildings west of the West Mess Hall along Finch Street and south of Trinity Drive. These buildings included dormitories, barracks, a military post office, an officer's lounge, a post exchange, and apartments.

The tank was approximately 16 ft long x 8 ft wide x 8 ft deep and constructed of concrete. The tank was drained by a vitrified-clay pipe (VCP) from the outlet to an outfall within a drainage channel located approximately 100 ft southwest of the septic tank.

In June 1996, the septic tank was removed and confirmation samples were collected beneath the tank as part of a voluntary corrective action (VCA). Samples were also collected beneath the inlet and outlet lines (which were left in place) and at the outfall. As a result of the original 1996 VCA at PRS 0-030(i), antimony, barium, cadmium, lead, selenium, and zinc were detected (or had detection limits) greater than their respective background values (BVs), and 28 organic chemicals (pesticides, poly-aromatic hydrocarbons, phthalates, and volatile organic compounds) were detected in the soil, sediment, and/or tuff in at least one of the samples collected from the environmental media on the exterior of the septic tank. No radionuclides were detected above background/fallout values. The data defined the nature of contamination potentially associated with PRS 0-030(i), but the extent of contamination was not clearly defined.

A second VCA was conducted in July 2000 to remove the inlet and outlet lines and collect confirmation samples beneath these lines. Supplemental samples were also collected to provide additional data with which to define the extent of potential contamination from PRS 00-030(i). These samples were collected at depth beneath the location of the former septic tank and in the vicinity of and down-gradient the outfall for the purpose of defining the extent of contamination. No inorganic chemicals were detected above BVs, and no organic chemicals were detected in these samples and the sampling successfully defined the extent of contamination beneath the septic tank. However, lead, 4,4'-DDT, alpha and gamma chlordane, and dieldrin were either detected (in the case of the organics) or detected above BVs (in the case of lead) in the outfall drainage down-gradient from the mouth of the outlet pipeline. The vertical and horizontal extent of these contaminants demonstrated a down-gradient decreasing trend in sample concentrations.

An additional sediment sample was collected from a tributary drainage that connects with the septic tank outfall drainage. Cadmium, chromium (total), lead, silver, and zinc were detected in this sample above BVs, and 4, 4'-DDD, 4, 4',-DDT, benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, bis[2-ethylhexyl]phthalate, alpha and gamma chlordane, chrysene, dieldrin, fluoranthene, and pyrene were detected. The presence of these contaminants indicated contributions from another source.

The human-health and ecological screening assessments in the VCA Report indicate that PRS 00-030(i) does not pose an unacceptable human health hazard or an unacceptable risk to environmental receptors.

**ER Project Supporting Documentation  
For The LAAO-1 East Sub-parcel [Map Designation A-12]  
CERCLA 120(h) Report**

**Is there any record of a hazardous substance having been stored on site?**

No. There is no information that suggests that hazardous substances were stored on site.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater?**

Not applicable.

**Was the amount disposed of or released greater than or equal to the RQ?**

Not applicable.

**Current Regulatory Status:** The LAAO-1 East sub-parcel contains one PRS within its boundaries. PRS 00-030(i) is not currently on the Hazardous and Solid Waste Amendments (HSWA) module of Los Alamos National Laboratory's (LANL's) Resource Conservation and Recovery Act permit; therefore, it is regulated under DOE's authority. A VCA Report recommending no further action was submitted to DOE in July 2001. In February 2002, the DOE concurred with the ER Project's recommendation that no further remedial action is required for this PRS. Therefore, this parcel meets the Comprehensive Environmental Response, Compensation and Liability Act Section 120(h) requirements because all necessary remedial action has been taken prior to transfer.

**Future Actions Required:** None

**References:** "VCA Completion Report," Department of Energy, Office of Los Alamos Operations, February 2002, Memorandum MJ-0002-002.

"Voluntary Corrective Action Report for Potential Release Sites 00-003, 00-012, and 00-030(i)," Environmental Restoration Project, July 2001, LA-UR-01-2034.

"Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico," Report to Congress Under Public Law 105-119," Department of Energy, September 2000.

"Voluntary Corrective Action Report for Potential Release Sites 00-003, 00-012, and 00-030(i)," Environmental Restoration Project, December 1999, LA-UR-99-5671.

"Environmental Restoration Report to Support Land Conveyance and Transfer Under Public Law 105-119," August 1999, LA-UR-99-4187.

"VCA/RFI Reports for TAs 0: PRSs 00-030(h,i,n,o,p)" Environmental Restoration Project, September 1996, LA-UR-96-3551.

"Voluntary Corrective Action Plan for TA 0: PRSs 00-030(d,h,i,j,k,n,o,p), Town Site Septic Tank Systems," Environmental Restoration Project, March 1996, LA-UR-96-936.

"RFI Work Plan for OU 1071," Environmental Restoration Project, May 1992, LA-UR-92-0810.

"Solid Waste Management Units Report Los Alamos National Laboratory, Revised November 1990, Vol. 1 of IV (TA-0 through TA-9)," Environmental Restoration Project, 1990, LA-UR-90-3400.

# **Appendix D**

## **Site Map**



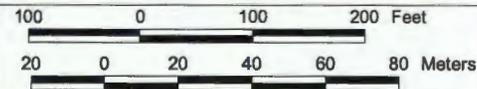
TRINITY DRIVE

4.5  
acres

8.8  
acres

### LEGEND

-  Paved Road
-  Current LANL Boundary
- Proposed Ownership*
-  LAAO Tract East
-  LAAO Tract West



**Los Alamos Area Office  
Land Transfer Tract**

# **Environmental Baseline Survey**

**for**

**Bureau of Indian Affairs Portions of  
Technical Area 74 Tract and  
White Rock Y Tract**

(Tracts B-2  
and B-4)

Pursuant to the US Department of Energy

Cross-Cut Guidance on Environmental Guidance  
for DOE Real Property Transfers

November 13, 2001

## **Environmental Baseline Survey**

**for**

### **Bureau of Indian Affairs Portions of Technical Area 74 Tract and White Rock Y Tract**

#### **Executive Summary**

This document, “Environmental Information for Real Property Transfer”, was prepared in accordance with the “Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers” in preparation of transferring ownership of portions of the Technical Area 74 (hereafter referred to as BIA TA-74) Tract and portions of the White Rock Y (hereafter referred to as BIA WR-Y) Tract at Los Alamos National Laboratory from the US Department of Energy (DOE) to the Bureau of Indian Affairs to be held in trust for the Pueblo of San Ildefonso pursuant to Public Law 105-119, Section 632. It discusses DOE compliance with the environmental requirements associated with real property transfers. It also demonstrates that, although potentially contaminated, BIA TA-74 and BIA WR-Y are in such condition that DOE may issue deeds on the basis that covenant deferrals are in place to allow future Environmental Restoration Program investigations and possible clean-ups of potential release sites (i.e., the canyon bottoms and floodplains) associated with these properties.

The methodology used to prepare this report was to:

- conduct an environmental site assessment of BIA TA-74 and BIA WR-Y consistent with the American Society of Testing and Materials (ASTM) “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to BIA TA-74 and BIA WR-Y,
- perform a physical examination of the BIA TA-74 and BIA WR-Y, and
- consult with both University of California and DOE staff to confirm existing information or develop additional information.

Based on this assessment, it has been determined that BIA TA-74 and BIA WR-Y have:

- Three potential release sites (PRs). The canyon bottoms of Pueblo, Bayo, and Barrancas canyons contain residual contamination from historical operations at the Laboratory, and are under investigation by the Environmental Restoration Project. All three watersheds are defined as Areas of Concern and are PRs by definition.
- no records that hazardous substances were ever stored at these sites, and
- requirements for future Environmental Restoration Project investigations of sediment, surface water, and alluvial groundwater in all three canyon bottoms. It is not known if remedial actions will be required as a result of these investigations.

Air quality at both tracts is high. Neither hazardous nor radioactive air pollutant sources exist at these tracts. Small amounts of hydrocarbon-generated ozone and carbon dioxide are emitted by vehicles passing through the southern edge of both tracts on State Road 502, but no criteria pollutants are emitted from anywhere else on either tract of land.

The BIA TA-74 tract spans portions of the stream channels and flood plains of both Bayo and Barrancas canyons, and the BIA WR-Y tract includes a portion of the stream channel and flood plain of Pueblo canyon. Bayo canyon has natural ephemeral streams in the vicinity of the tract. Pueblo Canyon receives treated sanitary effluent from the County's Bayo Wastewater Treatment Plant, and this effluent-supported reach extends to the confluence with Los Alamos Canyon. There is one known spring, Hamilton Bend Spring that does not flow consistently. The U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) and LANL identify wetlands in stretches of Pueblo Canyon. Assessment of these wetlands is included in Appendix D of the CT EIS (DOE/EIS-0293).

No threatened or endangered species have been observed on either the BIA TA-74 or BIA WR-Y tracts, although both are adjacent to an area of environmental interest for the Mexican spotted owl.

BIA TA-74 and BIA WR-Y tracts were used from the Archaic period through the Nuclear Energy period. Both tracts contain numerous prehistoric archaeological sites. This sites will continue to receive the same protection under the Bureau of Indian Affairs as they did under the auspices of DOE and no further action from a cultural resource protection standpoint regarding these sites is necessary.

Based on this information, the University of California and DOE conclude that there are no outstanding environmental issues to prevent conveyance or transfer of BIA TA-74 and BIA WR-Y to the Bureau of Indian Affairs to be held in trust for the Pueblo of San Ildefonso. Covenant deferrals will be necessary to allow future Environmental Restoration Program investigations and possible clean-ups of potential release sites (i.e., the canyon bottoms and floodplains) associated with these properties.

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## **1.0 Purpose of the Environmental Baseline Survey**

On November 26, 1997, Congress passed Public Law 105-119. Section 632 of that law directed the Secretary of Energy to convey to the Incorporated County of Los Alamos, NM, or to the designee of the County and transfer to the Secretary of the Interior, in trust for the Pueblo of San Ildefonso, parcels of land under the jurisdictional administrative control of the Secretary at or in the vicinity of Los Alamos National Laboratory. Such parcels, or tracts, of land must meet the suitability criteria established by the law, that is, they are not required for the national security mission before the end of the 11/26/2007; can be restored or remediated by 11/26/2007; and are suitable for historic, cultural or environmental preservation, economic diversification, or community self-sufficiency. The DOE identified 10 tracts of land for potential transfer to the County of Los Alamos or to San Ildefonso Pueblo.

DOE's "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers (DOE/EH-413/9712) provides guidance on the types of information needed to support real property transfers. Information such as the presence of floodplains and wetlands; critical habitats; historic properties; and hazardous substances must be gathered and provided to the potential recipients of the property. This document provides the relevant environmental information as outlined in the Cross-Cut Guidance and provides references to more detailed information.

For these discussions, BIA TA-74 and BIA WR-Y refer to only those portions of the Technical Area 74 and White Rock Y Tracts that are to be conveyed to the Bureau of Indian Affairs to be held in trust for the Pueblo of San Ildefonso.

### **1.1 Boundaries of Property and Scope of Survey**

BIA TA-74 represents a large area of LANL buffer lands located east of the Los Alamos townsite and below the mesa upon which the townsite is built. BIA TA-74 is located entirely in Santa Fe County, NM. Its southern boundary is approximately 200 feet north of the effluent channel associated with the Los Alamos County Bayo Canyon Wastewater Treatment Plant, and extends to the northern boundary of the TA-74 parcel as defined in the *Environmental Impact Statement for the Conveyance and Transfer of Certain Land Tracts Administered by the U.S. Department of Energy and Located at Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico* (DOE/EIS – 0239, October 1999). It also includes a small, mesa-top area to the south of the effluent channel, known as the Little Otowi site. The northeastern portion of the BIA WR-Y parcel is located north of State Road 502 and east of the White Rock Y interchange, and abuts to the southern boundary of the BIA TA-74 tract.

Access to this land is currently gated and limited to Federal, State, and local government personnel on official business. However, access by others may be coordinated on a case-by-case basis. Although not subject to Los Alamos County land use controls, the tract is zoned by the County as Federal lands for planning purposes (LAC 1998).

The BIA TA-74 Tract is isolated from LANL operations and contains numerous archaeological sites and sensitive wildlife habitat (LANL 1990). The site is heavily forested with ponderosa pine and pinyon-juniper woodlands (DOE 1999c).<sup>1</sup>

The scope of this Environmental Baseline Survey was to identify potential environmental issues associated with those portions of BIA TA-74 and BIA WR-Y that might impact transfer of ownership.

## **2.0 Survey Methodology**

The methodology used to prepare this report was to:

- conduct an environmental site assessment of BIA TA-74 and BIA WR-Y consistent with the American Society of Testing and Materials (ASTM) “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to BIA TA-74 and BIA WR-Y,
- perform a physical examination of BIA TA-74 and BIA WR-Y, and
- consult with both University of California and DOE staff to confirm existing information or develop additional information.

## **2.1 Approach and Rationale**

Historical and current information (see 2.1.1 below) for BIA TA-74 and BIA WR-Y was reviewed, and the sites were physically visited and surveyed. After determining the nature and quality of available information, UC and DOE staff were consulted to confirm existing information or develop new information as needed. Collectively, this survey addressed air quality, water quality (surface and groundwater), soil and sediment contamination, and any structures, waste sites, natural resources or other environmental concerns present at the site.

To conduct this assessment it was assumed that BIA TA-74 and BIA WR-Y parcel boundaries were established and not subject to significant change. Environmental conditions and associated information were evaluated based upon those boundaries. Second, it was assumed that the nature and quality of the document reviews and site surveys were independent of, and unaffected by, the recipients’ intended use as identified in the “Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico” (DOE September 2000). Lastly, it was assumed that a final inspection or “walk-through” of each parcel would occur prior to conveyance or transfer.

---

<sup>1</sup> Extracted from the DOE/EIS – 0293, Final Environmental Impact Statement for the Conveyance and Transfer of Certain Land Tracts Administered by the U.S. Department of Energy and Located at Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico, October 1999, Chapter 19, Section 19.1.1, Land Use.

### **2.1.1 List and Description of Documents Reviewed**

In addition to the documents listed below, the Environmental Site Assessment (Appendix B) identifies additional resources used in this evaluation.

1. "Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory", US Department of Energy, DOE/EIS-0238, January 1999.
2. "Final Environmental Impact Statement for the Conveyance and Transfer of Certain Tracts Administered by the US DOE and Located at Los Alamos National Laboratory", US Department of Energy, DOE/EIS-0293, October 1999
3. "Final Environmental Restoration Report to Support Land Conveyance and Transfer under Public Law 105-119", Los Alamos National Laboratory, LA-UR-99-4187, August 1999
4. "Combined Data Report to Congress to Support Land Conveyance and Transfer under Public Law 105-119", US Department of Energy, Unnumbered Report, January 2000.
5. "Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico", U.S. Department of Energy, Report to Congress Under Public Law 105-119, Unnumbered Report, September 2000.
6. "Technical Area 74 at Los Alamos, New Mexico", U.S. Army Corps of Engineers Title Report, September 15, 1998.
7. "White Rock Y Site at Los Alamos, New Mexico", U.S. Army Corps of Engineers Title Report, September 15, 1998.
8. LANL Hazardous Waste Facility Permit, NM 0890010515-1, 11/8/89
9. "Environmental Surveillance at Los Alamos During 1999", Los Alamos National Laboratory, LA-13775-ENV, December 2000.
10. "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers", U.S. Department of Energy, DOE/EH-413/9712, October 1997
11. "Threatened and Endangered Species Habitat Management Plan," Los Alamos National Laboratory, August 1998.

12. "A Status Report on Threatened and Endangered Species, Wetlands, and Floodplains for the Proposed Conveyance and Transfer Tracts at Los Alamos National Laboratory, Los Alamos, New Mexico", Los Alamos National Laboratory, July 1998.
13. LANL Draft Watershed Management Plan
14. LANL Environmental Restoration Project Baseline, WBS 1.4.2.6.01.02.24.JG.
15. "Endangered Species Act", United States Code, Washington, D.C., Title 16, Conservation; Chapter 35, Endanger Species Act, December 1973.

### **2.1.2 Inspections of Properties Conducted and Personnel Contacted**

The Environmental Site Assessment (Appendix B) identifies personnel contacted during this evaluation.

## **3.0 Summary of Data**

### **3.1 History and Current Use**

Prior to LANL occupancy, there was little development in this remote area. Historical maps from the pre-LANL era (1924), aerial photographs of the area (1935), and historical accounts of life in the area show little development in the area until 1917 when the Los Alamos Ranch School for boys was established.

Even after LANL occupancy, the BIA TA-74 and BIA W-Y parcels had very little development and served instead to buffer Laboratory activities from the surrounding region.

### **3.2 Environmental Setting**

Vegetation communities present within the BIA TA-74 tract are basically ponderosa pine forest; pinyon-juniper woodland; and open shrub, grassland, and wildflower areas. There are no roads in this remote area, and floodplains with the BIA TA-74 Tract are not well defined. Flora and fauna are characteristic of the region. Suitable habitat is present for the Mexico spotted owl and bald eagle.

The BIA WR-Y tract contains pinyon-juniper woodland and portions of the Pueblo Canyon stream channel and floodplain below its confluence with Bayo Canyon.

#### **3.2.1 Stormwater Runoff Patterns**

There are three established stream channels and flood plains within the BIA TA-74 and BIA WR-Y tracts. The BIA TA-74 tract spans portions of the stream channels and flood plains of both Bayo and Barrancas Canyons, and the BIA WR-Y tract includes a portion of the stream channel and flood plain of Pueblo Canyon. Bayo Canyon has natural

ephemeral streams in the vicinity of the tract. Pueblo Canyon receives treated sanitary effluent from the County's Bayo Wastewater Treatment Plant, and this effluent-supported reach extends to the confluence with Los Alamos Canyon. There is one known intermittent spring, Hamilton Bend Spring, adjacent to the BIA TA-74 Tract.. The U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) and LANL have identified wetlands in stretches of Pueblo Canyon. Assessment of these wetlands is included in Appendix D of the CT EIS (DOE/EIS-0293).

### **3.2.2 Hazardous Materials and Waste Management**

Not applicable. Hazardous wastes have not been historically nor are they currently managed by LANL at the BIA TA-74 or BIA WR-Y sites.

### **3.2.3 CERCLA-Related Contamination**

There are three PRSs (Bayo, Barrancas, and Pueblo Canyons) located, in part, on the BIA TA-74 and BIA WR-Y tracts. Results of investigations conducted by LANL's Environmental Restoration Project indicate that the levels of contamination in Pueblo Canyon sediments do not present a significant human health risk under the conditions of present day land use, including trail users and resource users (Appendix C).

### **3.2.4 Storage Tanks and Pipelines**

Not applicable. There is no historical record, employee recollection, or visible indication that there are or were underground storage tanks or pipelines in service on this property.

### **3.2.5 Wastewater Treatment and Disposal**

Los Alamos County operates a sanitary wastewater treatment plant in Bayo Canyon, upstream of the Pueblo Canyon channel that crosses the BIA WR-Y parcel. The volume of effluent discharged from this treatment plant can be up to a million gallons per day, and this discharge has created a small (<5.0 acre) wetland area within the stream channel of Pueblo Canyon.

### **3.2.6 Lead in Drinking Water**

A water supply well (Otowi Well #1) is located adjacent to the BIA TA-74 parcel. Los Alamos County owns this water supply well. There is no known lead contamination in this drinking water.

There are also several LANL environmental monitoring wells located adjacent to this parcel. None of these monitoring wells have indicated lead contamination.

### **3.2.7 Oil Water Separator**

Not applicable. No current or historic use of oil water separators are associated with this site.

### **3.2.8 Asbestos**

Not applicable. There are no structures on either the BIA TA-74 or BIA WR-Y parcel.

### **3.2.9 Air**

Air quality is high. Neither hazardous nor radioactive air pollutant sources exist at either the BIA TA-74 or BIA WR-Y tracts. Vehicles passing near the southern edge of these parcels on State Road 502 emit small amounts of hydrocarbon-generated ozone and carbon dioxide; but no criteria pollutants are emitted from anywhere else on this large tract of land.

The BIA TA-74 and BIA WR-Y parcels are part of New Mexico Region 3, an attainment area that meets National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Analyses performed for the LANL SWEIS estimate that concentrations of chemical air pollutants will not exceed health-based standards for any point beyond the LANL boundary (DOE 1999c, Chapter 5), and no adverse human health effects are expected.

### **3.2.10 Lead-Based Paint Surveys and Other Sources of Lead**

Not applicable. There are no known sources of lead at either the BIA TA-74 or BIA WR-Y parcels.

### **3.2.11 PCBs**

Not applicable. LANL's PCB database shows that no PBC-containing equipment was used, stored or disposed on the BIA TA-74 or BIA WR-Y parcels.

### **3.2.12 Pesticides**

Not applicable. There are no records of pesticides being used or stored on the BIA TA-74 or BIA WR-Y parcels.

### **3.2.13 Medical Wastes**

Not applicable. There are no records of medical wastes being generated or disposed on the BIA TA-74 or BIA WR-Y parcels.

### **3.2.14 Ordnance**

There are no records of ordnance being used, stored, or disposed on the BIA TA-74 or BIA WR-Y parcels. However, TA-10, a former firing site, was located in the middle portion of Bayo Canyon immediately upstream from the BIA TA-74 parcel. Activities at

former TA-10 included test of conventional high explosive and depleted and natural uranium assemblies. In 1994, an interim action including a shrapnel density distribution investigation and removal was performed at former TA-10. Over 19,000 pieces of shrapnel were removed from an area that extended into the western portion of the BIA TA-74 parcel. It is recognized that not all pieces of shrapnel were located and removed due to technical and physical constraints. The data collected during this clean-up were used to perform a human health risk assessment. The results of this risk assessment indicated that the remaining shrapnel did not pose an unacceptable human health risk (see Appendix C).

### **3.2.15 Radioactive Materials and Wastes**

Not applicable.

### **3.2.16 Radon**

Not applicable.

### **3.2.17 Groundwater**

Not applicable. There are no supply or monitoring wells located on this site, and there is no known contamination at this site that would impact these resources.

## **3.3 Natural and Cultural Resources**

An Area of Ecological Interest for the Mexican Spotted Owl may be affected by the proposed action (property transfer). The DOE and the UC consulted with the US Fish and Wildlife Service to assess those affects. The DOE and the FWS agreed that the Spotted Owl was not likely to be adversely affected by the proposed action and therefore, under Section 7 of the Endangered Species Act, no further action was required (i.e., no formal consultation was necessary). In addition, these resources would be afforded the same level of protection under the Department of Interior as they are under the DOE, and no further action is required.

There are no historic structures located on either the BIA TA-74 or BIA WR-Y parcels. There are numerous prehistoric sites present, and traditional cultural properties may also be present on these parcels. However, these resources would be afforded the same level of protection under the Department of Interior as they are under the DOE, and no further action is required.

## **3.4 Identification of Uncontaminated Properties**

Neither BIA TA-74 nor BIA WR-Y have environmental contamination as defined by CERCLA 120(h)(4).

### **3.5 All Other Properties**

Not applicable. There are no other properties associated with this site.

### **4.0 Summary of Data for Adjacent Properties**

The adjacent properties consist of the southern portion of TA-74, the southern portion of the White Rock Y tract, Los Alamos County lands to the west, U.S. Forest Service Lands to the north, and San Ildefonso lands to the east. The Environmental Site Assessment (Appendix B) reviewed the appropriate ASTM records out to a distance of 2 or 3 miles as appropriate to identify if hazardous sites or serious local environmental problems may exist on or immediately adjacent to the facility. None were found.

#### **4.1 History and Current Use**

The adjacent properties are mostly undeveloped land. The lands occupied by Los Alamos County to the west are part of the townsite, but are mostly housing developments on mesa tops. The closest industrial activity would be the Los Alamos Airport, and this would not be expected to result in environmental problems for either the BIA TA-74 or BIA WR-Y parcels. The remaining surrounding lands are undeveloped.

#### **4.2 Environmental Setting**

The adjacent lands consist mostly of undeveloped property or housing developments on mesa tops to the west. The undeveloped lands contain native plant and animal communities, and represent natural resources currently used by members of the San Ildefonso Pueblo.

#### **4.3 Adjacent Properties with No Known or Suspected Releases**

The U.S. Forest Service lands to the north and the San Ildefonso lands to the east are not known to contain any potential sources of contamination.

#### **4.4 Adjacent Properties with Known or Suspected Releases**

As previously mentioned, three canyon systems, with known or suspected contaminants, are part of the adjacent properties. All three canyon stream channels and floodplains (Bayo, Barrancas, and Pueblo Canyons) are defined as Areas of Concern and are PRSs by definition. Results of investigations conducted by LANL's Environmental Restoration Project indicate that the levels of contamination in Pueblo Canyon sediments do not present a significant human health risk under the conditions of present day land use, including trail users and resource users (Appendix C).

### **5.0 Conclusions and Recommended Courses of Action**

DOE and UC health and safety professionals have reviewed environmental conditions at this parcel and have determined that no special precautions are required.

Based on best available environmental information, the University of California and the Department of Energy conclude that there are no outstanding environmental issues to prevent conveyance or transfer of this tract. However, covenant deferrals will be necessary to allow future Environmental Restoration Program investigations and possible clean-ups of potential release sites (i.e., the canyon bottoms and floodplains) associated with these properties.

### **5.1 Facility Matrix**

Not applicable. There are no structures on these tracts.

### **5.2 Property Categorization**

Not applicable. All lands at BIA TA-74 and BIA WR-Y are categorized the same.

### **5.3 Resource Map**

Not applicable. No hazardous materials were identified, and no wells are located on this property.

### **6.0 Certification of Environmental Baseline Survey**

Los Alamos National Laboratory staff and Environmental Contractors conducted this Environmental Baseline Survey under direction and guidance of the Site-Wide Issues Program Office. The information contained in this document is accurate to the best of our knowledge.

  
\_\_\_\_\_  
Doris Garvey, Program Manager

# **Appendix A**

## **CERCLA 120h**

## CERCLA 120(h) Report

### TA-74 and White Rock Y Tract (BIA Portion)

#### **Location:**

TA-74 is located east of the Los Alamos townsite and below the mesa upon which the townsite is built. The northern half of the site is dominated by lower Bayo Canyon; the southern half includes much of Pueblo Canyon. U.S. Forest Service property borders the tract to the north. State Road 502 forms the southern border and provides vehicle access. State Road 502 also serves to separate TA-74 from the northeast edge of the White Rock Y tract and the northwest edge of Bandelier National Monument. Pueblo of San Ildefonso lands lie to the east, and the Airport Tract is to the west.

The White Rock Y Tract incorporates the alignments and intersections of State Road 502, State Road 4, and the easternmost portion of East Jemez Road. State Road 502 bounds the tract to the north, across from the TA-74 Tract. The White Rock Y Tract shares its southern boundary with Pueblo of San Ildefonso lands, just south of East Jemez Road. State Road 4 and Bandelier National Monument (BNM) lie to the east, and TA-72 lies to the west.

The portions of TA-74 and WRY that are being conveyed to the Pueblo of San Ildefonso are the subject of this report.

#### **Description:**

The portion of the TA-74 and WRY tract being conveyed to the Pueblo of San Ildefonso consists of the northeastern-most two-thirds of the TA-74 tract, and that portion of the White Rock Y tract that is contiguous with the TA-74 tract and that lies mostly east of the intersection known as the "White Rock Y" and north of NM 502 and NM 4.

#### **History:**

Solid waste management units do not exist on those portions of the TA-74 or White Rock Y tracts being conveyed to the Pueblo of San Ildefonso. However, TA-74 spans portions of the stream channels and flood plains of both Bayo and Barrancas Canyons. The stream channels and flood plains have been adversely impacted by contaminants carried downstream within surface water or sediments from former LANL operations at TA-10 and TA-00. The TA-74 portion also has potential to be impacted by known contaminants in Pueblo Canyon should the floodplain encroach upon the parcel's southern property boundary. All three watersheds are defined as Areas of Concern (AOCs) and are Potential Release Sites (PRSs) by definition.

The White Rock Y parcel includes a portion of the Pueblo Canyon Stream channel and flood plain known to have received contaminants from multiple potential release sites within this watershed upstream from this parcel. The most significant contaminate source was former TA-45 where radioactive effluent was discharged between 1944 and 1964 into Acid Canyon, a small tributary of Pueblo Canyon, located approximately 6 miles upstream of the southwestern boundary of the parcel.

**Is there any record of a hazardous substance having been stored on site?**

No. There is no information that suggests that hazardous substances were used, stored, or disposed on the Pueblo's portion of the TA-74 or WRY Tracts. However, the ER Project has identified PRSs that may contain dispersed contamination (see history above).

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater; and, was the hazardous substance stored for one year or longer?**

No. There is no information that suggests that hazardous substances were used, stored, or disposed on the Pueblo's portion of the TA-74 or WRY Tracts.

**Was the amount disposed of or released greater than or equal to the RQ?**

No. There is no information that suggests that hazardous substances were used, stored, or disposed on the Pueblo's portion of the TA-74 or WRY Tracts.

**Current Regulatory Status:** None of the PRSs on the portions of the TA-74 or WRY Tracts being transferred to the Pueblo of San Ildefonso are currently listed on the Hazardous and Solid Waste Amendments (HSWA) module of LANL's Resource Conservation and Recovery Act permit; therefore, they are regulated under DOE authority.

Based on the evaluations performed by the Environmental Restoration Program, the levels of contamination in the sediments do not present an unacceptable human health risk under the conditions of present-day land use, including scenarios for trail users, resource users, and construction workers. In addition, because concentrations of contaminants in sediments carried by flood are not increasing over time, and present levels of contamination have not been shown to either cause an unacceptable risk in downstream areas or exceed regulatory standards, no immediate remedial action is required in the context of future remobilization of contaminated sediments.

**Future Actions Required:**

The Environmental Restoration Project intends to complete all sediment, surface water and alluvial groundwater investigations in Pueblo Canyon, and begin the preparation of a surface aggregate report in fiscal year 2002. Work on Bayo and Barrancas canyons is schedule for FY04. It is not known if remedial actions will be required as a result of these investigations.

**Appendix B**  
**Environmental**  
**Assessment**

# **ENVIRONMENTAL ASSESSMENT**

## **Land Transfer Parcel, TA-74 North**

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**Prepared For: THE DEPARTMENT OF  
ENERGY**

**November 5, 2001**

## **EXECUTIVE SUMMARY**

This report presents a findings summary for an assessment of the actual and potential environmental concerns associated with the northern portion of the TA-74 parcel and the northeastern portion of the White Rock Y parcel, which is slated for transfer to the Secretary of the Interior in trust for San Ildefonso Pueblo. The TA-74 parcel is located predominantly in Santa Fe County, NM, and the northern portion of the parcel is located entirely in Santa Fe County, NM, as is the northeastern portion of the White Rock Y parcel. The northern portion of the TA-74 parcel encompasses the area whose southern boundary is approximately 200 feet north of the effluent channel associated with the Los Alamos County Bayo Canyon Wastewater Treatment Plant, and extends to the northern boundary of the TA-74 parcel, as defined in the *Environmental Impact Statement for the Conveyance and Transfer of Certain Land Tracts Administered by the U.S. Department of Energy and Located at Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico* (DOE/EIS – 0293, October 1999). It also includes a small, mesa-top area to the south of the effluent channel, known as the Little Otowi site. The northeastern portion of the White Rock Y parcel is located north of State Road 502 and east of the White Rock Y interchange, and it abuts the southern boundary of the northern portion of the TA-74 parcel. For linguistic ease, these sub-parcels are collectively called the “TA-74 North” parcel. Collectively, the TA-74 North parcel is 2,089 acres in size. Exhibit 1 (at the end of this executive summary) provides a descriptive summary for the TA-74 North parcel and Exhibit 2 (also at the end of this executive summary) summarizes the known history of this site. Los Alamos National Laboratory conducted its assessment on August 28, 2000, and subsequently on October 2-3, 2001 at the request of the U.S. Department of Energy. The LANL site assessors for this assignment were Ms. Jennifer Pope and Ms. Virginia Smith.

This assessment (hereafter referred to as an environmental site assessment (ESA)) was conducted pursuant to a scope of work consistent with the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-00); along with an additional off-site disposal practices review (including evaluating whether the subject site is listed as a potentially responsible party (PRP) at an off-site waste disposal site); and an examination of possible asbestos-containing materials (ACMs). A specific discussion of the tasks undertaken is set forth in Attachment A. LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this assessment.

It is LANL’s understanding and agreement that the DOE may provide this report to the recipient of the subject parcel, as well as to the public. The parcel recipient may provide this report to third parties and other financing institutions and institutional lenders connected with the contemplated transaction (including, without limitation, any such party providing financing on or after consummation of the contemplated transaction and all assignees and participants of any of the foregoing), and that these parties may rely on the information in the report to the same extent as and subject to the same restrictions agreed to by DOE.

## **1.2            *LIMITATIONS***

All the information contained in this report, including any engineering conclusions, is based on the information made available to LANL's site assessor during the investigation, which we assume to have been provided in good faith. This report represents an assessment of the TA-74 North parcel performed in accordance with generally accepted industry standards regarding environmental assessments. LANL makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to ownership of any property or the application of any law to the facts set forth herein. Except as otherwise may be requested by DOE, LANL disclaims any obligation to update the report for events taking place after the time during which we conducted our assessment.

**Exhibit 1. TA-74 North Parcel Description Summary**

# of Acres	# of Buildings (approx. total sq. ft)	# of Potential Release Sites (and remediation status)	Current Activities
Approximately 2,089 acres.	None.	Three: Pueblo, Bayo and Barrancas Canyons. Pueblo Canyon is known to contain residual contamination from historical operations at the Laboratory. Results of investigations conducted by LANL's Environmental Restoration (ER) Project to date indicate that the levels of contamination in Pueblo Canyon sediments do not present a significant human health risk under the conditions of present-day land use, including trail users and resource users. The stream channels and flood plains of Bayo and Barrancas Canyons may have been adversely affected by contaminants carried downstream within surface water or sediments from historical operations at TAs 10 and 0. The portions of these canyon bottoms within the TA-74 North parcel are slated for investigation by LANL's ER Project in FY 2004.	There is no activity related to LANL operations on this parcel. The only LANL-related activity slated for this parcel is the investigation and remediation, if necessary, of Pueblo, Bayo and Barrancas Canyons.

**Exhibit 2. TA-74 North Parcel Site History Summary**

<b>Site History Prior to LANL Occupancy</b>	Prior to LANL occupancy, there was little development in this remote area. Historical maps from the pre-LANL era (1924), aerial photographs of the area (1935), and historical accounts of life in the area show little development in the area until 1917 when the Los Alamos Ranch School for boys was established.
<b>Site History After LANL's Occupancy</b>	Even after LANL occupancy, this land parcel had very little development and served instead to buffer Laboratory activities from the surrounding region.

***ATTACHMENT A***

***ASSESSMENT METHODOLOGY***

This environmental assessment, consistent with the ASTM Practice E 1527-00 (with added evaluations of ACMs, and possible wetland areas), consisted, in general, of the following steps:

- We met with the following individuals at LANL to discuss parcel-specific environmental and occupational health and safety (EH&S) issues:
  - Mr. Albert Dye, ESH-19, PCB Database Manager;
  - Ms. Debra Archuleta, ESH-17, Asbestos Program Manager;
  - Mr. David Ortiz and Ms. Josie Encinias, ESH-5, Asbestos Management Program;
  - Ms. Louann Romero, ESH-19, HSTD Database Manager;
  - Mr. Harvey Decker, ESH-18, SPCC and SWPPP Plans;
  - Mr. William Flor, HAZMAT Spills Database Manager;
  - Mr. Terry Rust and Dr. Steve Reneau, Environmental Restoration, Potential Release Sites; and
  - Ms. Jean Dewart, ESH-17, Air Quality Program.
- We visited the parcel on September 6, 2000, and subsequently on October 2-3, 2001 to gather more detailed information concerning possible on-site contamination, and to determine the compliance status of the parcel. Before, during and after the September 6, 2000 visit, we interviewed LANL personnel about past and present site operations, raw materials and waste management practices, and significant environmental liability problems, if any. We did not repeat these interviews in October 2001 because there are no ongoing LANL operations on or near the parcel. We also observed actual site conditions in an attempt to identify and assess the status of potential liabilities such as past disposal areas, waste management units and systems, and sites of environmental releases.
- We reviewed ES&H-related files, correspondence, and other documents supplied by LANL.
- We visited the Los Alamos County Archives office in Los Alamos, NM to review aerial photographs of the area and to collect information on site use prior to the Manhattan Project.
- We performed a walk-by and drive-by survey of the immediate neighboring properties from publicly accessible areas for obvious signs of environmental concerns and how those concerns may have environmentally degraded the property under study, and to assess the proximity of the subject property to sensitive ecological areas (e.g., wetlands).
- We reviewed a search of the following computerized environmental databases to determine if hazardous sites or serious local environmental problems may exist on or immediately adjacent to the facility (see radius specifications):<sup>1</sup>

*Federal ASTM Records*

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<sup>1</sup>The environmental database searches were completed for LANL by e Data Resources. The database-specific radii specified for these searches either match the ASTM E 1527-00 requirements or are larger than specified in E 1527-00.

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) (subject site and 0.5-mile radius);
- Emergency Response Notification System (subject site only);
- National Priority List (NPL) (subject site and 1-mile radius);
- RCRA Corrective Action Sites (CORRACTS) list (subject site and 1-mile radius);
- Resource Conservation and Recovery Information System (RCRIS) (subject site and 0.25-mile radius for generators and 0.5-mile radius for treatment, storage, and disposal facilities); and
- CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP) (subject site and 0.25-mile radius).

*Additional Federal Records*

- Biennial Reporting System (subject site only);
- PCB Activity Database System (subject site only);
- RCRA Administrative Action Tracking System (RAATS) list (subject site only);
- Toxic Release Inventory System (subject site only);
- Facility Index Data Base System (FINDs) (subject site only);
- Consolidated Docket Enforcement System (subject site and company name only);
- Hazardous Materials Incident Reporting System (subject site only);
- Delisted NPL Sites (subject site and 1-mile radius);
- Federal Superfund Liens (subject site only);
- Superfund Consent Decrees (subject site and 1-mile radius);
- Toxic Substances Control Act data base (subject site only);
- Materials License Tracking System (subject site only);
- Mines Master Index File (subject site and 0.25-mile radius);
- Records of Decision data base (subject site and 1-mile radius); and
- FIFRA/TSCA Tracking System (FFTS) (subject site only).

*State ASTM Records*

- New Mexico State leaking underground storage tank (UST) database list (subject site and 0.5-mile radius);
- New Mexico State permitted solid waste facilities/landfill sites (subject site and 0.5-mile radius); and
- New Mexico State registered USTs (subject site and 0.25-mile radius).

*Additional State Records*

- New Mexico State Aboveground Storage Tanks (subject site only).
- We attempted to obtain and review historical Sanborn Fire Insurance land use maps to establish past land uses of the subject property and the surrounding area consistent with the requirements of ASTM Practice E 1527-00. Sanborn Fire Insurance land use maps were not available for this facility or the surrounding area.
- We reviewed historical aerial photographs available from public agency sources to establish past land uses of several of the subject properties and the surrounding

areas consistent with the requirements of ASTM Practice E 1527-00. Aerial photographs dated 1935, 1958, 1974, and 1991 were available from the Environmental Restoration, University of New Mexico Archives, and Los Alamos County photographic archives. In general, photographic information of the Laboratory and surrounds has been difficult to obtain and is sparse in nature. We have searched the archives listed above as well as a number of other public and private entities. Amongst the entities not listed above, the New Mexico State Archives, National Resource and Conservation Services Bureau, the State of New Mexico Forestry Division, New Mexico Aerial Surveys, Inc., and Pacific Western Technologies were all contacted regarding aerial photographs of the Los Alamos area.

- We located and reviewed abstracts of available historical city directories to establish past uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. A search of the county archives in Los Alamos yielded no historical or current city directories for TA-74 that gave addresses for the subject site. In most cases, older city directories listed names and phone numbers without the benefit of the listing address.
- We assessed possible issues of current or future environmental liability. This assessment evaluated operations, both past and present, with respect to: air pollution control (including, but not limited to, applicable requirements of the 1990 Clean Air Act Amendments); asbestos management; water supply and pollution control, including stormwater management; nonhazardous solid waste management; hazardous solid waste management; USTs; materials, products, and pesticide storage and handling practices (including Superfund Amendments and Reauthorization Act (SARA) Title III programs); polychlorinated biphenyls (PCBs) inventory management; past on-site or off-site waste disposal practices; and occupational safety and health (including hazards communication).
- We completed an assessment of the facility's potentially significant liabilities under the Superfund statute and related state statutes pertaining to potential on-site contamination and related to the off-site disposal of wastes.
- LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this environmental assessment. LANL did, however, review environmental surveillance, monitoring, and sampling results that have been collected over time and that were relevant to the parcel.

***ATTACHMENT B***

***ISSUES SUMMARY***

**TABLE Exhibit 3**

**Summary of Environmental Assessment Results for TA-74 North**

<b>AREA</b>	<b>ISSUE</b>	<b>COMMENT/RECOMMENDATION/LIABILITY/COST</b>
Air Pollution Control	There appear to be no environmental liability issues associated with air pollution control on this parcel.	None.
Asbestos Management	There appear to be no environmental liability issues associated with asbestos on this parcel.	There are no structures (other than historical cultural resources) on the TA-74 North parcel.
Water Supply and Pollution Control, Including Stormwater Management	There appear to be no environmental liability issues concerning the water supply to or the wastewater discharges from this parcel.	The only source of wastewater discharge in proximity to this parcel is the Los Alamos County Bayo Canyon Wastewater Treatment Plant. The southern boundary of the TA-74 North parcel lies approximately 200 feet north of the effluent channel.
Nonhazardous Solid Waste Management	There appear to be no environmental liability issues associated with nonhazardous waste within the parcel.	There are no nonhazardous wastes generated by LANL at this parcel.
Hazardous Solid Waste Management	There appear to be no environmental liability issues associated with hazardous waste within this parcel.	No hazardous wastes have historically been or are currently managed by LANL on this parcel.
Underground Storage Tanks	There appear to be no environmental liability issues associated with USTs at this facility.	There is no historical record, employee recollection, or visible indication that there are or were USTs in service on this property. There is no plan to install any USTs.
Materials, Products, and Pesticide Handling and Storage Practices	There appear to be no environmental liability issues associated with current materials, products, and pesticide handling and storage practice at this parcel.	LANL handles no materials, products or pesticides within this parcel.
PCB Inventory Management	There appear to be no environmental liability issues associated with PCB inventory management at this land parcel.	LANL's PCB database shows that no PBC-containing equipment was used, stored or disposed on this parcel.
Potential On-Site Contamination and	There is no record, employee recollection, or visible indication that waste materials have been disposed on the	A site walk-through was conducted on October 2-3, 2001; no unusual or suspect site conditions were noted at that

Waste Disposal	subject property. LANL is currently not listed on the proposed or final NPL, in the CERCLIS or CERCLIS-NFRAP databases, or on the State's list of designated potential hazardous waste disposal sites. No USTs are known to have been located on this property. In addition, the site address is currently not listed in the state or federal reportable spills databases.	time. An aerial photo review indicated there was no unusually altered topography, unusually stressed vegetation, unusual ground depressions, or other visible indications of past spills, releases, or waste disposal. Site contacts reported responding to one site spill resulting from an overturned truck at State Road 4. Restaurant grease and hydraulic fluid was released from this spill; however, the spill was contained in the localized area adjacent to the road.
Past Off-Site Waste Disposal	To the best of LANL ESH-19 staff's knowledge, no issues or concerns have been raised regarding this facility's past off-site waste disposal practices. LANL has not received or filed notifications under the Comprehensive Environmental Response, Compensation, and Liability Act related to the disposal of any hazardous substances.	None of the off-site disposal facilities known to have received hazardous or nonhazardous wastes from LANL is currently listed on the proposed or final NPL, in the federal CERCLIS or CERCLIS-NFRAP databases, or in the respective state databases that are the equivalent of the federal CERCLIS and NPL databases.
Environmental Data Base Search Results	No apparent environmental liabilities were identified in any of the federal or state environmental databases searched for this assessment (see Attachment A). The database search to assess whether environmental conditions on the subject property have been affected by any off-site source or sources identified no mappable sites as being within the designated search radii. (NOTE: The term "mappable" means that the address information provided is sufficient for the database search vendor to pinpoint the site's location on a street map with a high degree of confidence.).	Given the database search results and based on an inspection of the surrounding properties from publicly accessible areas, none of the neighboring operations is believed to pose a significant potential concern for environmental conditions on the subject property.  The environmental database search also identified 43 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). Based on the area tour, none of these listed "orphan" sites is believed to be located within 1 mile of the subject property.

**Appendix C**  
**Environmental**  
**Restoration**  
**CERCLA Report**

**ENVIRONMENTAL  
RESTORATION  
PROJECT**

**Memorandum**

Environmental Science and Waste Technology (E)  
Environmental Restoration (ER) Project, MS M992

To/MS: D. Garvey, ESH-EIS, MS M889  
From/MS: P. Schumann, E/ER, MS M992  
Phone/FAX: 7-0808/5-4747  
Symbol: ER2001-0921  
Date: November 5, 2001

**SUBJECT: ENVIRONMENTAL RESTORATION PROJECT COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) 120(h) INFORMATION IN SUPPORT OF THOSE PORTIONS OF TECHNICAL AREA (TA) 74 AND WHITE ROCK "Y" PARCELS PROPOSED FOR TRANSFER TO THE DEPARTMENT OF INTERIOR**

The purpose of this document is to transmit CERCLA 120(h) information to support the transfer of portions of TA 74 and White Rock "Y" parcels to the Department of Interior to be held in trust for the Pueblo of San Ildefonso.

No previous documents have been submitted by the Environmental Restoration (ER) Project regarding CERCLA 120(h) requirements for potential release sites (PRSs) associated with the transfer of the above-mentioned parcels.

Please note that the CERCLA 120(h) reports provided herein are based on the review of the four maps (Thiel, Vigil, Merrick and Thatcher/Vigil) provided to the ER Project in 1998, the electronic boundary survey files compiled by the Corps of Engineers which were transmitted to this office earlier this month, and the most current topographic and PRS information maintained by the Laboratory's Facility for Information Management, Analysis, and Display.

In addition, please note that the CERCLA 120(h) information provided relates only to the status of the PRSs; other information relevant to current operations and activities, or other regulations at the parcels included in the transfer, are the responsibility of other Los Alamos National Laboratory organizations and is not included herein. The Department of Energy is advised to contact the Laboratory's Site-Wide Issues Program Office to obtain updates of this other information necessary to complete the CERCLA 120(h) report.

If you have any questions, please call me at (505) 667-5840 or Kim Birdsall at (505) 665-3486.

Attachments:           1) Technical Area 74 – Pueblo Tract  
                              2) White Rock “Y” – Pueblo Tract

Cy (w/enc.):

K. Birdsall, E/ER, MS M992  
M. Kirsch, E/ER, MS M992  
E. Louderbough, LC-GL, MS A187  
W. Neff, E/ET, MS M992  
V. Smith, E/ER, MS M992  
P. Wardwell, LC-GL, MS A187  
L. Cummings, LAAO, MS A316  
D. Gregory, LAAO, MS A316  
M. Johansen, LAAO, MS A316  
E/ER File, MS M992  
IM-5, MS A150  
RPF, MS M707

Cy (w/o enc.):

J. Canepa, E/ER, MS M992

## Technical Area 74 Parcel – San Ildefonso Tract

**Location:** Portions of Bayo, Barrancas and Pueblo Canyons

**Description:** The Technical Area (TA) 74 Parcel – San Ildefonso Tract (the “Parcel”) is located north-northeast of the Los Alamos townsite and spans portions of the Bayo and Barrancas Canyon watersheds. This Parcel covers approximately 2,063 acres and includes a small portion (3.4 acres) of a mesa top overlooking Pueblo Canyon that contains a culturally significant area known as “Little Otowi.”

The United States Forest Service administers the land to the north of the Parcel and the United States Department of Interior holds the land to the east in trust for the Pueblo of San Ildefonso. The western and southern boundaries of the Parcel are demarcated by the northern margin of the Pueblo Canyon floodplain, the Los Alamos townsite and TA 73 (Los Alamos Airport).

**History:** Although the Parcel contains no solid waste management units (SWMUs) within its boundaries, the Parcel spans portions of the stream channels and flood plains of both Bayo and Barrancas Canyons. The stream channels and flood plains of these canyons may have been adversely impacted by contaminants carried downstream within surface water or sediments from former Los Alamos National Laboratory (LANL) operations at Technical Areas 10 and 0. In 2001, the Environmental Restoration (ER) Project prepared a work plan for investigating the surface water, sediments and alluvial water (where present) in these canyons. This work plan, the North Canyons Work Plan, is scheduled for implementation in fiscal year (FY) 2004. Therefore, the data available upon which this report is based is limited.

TA 10, a former firing site, was located in the middle portion of Bayo Canyon immediately upstream from the Parcel. Activities at former TA 10 included the testing of conventional high explosive and depleted and natural uranium assemblies. In 1994, an interim action (IA) including a shrapnel density distribution investigation and removal was performed at former TA 10. Over 19,000 pieces of shrapnel were removed from an area that extended into the western portion of the Parcel (see Figure 2.3-1). However, it is recognized that not all pieces of shrapnel were located and removed due to technical and physical constraints. The data collected during this IA was used to perform a human health risk assessment. The results of this risk assessment indicated that the remaining shrapnel did not pose an unacceptable human health risk.

In addition, a portion of the southern boundary was defined in the property survey for this potential transfer as the northern margin of the Pueblo Canyon watershed floodplain. Because this floodplain is not static, it is possible that contaminated sediments in Pueblo Canyon could eventually become situated within the Parcel’s southern boundary.

Pueblo Canyon is known to have received contaminants from multiple potential release sites (PRSs) within the watershed located upstream from this Parcel. The most significant contaminant source was former TA 45, where radioactive effluent was discharged between 1944 and 1964 into Acid Canyon, a small tributary to Pueblo Canyon located approximately 6 miles upstream of the southwestern boundary of the Parcel. Other PRSs that may have contributed contaminants to Pueblo Canyon are located in TAs 0, 31, and 73. Contaminants may also have originated from residential and commercial areas in the Los Alamos townsite. The most significant chemical of potential concern (COPC) with regard to potential human health risk identified in the sediments of Pueblo Canyon is plutonium-239,240. Plutonium-239,240 and other COPCs have been distributed by floods along the full length of Pueblo Canyon downstream from Acid Canyon. Other COPCs identified in the sediments of Pueblo Canyon include 5 radionuclides, 8 inorganic chemicals, and 29 organic chemicals (see Table 1 and Figure 1.1-1 attached). Plutonium-239,240 in Reach P-1 (approximately 6 miles upstream of the southwestern boundary of the Parcel) is measured at concentrations up to 7000 times the levels associated with fallout from worldwide nuclear tests. All other COPCs are found at much lower concentrations relative to background concentrations or detection limits.

**Is there any record of a hazardous substance having been stored on site?**

No. There is no information that suggests that hazardous substances were stored on site.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater?**

Not applicable.

**Was the amount disposed of or released greater than or equal to the RQ?**

Not applicable.

**Current Regulatory Status:** The Parcel contains no SWMUs within its boundaries. However, the Parcel spans two watersheds (Bayo and Barrancas Canyons) and borders another (Pueblo Canyon). It is currently not known whether the Parcel has been adversely impacted by contaminants transported downstream from PRSs within the Bayo and Barrancas Canyon watersheds. The Parcel has the potential to be impacted by known contaminants in Pueblo Canyon should the floodplain encroach upon the Parcel's southern property boundary. All three watersheds are defined as Areas of Concern (AOCs) and are PRSs by definition. None of these PRSs are currently on the Hazardous and Solid Waste Amendments (HSWA) module of LANL's Resource Conservation and Recovery Act permit; therefore, they are regulated under DOE's authority.

Based on the human health risk assessment performed following the IA investigation and removal of shrapnel in the vicinity of former TA 10, the shrapnel remaining in the area does not pose an unacceptable human health risk. However, the evaluations performed did not include an ecological risk assessment. Therefore, it is not certain whether further remedial actions might be necessary based on the evaluation of ecological risk.

Based on the evaluations performed and presented in the *Evaluation of Sediments in Pueblo Canyon* (see reference below), the levels of contamination in the sediments do not present an unacceptable human health risk under the conditions of present-day land use, including scenarios for trail users, resource users, and construction workers. In addition, because concentrations of contaminants in sediments carried by floods are not increasing over time, and present levels of contamination have not been shown to either cause an unacceptable risk in downstream areas or exceed regulatory standards, no immediate remedial action is required in the context of future remobilization of contaminated sediments.

At this time, the Department of Energy cannot certify that this Parcel meets the Comprehensive Environmental Response, Compensation and Liability Act Section 120(h) requirement that all necessary remedial action has been taken prior to transfer.

**Future Actions Required:** The ER Project is scheduled to implement the North Canyons work plan for investigating the surface water, sediments and alluvial water (where present) in Bayo, Barrancas, Guaje and Rendija canyons in FY04. It is not known if additional remedial actions will be required as a result of this investigation.

An ecological risk assessment of the threat posed by remaining shrapnel in the vicinity of former TA 10 should be performed.

**References:**

"*Work Plan for the North Canyons*," Environmental Restoration Project, September 2001, LA-UR-01-1316.

"*Evaluation of Sediment Contamination in the Pueblo Canyon: Reaches P-1, P-2, P-3, and P-4*," Environmental Restoration Project, December 1998, LA-UR-98-3324.

*"Work Plan for Operable Unit 1049, Los Alamos Canyon and Pueblo Canyon,"* Environmental Restoration Project, November 1995, LA-UR-95-2053.

*"Supplement to Response to Request for Information for the Canyons Investigation Core Work Plan,"* Environmental Restoration Project, January 1998, EM/ER:98-020.

*"Core Document for Canyons Investigations,"* Environmental Restoration Project, April 1997, LA-UR-96-2083.

*"Environmental Restoration Report to Support Land Conveyance and Transfer Under Public Law 105-119,"* Environmental Restoration Project, August 1999, LA-UR-99-4187.

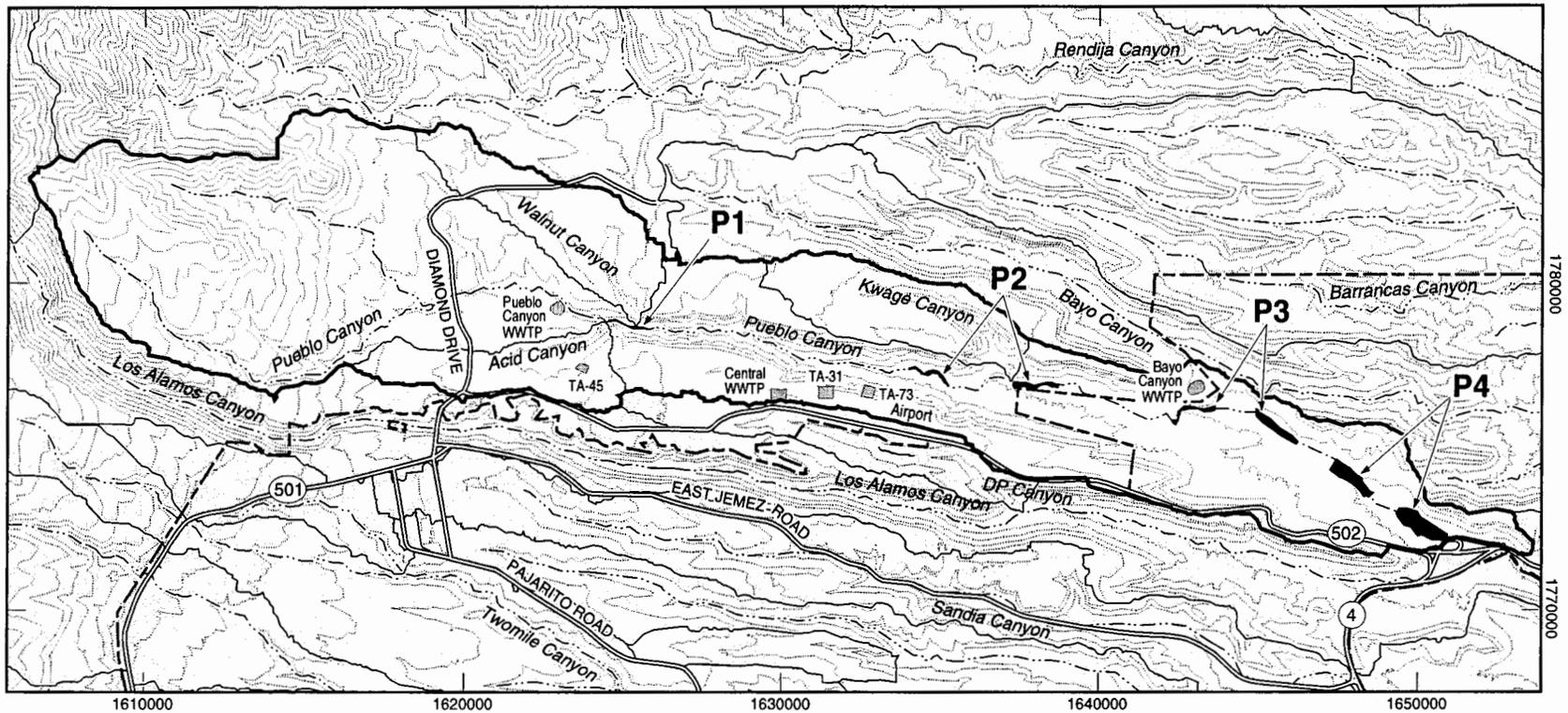
*"Summary of ER Activities to Support Land Conveyance and Transfer at Los Alamos National Laboratory Under Public Law 105-119,"* Environmental Restoration Project, August 1999, LA-UR-99-1018.

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**TABLE 1**  
**SUMMARY OF PUEBLO CANYON COPCs**

COPC and Units	Background Value or Estimated Quantitation Limit	Maximum Result <sup>a</sup>	Reach with Maximum Result
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Americium-241	0.04	10.671	P-1
Cesium-137	0.90	1.53	P-1
Plutonium-238	0.006	2.078	P-1
Plutonium-239,240	0.068	502.01	P-1
Strontium-90	1.03	1.4	P-1
Tritium	0.093	1.21	P-1
<b>Inorganic Chemicals (mg/kg)</b>			
Antimony	0.83	[4.9]	[P-1 and P-4]
Cadmium	0.4	0.92	P-1
Copper	11.2	31.5	P-2
Lead	19.7	77.3	P-1
Mercury	0.1	0.65	P-1
Selenium	0.3	0.98 [1.1]	P-2 [P-1]
Silver	1.0	1.7	P-1
Zinc	60.2	113	P-1
<b>Organic Chemicals (mg/kg)</b>			
Aroclor-1254	0.033	0.238	P-1
Aroclor-1260	0.033	0.117	P-1
Aldrin	0.033	0.00211	P-1
δ-BHC	0.033	0.00197 [0.0023]	P-1 [P-3W]
α-Chlordane	0.0165	0.00497	P-1
γ-Chlordane	0.0165	0.00211 [0.0023]	Acid Cyn [P-3]
4,4'-DDT	0.033	0.00599	Acid Cyn
Acenaphthene	0.33	0.219 [0.344]	P-4 [P-4]
Acenaphthylene	0.33	0.44	P-1
Anthracene	0.33	0.369	P-4
Benz(a)anthracene	0.33	1.0	P-1
Benzo(a)pyrene	0.33	1.7	P-1
Benzo(b)fluoranthene	0.33	2.5	P-1
Benzo(g,h,i)perylene	0.33	0.86	P-1
Benzo(k)fluoranthene	0.33	0.95	P-1
Benzoic acid	0.33	0.75 [3.3]	Acid Cyn [P-1]
Bis(2-ethylhexyl)phthalate	0.33	2.8	P-1
Carbazole	0.33	0.18 [0.34]	P-1 [P-1]
Chrysene	0.33	1.2	P-1
Di-n-octylphthalate	0.33	0.094 [0.66]	P-4 [P-1]
Dibenz(a,h)anthracene	0.33	0.28 [0.66]	P-1
Dibenzofuran	0.33	0.18 [0.344]	P-4 [P-4]
Fluoranthene	0.33	1.9	P-1
Fluorene	0.33	0.294 [0.344]	P-4 [P-4]
Indeno(1,2,3-cd)pyrene	0.33	0.88	P-1
2-Methylnaphthalene	0.33	0.167 [0.66]	P-4 [P-1]
Naphthalene	0.33	0.374	P-4
Phenanthrene	0.33	1.505	P-4
Pyrene	0.33	2.2	P-1
<p>a. Values in brackets indicate that the maximum result is reported as a nondetect.  b. PCWWTP = Pueblo Canyon Wastewater Treatment Plant  c. nps = nonpoint sources</p>			



F1.1-1 / PUEBLO CANYON REACH RPT / 081398

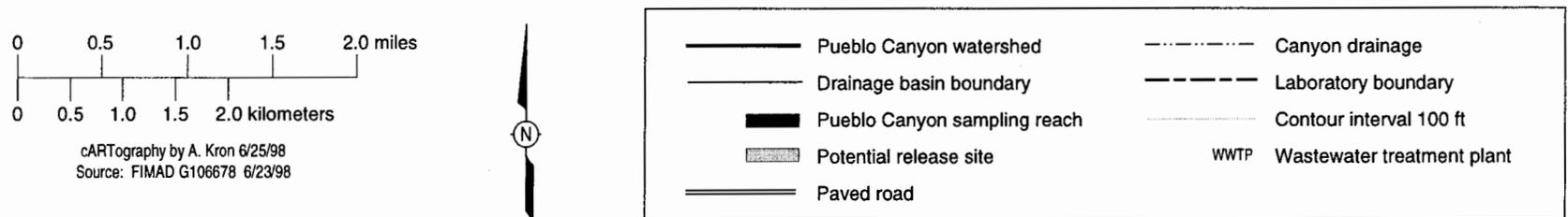


Figure 1.1-1. Pueblo Canyon watershed.

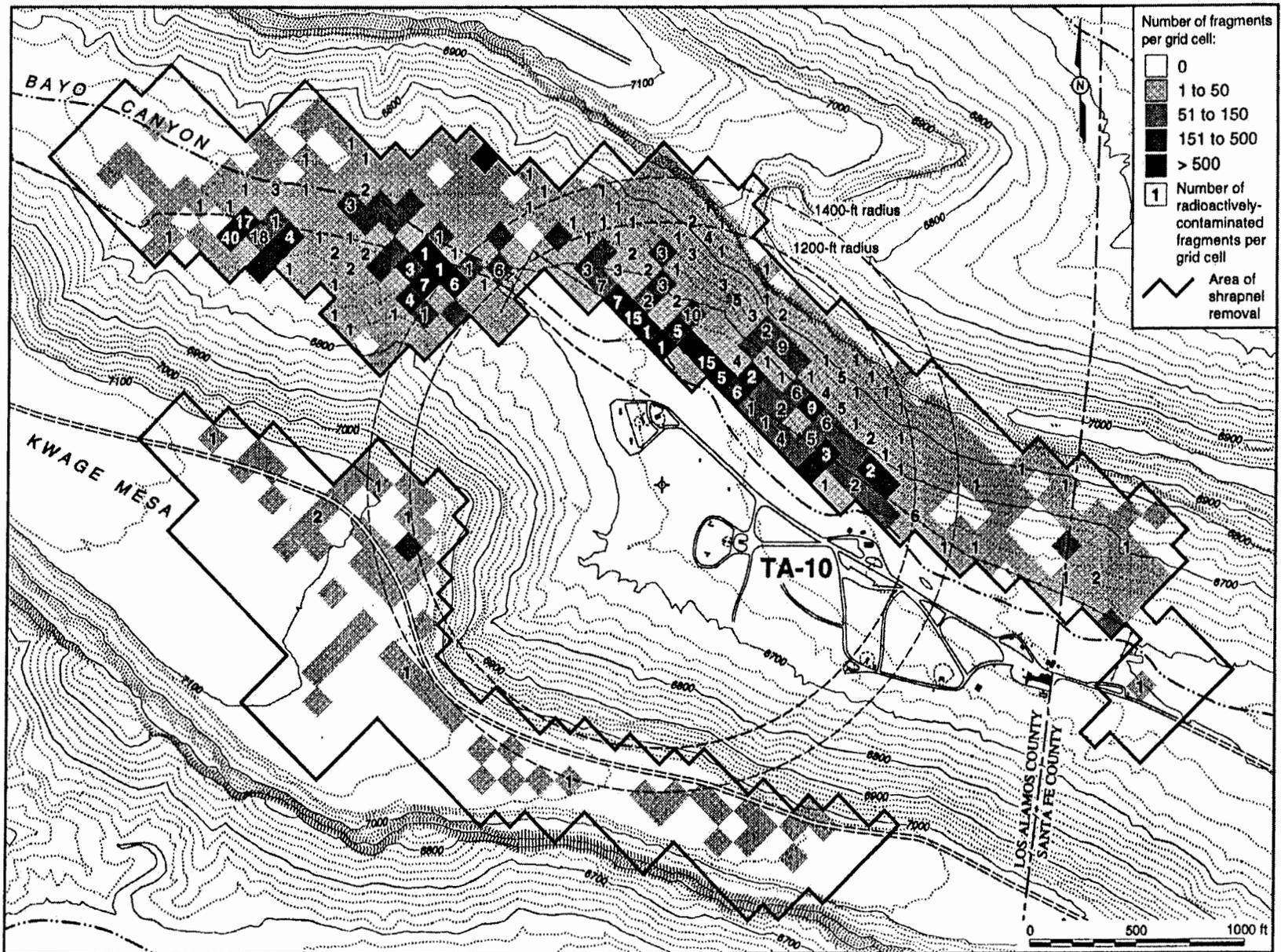


Figure 2.3-1. Area of shrapnel removal in middle Bayo Canyon

## White Rock "Y" Parcel – San Ildefonso Tract

**Location:** Portion Pueblo Canyon

**Description:** The White Rock "Y" Parcel – San Ildefonso Tract (the "Parcel") incorporates portions of the alignments and intersections of State Route 502 and State Route 4. The Parcel is approximately 26 acres and includes the state-owned, grade-separated intersection and surrounding land known as the "White Rock Y." This Parcel is undeveloped except for the major transportation routes connecting Los Alamos with northern New Mexico.

**History:** Although the Parcel contains no solid waste management units (SWMUs) within its boundaries, the Parcel includes a portion of the stream channel and flood plain of Pueblo Canyon. Pueblo Canyon is known to have received contaminants from multiple potential release sites (PRSs) within this watershed located upstream from this Parcel. The most significant contaminant source was former Technical Area (TA) 45, where radioactive effluent was discharged between 1944 and 1964 into Acid Canyon, a small tributary to Pueblo Canyon located approximately 6 miles upstream from the southwestern boundary of the Parcel. Other PRSs that may have contributed contaminants to Pueblo Canyon are located in TAs 0, 31, and 73. Contaminants may also have originated from residential and commercial areas in the Los Alamos townsite. The most significant chemical of potential concern (COPC) with regard to potential human health risk in the sediments of Pueblo Canyon is plutonium-239,240. Plutonium-239,240 and other COPCs have been distributed by floods along the full length of Pueblo Canyon downstream from Acid Canyon. Other COPCs identified in the sediments of Pueblo Canyon include 5 radionuclides, 8 inorganic chemicals, and 29 organic chemicals (see Table 1 and Figure 1.1-1 attached). Plutonium-239,240 in Reach P-1 (approximately 6 miles upstream of the southwestern boundary of the Parcel) is measured at concentrations up to 7000 times the levels associated with fallout from worldwide nuclear tests. All other COPCs are found at much lower concentrations relative to background concentrations or detection limits.

**Is there any record of a hazardous substance having been stored on site?**

No. There is no information that suggests that hazardous substances were stored on site.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater?**

Not applicable.

**Was the amount disposed of or released greater than or equal to the RQ?**

Not applicable.

**Current Regulatory Status:** The Parcel contains no SWMUs within its boundaries. However, the Parcel spans a portion of Pueblo Canyon that has been adversely impacted by contaminants transported downstream from PRSs within the Pueblo Canyon watershed. The Pueblo Canyon watershed is defined as an Area of Concern (AOC), which is a PRS by definition. Pueblo Canyon is not currently on the Hazardous and Solid Waste Amendments (HSWA) module of LANL's Resource Conservation and Recovery Act permit; therefore, it is regulated under DOE's authority.

Based on the evaluations performed and presented in the *Evaluation of Sediments in Pueblo Canyon* (see reference below), the levels of contamination in Pueblo Canyon sediments do not present an unacceptable human health risk under the conditions of present-day land use, including scenarios for trail users, resource users, and construction workers. In addition, because concentrations of contaminants in sediments carried by floods are not increasing over time and present levels of contamination have not been shown to either cause an unacceptable risk in downstream areas or exceed regulatory standards, no immediate remedial action is required in the context of future remobilization of contaminated sediments.

At this time, the Department of Energy cannot certify that this Parcel meets the Comprehensive Environmental Response, Compensation and Liability Act Section 120(h) requirement that all necessary remedial action has been taken prior to transfer.

**Future Actions Required:** The Environmental Restoration Project intends to complete all sediment, surface water and alluvial groundwater investigations in Los Alamos and Pueblo Canyons and begin the preparation of a surface aggregate report detailing these investigations in fiscal year 2002.

**References:**

*"Evaluation of Sediment Contamination in the Pueblo Canyon: Reaches P-1, P-2, P-3, and P-4,"* Environmental Restoration Project, December 1998, LA-UR-98-3324.

*"Work Plan for Operable Unit 1049, Los Alamos Canyon and Pueblo Canyon,"* Environmental Restoration Project, November 1995, LA-UR-95-2053.

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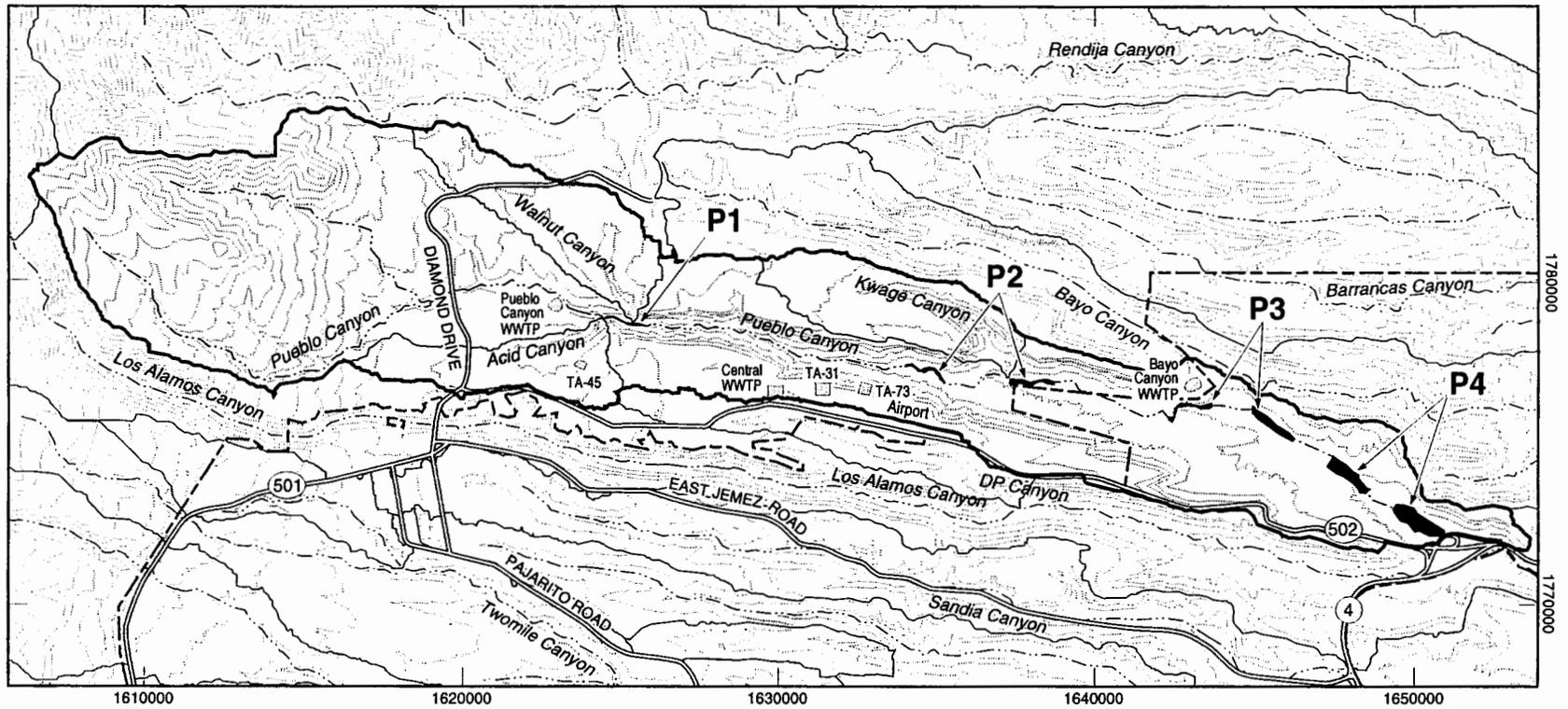
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F1.1-1 / PUEBLO CANYON REACH RPT / 081398

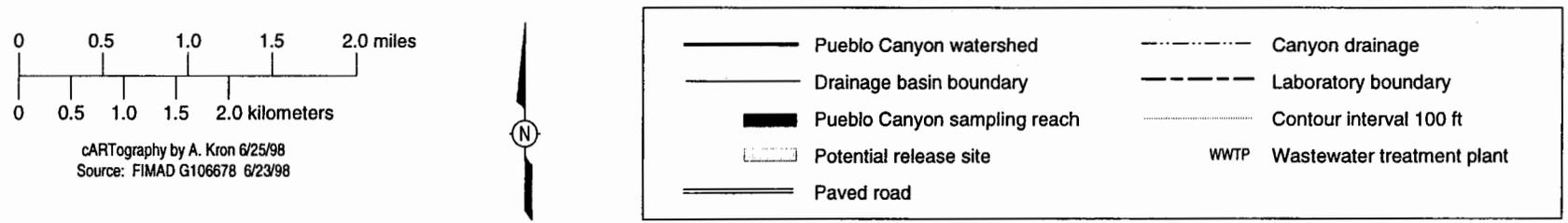
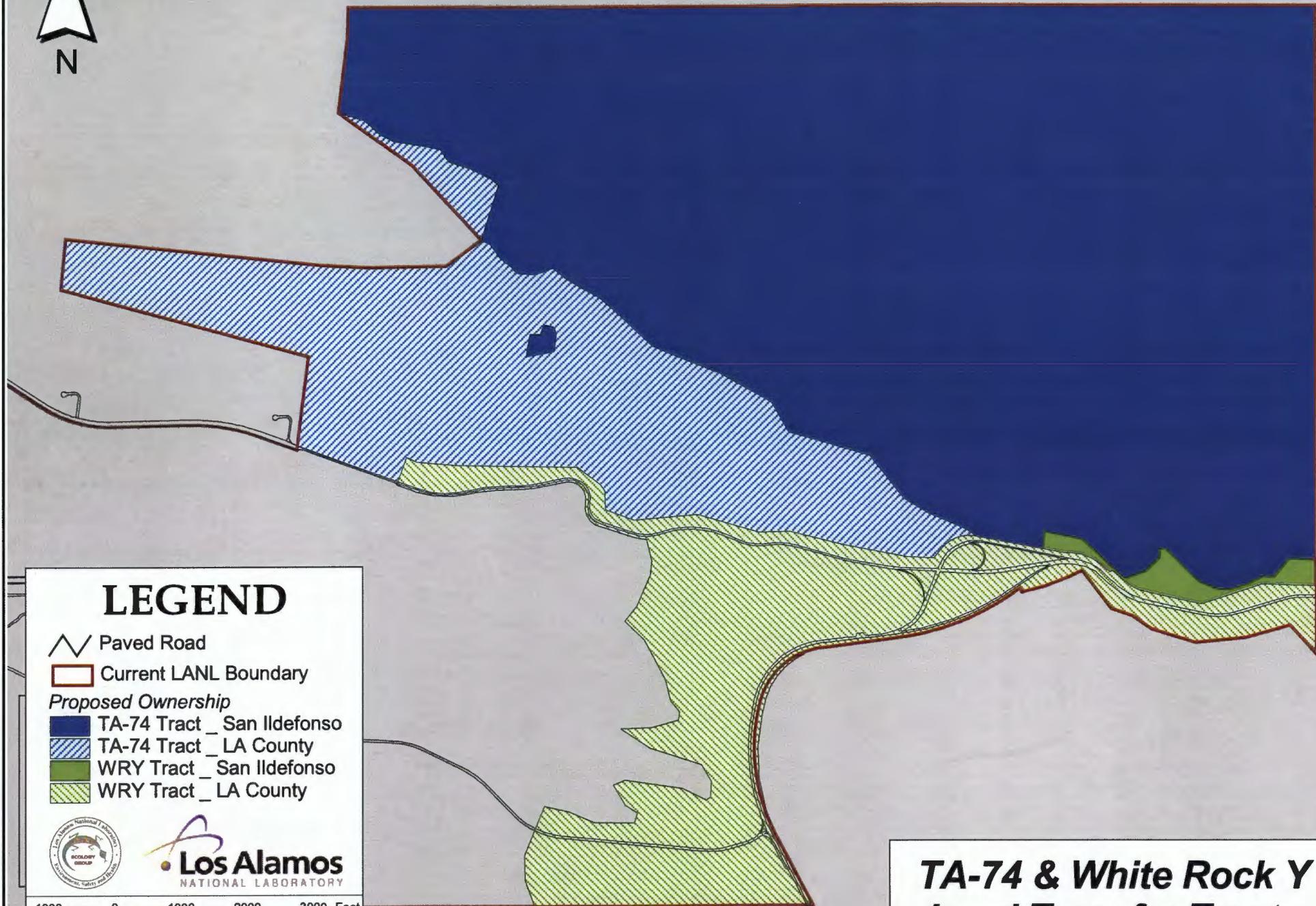


Figure 1.1-1. Pueblo Canyon watershed.

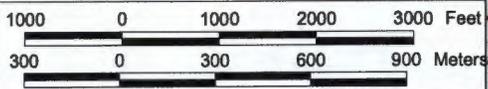
# **Appendix D**

## **Site Map**



# LEGEND

-  Paved Road
-  Current LANL Boundary
- Proposed Ownership*
-  TA-74 Tract \_ San Ildefonso
-  TA-74 Tract \_ LA County
-  WRY Tract \_ San Ildefonso
-  WRY Tract \_ LA County



**TA-74 & White Rock Y  
Land Transfer Tracts**

**Environmental Baseline Survey**  
**for**  
**C-1**  
**White Rock Tract**  
**New Mexico State Highway Department Portion**

Pursuant to the US Department of Energy  
Cross-Cut Guidance on Environmental Guidance  
for DOE Real Property Transfers

April 25, 2002

**Environmental Baseline Survey**  
**for**  
**C-1**  
**White Rock Tract**  
**New Mexico State Highway Department Portion**

**Executive Summary**

This document, "Environmental Baseline Survey for C-1, White Rock Tract", was prepared in accordance with the "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers" in preparation of transferring ownership of the highway portion of the White Rock Tract (hereafter referred to as "White Rock Highway Tract") at Los Alamos National Laboratory from the US Department of Energy (DOE), National Nuclear Security Administration (NNSA)<sup>1</sup> to the New Mexico State Highway Department as stipulated by Los Alamos County pursuant to Public Law 105-119, Section 632. It discusses NNSA compliance with the environmental requirements associated with real property transfers. It also demonstrates that, although potentially contaminated, White Rock Highway Tract is in such condition that NNSA may issue deeds on the basis that "all remedial action necessary to protect human health and the environment has been taken".

The methodology used to prepare this report was to:

- conduct an environmental site assessment of White Rock Highway Tract consistent with the American Society of Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to White Rock Highway Tract,
- perform a physical examination of the White Rock Highway Tract, and
- consult with both University of California and NNSA staff to confirm existing information or develop additional information.

Based on this assessment, it has been determined that White Rock Highway Tract has:

- one potential release site (PRS) within its boundaries; however, an investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Canada del Buey located within the White Rock Highway Tract,

---

<sup>1</sup> Congress established the National Nuclear Security Administration (NNSA) within the DOE to manage the nuclear weapons program for the United States. Los Alamos National Laboratory (LANL or Laboratory) is one of the facilities now managed by the NNSA. The NNSA officially began operations on March 1, 2000. Its mission is to carry out the national security responsibilities of the DOE, including maintenance of a safe, secure, and reliable stockpile of nuclear weapons and associated materials capabilities and technologies; promotion of international nuclear safety and nonproliferation; and administration and management of the naval nuclear propulsion program.

- no record that hazardous substances were ever stored at this site, and
- no requirements for future remedial clean-up activities.

Analyses indicate that air quality is good.

There are no known springs or wetlands within White Rock Highway Tract boundaries, nor do regional aquifer groundwater test or supply wells exist within the tract or within a distance of 0.5 miles of the tract. No surface or groundwater contamination is known to exist at White Rock Highway Tract, and White Rock Highway Tract does not lie within the 100-year or 500-year floodplains.

No habitat for threatened and endangered species overlaps White Rock Highway Tract.

A complete archaeological survey of White Rock Highway Tract identified no prehistoric resources nor do traditional cultural properties (TCPs) exist on this tract.

Based on this information, the University of California and NNSA conclude that there are no outstanding environmental issues to prevent conveyance or transfer of White Rock Highway Tract to Los Alamos County.

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## **1.0 Purpose of the Environmental Baseline Survey**

On November 26, 1997, Congress passed Public Law 105-119. Section 632 of that law directed the Secretary of Energy to convey to the Incorporated County of Los Alamos, New Mexico, or to the designee of the County and transfer to the Secretary of the Interior, in trust for the Pueblo of San Ildefonso, parcels of land under the jurisdictional administrative control of the Secretary at or in the vicinity of Los Alamos National Laboratory. Such parcels, or tracts, of land must meet the suitability criteria established by the law, that is, they are not required for the national security mission before the end of the 11/26/2007; can be restored or remediated by 11/26/2007; and are suitable for historic, cultural or environmental preservation, economic diversification, or community self-sufficiency. The DOE<sup>2</sup> identified 10 tracts of land for potential transfer to the County of Los Alamos or to San Ildefonso Pueblo. These 10 tracts of land have been further divided into sub-parcels for transfer purposes.

DOE's "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers (DOE/EH-413/9712) provides guidance on the types of information needed to support real property transfers. Information such as the presence of floodplains and wetlands; critical habitats; historic properties; and hazardous substances must be gathered and provided to the potential recipients of the property. This document provides the relevant environmental information as outlined in the Cross-Cut Guidance and provides references to more detailed information.

### **1.1 Boundaries of Property and Scope of Survey**

The White Rock Tract consists of about 100 acres and is located north of the White Rock residential community (see Appendix D). The White Rock Tract was subdivided into three sub-parcels: sub-parcel B-1 going to San Ildefonso, sub-parcel A-19 going to Los Alamos County, and sub-parcel C-1 going to the New Mexico State Highway Department. This Environmental Baseline Survey addresses sub-parcel C-1 identified as the White Rock Highway Tract in this report. It includes New Mexico Highway 4 and its right-of-way. It is bounded by sub-parcel A-19 to the north, LANL's current low-level radioactive waste facility (Technical Area (TA) 54) to the west, and the town of White Rock to the south. The Pueblo of San Ildefonso owns the lands to the east.

The legal property boundary description of the whole White Rock tract is provided by the Army Corps of Engineers Title Report, "White Rock Tract at Los Alamos, New Mexico",

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<sup>2</sup> Congress established the National Nuclear Security Administration (NNSA) within the DOE to manage the nuclear weapons program for the United States. Los Alamos National Laboratory (LANL or Laboratory) is one of the facilities now managed by the NNSA. The NNSA officially began operations on March 1, 2000. Its mission is to carry out the national security responsibilities of the DOE, including maintenance of a safe, secure, and reliable stockpile of nuclear weapons and associated materials capabilities and technologies; promotion of international nuclear safety and nonproliferation; and administration and management of the naval nuclear propulsion program.

September 14, 1998. The description of subparcel C-1 is contained in the Army Corps of Engineers survey and property description.

The scope of this Environmental Baseline Survey was to identify potential environmental issues associated with White Rock Highway Tract that might impact transfer of ownership.

## **2.0 Survey Methodology**

The methodology used to prepare this report was to:

- conduct an environmental site assessment of White Rock Highway Tract consistent with the American Society of Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to White Rock Highway Tract,
- perform a physical examination of White Rock Highway Tract, and
- consult with both University of California and NNSA staff to confirm existing information or develop additional information.

## **2.1 Approach and Rationale**

Historical and current information (see 2.1.1 below) for White Rock Highway Tract was reviewed, and the site was physically visited and surveyed. After determining the nature and quality of available information, UC and NNSA staff were consulted to confirm existing information or develop new information as needed. Collectively, this survey addressed air quality, water quality (surface and groundwater), soil and sediment contamination, and any structures, waste sites, natural resources or other environmental concerns present at the site.

To conduct this assessment it was assumed that the White Rock Highway Tract parcel boundaries were established and not subject to significant change. Environmental conditions and associated information were evaluated based upon those boundaries.

### **2.1.1 List and Description of Documents Reviewed**

In addition to the documents listed below, the Environmental Site Assessment (Appendix B) identifies additional resources used in this evaluation.

1. "Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory", US Department of Energy, DOE/EIS-0238, January 1999.
2. "Final Environmental Impact Statement for the Conveyance and Transfer of Certain Tracts Administered by the US DOE and Located at Los Alamos National Laboratory", US Department of Energy, DOE/EIS-0293, October 1999

3. "Final Environmental Restoration Report to Support Land Conveyance and Transfer under Public Law 105-119", Los Alamos National Laboratory, LA-UR-99-4187, August 1999
4. "Combined Data Report to Congress to Support Land Conveyance and Transfer under Public Law 105-119", US Department of Energy, Unnumbered Report, January 2000.
5. "Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico", U.S. Department of Energy, Report to Congress Under Public Law 105-119, Unnumbered Report, September 2000.
6. "White Rock Tract at Los Alamos, New Mexico", U.S. Army Corps of Engineers Title Report, September 14, 1998.
7. LANL Hazardous Waste Facility Permit, NM 0890010515-1, 11/8/89
8. "Environmental Surveillance at Los Alamos During 1999", Los Alamos National Laboratory, LA-13775-ENV, December 2000.
9. "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers", U.S. Department of Energy, DOE/EH-413/9712, October 1997
10. "Threatened and Endangered Species Habitat Management Plan," Los Alamos National Laboratory, August 1998.
11. "A Status Report on Threatened and Endangered Species, Wetlands, and Floodplains for the Proposed Conveyance and Transfer Tracts at Los Alamos National Laboratory, Los Alamos, New Mexico", Los Alamos National Laboratory, July 1998.
12. LANL Draft Watershed Management Plan
13. LANL Environmental Restoration Project Baseline, WBS 1.4.2.6.01.02.24.JG.
14. "Endangered Species Act", United States Code, Washington, D.C., Title 16, Conservation; Chapter 35, Endanger Species Act, December 1973.

### **2.1.2 Inspections of Properties Conducted and Personnel Contacted**

The Environmental Site Assessment (Appendix B) identifies personnel contacted during this evaluation.

### **3.0 Summary of Data**

Sub-parcel C-1, the White Rock Highway Tract, includes New Mexico Highway 4 and its right-of-way. It is bounded by sub-parcel A-19 to the north, LANL's current low-level radioactive waste facility (Technical Area (TA) 54) to the west, and the town of White Rock to the south. The Pueblo of San Ildefonso owns the lands to the east.

Vegetation at the tract includes grasses and small shrubs within the highway right-of-way. This sub-tract was historically part of Technical Area 54 but is separated from the developed portions of Technical Area 54 by elevation. The tract was never used for LANL activities beyond serving as a buffer area between residents and LANL operations, and providing the access road to White Rock and TA-54.

Existing land use at the White Rock Highway Tract includes a paved highway and its right-of-way.

Adjacent land uses are based on that of the White Rock commercial and residential activities and include retail and light commercial industry, offices, commercial storage, single-family dwellings, and a small amount of high-density residential areas (approximately 9 acres). The largest and most active businesses serve the local communities, including a supermarket, gas stations, and local retail establishments. Land use to the north includes the open areas of undeveloped Pueblo land.

Other land use involves structures or facilities that are associated with Federal, State, or local permits. A water monitoring well and a stream gauging station exist next to the tract adjacent to State Road 4.

### **3.1 History and Current Use**

Prior to LANL occupancy (pre-1943), there was little development or other documented activity in this remote area. A 1924 Forest Service map shows a wooded area with a trail winding through the area in approximately the same location as the current State Road 4.

Beginning in 1947, the White Rock townsite was used by the Atomic Energy Commission to temporarily house construction workers working in Los Alamos. More permanent homes in this area were constructed in the early 1960s.

The White Rock parcel itself has traditionally served to buffer the town of White Rock from Laboratory activities and continues this tradition today. Adjacent to this parcel are several Laboratory air monitoring stations and a monitoring station that is part of a community-based monitoring network. Located on the parcel itself is a stream gauging station maintained by the USGS.

The eastern most part of the White Rock Highway Tract is located in the lower reaches of Canada del Buey canyon. An investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Canada del Buey located within the White Rock Highway Tract.

## **3.2 Environmental Setting**

White Rock Highway Tract consists of New Mexico State Highway 4 and its right-of-way. There are no known threatened or endangered species present on or adjacent to the tract. Immediately south of the tract is the town of White Rock; the rest of the tract to the north, east, and west is surrounded by undeveloped land. The developed portions of Technical Area 54, west of the tract, is several hundred meters distant.

Noise is from motorized vehicles on State Road 4 and business operations along the south side of State Road 4. Artificial light sources associated with commercial development and vehicles also are present.

### **3.2.1 Stormwater Runoff Patterns**

The tract is transected by Cañada del Buey, which is an ephemeral stream in the vicinity of the tract. Surface water from the tract flows into Cañada del Buey, through a culvert under State Road 4, through the community of White Rock and ultimately into the Rio Grande.

There are no known springs under the highway or within the highway right-of-way.

### **3.2.2 Hazardous Materials and Waste Management**

Not applicable. No current or historic hazardous waste generation or disposal are associated with this site.

### **3.2.3 CERCLA-Related Contamination**

None identified (see Appendix A and C). Although the White Rock parcel contains no solid waste management units (SWMUs), the stream in Canada del Buey, an area of concern (AOC), and therefore, by definition, a potential release site, flows through a culvert under the highway. However, an investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Canada del Buey located within or immediately adjacent to the White Rock Highway Tract.

### **3.2.4 Storage Tanks and Pipelines**

None identified. Historical records do not indicate that storage tanks existed at this site.

### **3.2.5 Wastewater Treatment and Disposal**

Not applicable. No current or historic wastewater treatment and disposal facilities are associated with this site. There are and have been no wastewaters discharged at this site, and there are no records of septic systems on-site. In addition, there are no process-related water uses on this parcel.

### **3.2.6 Lead in Drinking Water**

Not applicable. There are no water supply wells at this site, and there are no known sources of potential lead contamination associated with this site.

### **3.2.7 Oil Water Separator**

Not applicable. No current or historic use of oil water separators are associated with this site.

### **3.2.8 Asbestos**

Not applicable. There appear to be no facilities or structures located on this land parcel that contain asbestos as defined by 29 CFR 1926.1101.

### **3.2.9 Air**

Not applicable.

### **3.2.10 Lead-Based Paint Surveys and Other Sources of Lead**

Not applicable. There are no known sources of lead at this site.

### **3.2.11 PCBs**

Not applicable. LANL's PCB database shows that no PBC-containing equipment was used, stored or disposed on this tract. There is a transformer station, not associated with LANL, located on this tract, but during the site visit there was no staining or other indications of oil releases to the environment.

### **3.2.12 Pesticides**

Not applicable. There are no records of pesticides being used or stored at this site.

### **3.2.13 Medical Wastes**

Not applicable. There are no records of medical wastes being generated or disposed at this site.

### **3.2.14 Ordnance**

Not applicable. There are no records of ordnance being used, stored, or disposed at this site.

### **3.2.15 Radioactive Materials and Wastes**

A portion of the tract lies within the stream channel and floodplain of Cañada del Buey, and sampling of this canyon system has detected low levels of several radioactive isotopes. However, an investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Canada del Buey located under or adjacent to the White Rock Highway Tract.

### **3.2.16 Radon**

Not applicable.

### **3.2.17 Groundwater**

Not applicable. There are no supply wells located on this site, and there is no known contamination at this site that would impact these resources.

## **3.3 Natural and Cultural Resources**

The White Rock Highway Tract consists of State Highway 4 and its right-of-way. Native grasses and small shrubs occupy the right-of-way.

One hundred percent of the White Rock Highway Tract has been inventoried for historic and prehistoric cultural resources. Survey results indicate that there are no prehistoric sites or historic sites within the tract. The Pueblo of San Ildefonso has indicated, in general terms that TCPs are present near this tract. TCPs would not be anticipated in developed parts of the tract.

## **3.4 Identification of Uncontaminated Properties**

The entire White Rock Highway Tract is uncontaminated. White Rock Highway Tract does not have environmental contamination as defined by CERCLA 120(h)(4).

## **3.5 All Other Properties**

Not applicable. There are no other properties associated with this site

## **4.0 Summary of Data for Adjacent Properties**

The adjacent properties consist of the town of White Rock to the south and TA-54 to the west. The remaining lands are undeveloped.

The White Rock Highway Tract is not listed in any of the databases searched in accordance with the requirements of the ASTM Standard Practice for Environmental Site Assessments (ASTM E 1527-00). Given the database search results and based on an inspection of the surrounding properties from publicly accessible areas, none of the

neighboring operations is believed to pose a significant potential concern for environmental conditions on the subject property.

The environmental database search also identified 37 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). Based on the area tour, only two of these listed "orphan" sites are believed to be located within 1 mile of the subject property. The Metzger's located on Highway 4 has underground storage tanks that appear on the New Mexico UST registry, and LANL Material Disposal Area J is located at TA-54, west of the subject parcel. Neither of these sites is believed to pose a potential concern for environmental conditions on the subject property.

#### **4.1 History and Current Use**

Beginning in 1947, the White Rock townsite was used by the Atomic Energy Commission to temporarily house construction workers working in Los Alamos. More permanent homes in this area were constructed in the early 1960s.

#### **4.2 Environmental Setting**

The adjacent lands to the south are industrialized and mostly paved (the business strip that supports the town of White Rock). The area to the west contains the Laboratory's solid radioactive waste management facility (Area G). To the north and east the lands are undeveloped. Vegetation in this region is typified by pinyon-juniper woodlands intermingled with shrub-grassland.

#### **4.3 Adjacent Properties with No Known or Suspected Releases**

The undeveloped lands to the north and east of the White Rock Highway Tract are not known to contain contaminants.

#### **4.4 Adjacent Properties with Known or Suspected Releases**

Both Technical Area 54 to the west, and the town of White Rock to the south would be expected to have the typical releases associated with towns and the handling of wastes.

#### **5.0 Conclusions and Recommended Courses of Action**

NNSA and UC health and safety professionals have reviewed environmental conditions at this parcel and have determined that no special precautions are required.

Based on best available environmental information, the University of California and the Department of Energy conclude that there are no outstanding environmental issues to prevent conveyance or transfer of this tract. NNSA may issue deeds on the basis that "all remedial action necessary to protect human health and the environment have been taken".

### **5.1 Facility Matrix**

Not applicable. There are no structures on this site.

### **5.2 Property Categorization**

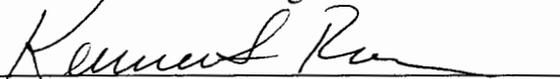
Not applicable. All lands at White Rock Highway Tract are categorized the same.

### **5.3 Resource Map**

Not applicable. No hazardous materials were identified, and no water supply wells are located on this property.

### **6.0 Certification of Environmental Baseline Survey**

Los Alamos National Laboratory staff and Environmental Contractors conducted this Environmental Baseline Survey. The information contained in this document is accurate to the best of our knowledge.



Kenneth Rea, RRES-ECO  
LANL Land Transfer

# **Appendix A**

## **CERCLA 120(h)**

**NOTICE of CERCLA 120(h) INFORMATION FOR PROPERTY SUBJECT TO  
CONVEYANCE AND TRANSFER:**

**C-1, White Rock Tract (NM State Highway & Transportation Department Portion)**

**Purpose:**

The purpose of this document is to meet the reporting requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 120(h) for the conveyance and transfer of the parcel of land identified as the White Rock (WR) Tract. *The information contained in this notice is required under authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) 42 U.S.C. section 9620(h).* This report describes the methodology used to evaluate whether any hazardous substances meeting the CERCLA reporting requirements were stored, released, or otherwise managed at the White Rock Tract and identifies those materials. **NOTE:** Upon transfer, the WR Tract will be divided with portions of the tract being conveyed to the Pueblo of San Ildefonso (the Pueblo), the County of Los Alamos (the County), and the New Mexico State Highway & Transportation Department (NMSHTD). This report addresses only that portion being transferred to the New Mexico State Highway & Transportation Department, C-1. [Reference: *Notice of CERCLA 120(h) Information for Property Subject to Conveyance and Transfer: White Rock Tract (Tribal Portion)* and *Notice of CERCLA 120(h) Information for Property Subject to Conveyance and Transfer: White Rock Tract (Los Alamos County Portion)*]

CERCLA 120(h) and the implementing regulations at 40 CFR 373 require the DOE, when entering into the sale or transfer of real property, to disclose whether any hazardous substances [as defined by CERCLA] have been stored for more than one year in quantities greater than or equal to 1000 kg or the reportable quantity (RQ); any hazardous substances known to be released or disposed of [on the C-1 tract]; and any acutely hazardous wastes stored for one year or more and in quantities greater than or equal to 1 kg.

**Location:**

The White Rock tract is located at the southeastern extremity of TA-54, on the north side of, and roughly parallel to, State Rd. 4 between its intersections with Pajarito Road to the west and with Rover Boulevard to the east. C-1, the portion of the WR Tract being conveyed to the NMSHTD, is a strip of land from the intersection of NM State Rd. 4 and Pajarito Rd. on the south end to the intersection of the NM State Rd. 4 and Rover Blvd. on the north end, and extending approximately seventy five (75) feet from the centerline on either side of the road.

**Methodology:**

The information in this report and its attachments is based on a review of available records and interviews. The reviews conducted by the Laboratory's Water Quality Group, the Hazardous and Solid Waste Group, and the Air Quality Group, included a review of Laboratory and group files

and databases on chemical inventories and usage; solid and hazardous waste management and storage; releases and spills; emergency response, and PCB equipment.

**Is there any record of a hazardous substance having been stored on site?**

No records of hazardous substances having been used, stored, released, or disposed on the C-1 tract have been observed. See Appendix C for information on Environmental Restoration Project activities and PRSs.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater; and, was the hazardous substance stored for one year or longer?**

No records of hazardous substances having been used, stored, released, or disposed on the C-1 tract have been observed. See Appendix C for information on Environmental Restoration Project activities and PRSs.

**Was the amount disposed of or released greater than or equal to the RQ?**

No records of hazardous substances having been used, stored, released, or disposed on the C-1 tract have been observed. See Appendix C for information on Environmental Restoration Project activities and PRSs.

**Current Regulatory Status:** The C-1 portion of the White Rock tract does not currently have any operations that are included in the Laboratory's Hazardous Waste Facility Permit. However, any potential release sites (PRS) are subject to RCRA corrective action requirements and associated conditions in Module VIII of the Permit. See Appendix C for more information on PRS's.

**Appendix B**  
**Environmental**  
**Assessment**

# **ENVIRONMENTAL ASSESSMENT**

## **Land Transfer Parcel, White Rock, New Mexico State Highway Department Portion**

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**Prepared For: THE DEPARTMENT OF  
ENERGY**

**March 26, 2002**

Revision 0

## **EXECUTIVE SUMMARY**

This report presents a findings summary for an assessment of the actual and potential environmental concerns associated with the portion of the White Rock parcel being conveyed to the New Mexico State Highway Department. The White Rock parcel is located adjacent to State Road 4 in White Rock, Los Alamos County, NM. The portion of the parcel that is the subject of this report is a narrow strip that begins just north of State Road 4 and ends at the southern boundary of the White Rock parcel. The rest of the parcel, which lies to the north of the subject parcel, is being transferred or conveyed to the U.S. Department of Interior in trust for San Ildefonso Pueblo or to Los Alamos County. For linguistic ease, the portion of the parcel that is the subject of this report is simply referred to as the White Rock parcel for the remainder of the report. Exhibit 1 (at the end of this executive summary) provides a descriptive summary for the White Rock parcel and Exhibit 2 (also at the end of this executive summary) summarizes the known history of this site. Los Alamos National Laboratory conducted its first assessment on August 28, 2000 and a subsequent assessment on September 10, 2001, at the request of the U.S. Department of Energy. The LANL site assessors for this assignment were Ms. Jennifer Pope and Ms. Virginia Smith.

This assessment (hereafter referred to as an environmental site assessment (ESA)) was conducted pursuant to a scope of work consistent with the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-00); along with an additional off-site disposal practices review (including evaluating whether the subject site is listed as a potentially responsible party (PRP) at an off-site waste disposal site); and an examination of possible asbestos-containing materials (ACMs). A specific discussion of the tasks undertaken is set forth in Attachment A. LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this assessment.

It is LANL's understanding and agreement that the DOE may provide this report to the recipient of the subject parcel, as well as to the public. The parcel recipient may provide this report to third parties and other financing institutions and institutional lenders connected with the contemplated transaction (including, without limitation, any such party providing financing on or after consummation of the contemplated transaction and all assignees and participants of any of the foregoing), and that these parties may rely on the information in the report to the same extent as and subject to the same restrictions agreed to by DOE.

## **1.2            *LIMITATIONS***

All the information contained in this report, including any engineering conclusions, is based on the information made available to LANL's site assessor during the investigation, which we assume to have been provided in good faith. This report represents an assessment of the White Rock parcel performed in accordance with generally accepted industry standards regarding environmental assessments. LANL makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to ownership of any property or the application of any law to the facts set forth herein. Except as otherwise may be requested by DOE, LANL disclaims any obligation to update the report for events taking place after the time during which we conducted our assessment.

**Exhibit 1. White Rock Parcel Description Summary**

# of Acres	# of Buildings (approx. total sq. ft)	# of Potential Release Sites (and remediation status)	Current Activities
Approximately 20.1 in the portion of the parcel designated for conveyance to the New Mexico State Highway Department.	None.	None. Canada del Buey is an area of concern that was characterized by the LANL Environmental Restoration Project in 2000, and results demonstrated that no contaminants are present at levels greater than background.	No LANL operations are undertaken at this parcel.

**Exhibit 2. White Rock Parcel Site History Summary**

<b>Site History Prior to LANL Occupancy</b>	<p>Prior to LANL occupancy (pre-1943), there was little development or other documented activity in this remote area. A 1924 Forest Service map shows a wooded area with a trail winding through the area in approximately the same location as the current State Road 4.</p>
<b>Site History After LANL's Occupancy</b>	<p>Beginning in 1947, the White Rock townsite was used by the Atomic Energy Commission to temporarily house construction workers working in Los Alamos. More permanent homes in this area were constructed in the early 1960s.</p> <p>The White Rock parcel has traditionally served to buffer the town of White Rock from Laboratory activities and continues to serve in this capacity today. Several Laboratory air monitoring stations are immediately adjacent to the parcel, as is a monitoring station that is part of a community-based monitoring network. Located on the parcel itself is a stream gauging station maintained by the USGS. The closest Laboratory operations to the parcel are the waste management activities conducted at TA-54, which is situated to the west of the parcel.</p> <p>The White Rock parcel is located in the lower reaches of Canada del Buey. The Environmental Restoration Project (LANL) conducted sampling in July 2000 in Canada del Buey to determine if contamination resulting from Laboratory activities exists at this site. The results demonstrated that no contaminants exist at levels exceeding background concentrations.</p>

**ATTACHMENT A**

**ASSESSMENT METHODOLOGY**

This environmental assessment, consistent with the ASTM Practice E 1527-00 (with added evaluations of ACMs, and possible wetland areas), consisted, in general, of the following steps:

- We met with the following individuals at LANL to discuss parcel-specific environmental and occupational health and safety (EH&S) issues:
  - Mr. Albert Dye, ESH-19, PCB Database Manager;
  - Ms. Debra Archuleta, ESH-17, Asbestos Program Manager;
  - Mr. David Ortiz and Ms. Josie Encinias, ESH-5, Asbestos Management Program;
  - Ms. Louann Romero, ESH-19, HSTD Database Manager;
  - Mr. Harvey Decker, ESH-18, SPCC and SWPPP Plans;
  - Mr. William Flor, HAZMAT Spills Database Manager; and
  - Ms. Jean Dewart, ESH-17, Air Quality Program.
  
- We visited the facility on August 28, 2000, and again on September 10, 2001 and March 22, 2002 to gather more detailed information concerning possible on-site contamination, and to determine the compliance status of the parcel. Before, during and after the first visit, we interviewed site personnel about past and present site operations, raw materials and waste management practices, and significant environmental liability problems, if any. We did not conduct additional interviews after the second or third site visits, because there are no ongoing LANL operations at the subject parcel. We also observed actual site conditions in an attempt to identify and assess the status of potential liabilities such as past disposal areas, waste management units and systems, and sites of environmental releases.
  
- We reviewed ES&H-related files, correspondence, and other documents supplied by LANL.
  
- We visited the Los Alamos County Archives office in Los Alamos, NM to review aerial photographs of the area and to collect information on site use prior to the Manhattan Project.
  
- We performed a walk-by and drive-by survey of the immediate neighboring properties in August 2000, September 2001, and March 2002 from publicly accessible areas for obvious signs of environmental concerns and how those concerns may have environmentally degraded the property under study, and to assess the proximity of the subject property to sensitive ecological areas (e.g., wetlands).
  
- We reviewed a search of the following computerized environmental databases in September 2001 to determine if hazardous sites or serious local environmental problems may exist on or immediately adjacent to the facility (see radius specifications):<sup>1</sup>

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<sup>1</sup>The environmental database searches were completed for LANL by Environmental Data Resources. The database-specific radii specified for these searches either match the ASTM E 1527-00 requirements or are larger than specified in E 1527-00.

### *Federal ASTM Records*

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) (subject site and 0.5-mile radius);
- Emergency Response Notification System (subject site);
- National Priority List (NPL) and proposed NPL (subject site and 1-mile radius);
- RCRA Corrective Action Sites (CORRACTS) list (subject site and 1-mile radius);
- Resource Conservation and Recovery Information System (RCRIS) (subject site and 0.25-mile radius for generators and 0.5-mile radius for treatment, storage, and disposal facilities); and
- CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP) (subject site and 0.25-mile radius).

### *Additional Federal Records*

- Biennial Reporting System (subject site only);
- PCB Activity Database System (subject site only);
- RCRA Administrative Action Tracking System (RAATS) list (subject site only);
- Toxic Release Inventory System (subject site only);
- Facility Index Data Base System (FINDs) (subject site only);
- Consolidated Docket Enforcement System (subject site and company name only);
- Hazardous Materials Incident Reporting System (subject site only);
- Delisted NPL Sites (subject site and 1-mile radius);
- Federal Superfund Liens (subject site only);
- Superfund Consent Decrees (subject site and 1-mile radius);
- Toxic Substances Control Act data base (subject site only);
- Materials License Tracking System (subject site only);
- Mines Master Index File (subject site and 0.25-mile radius);
- Records of Decision data base (subject site and 1-mile radius); and
- FIFRA/TSCA Tracking System (FFTS) (subject site only).

### *State ASTM Records*

- New Mexico State leaking underground storage tank (UST) database list (subject site and 0.5-mile radius);
- New Mexico State permitted solid waste facilities/landfill sites (subject site and 0.5-mile radius); and
- New Mexico State registered USTs (subject site and 0.25-mile radius).

### *Additional State Records*

- New Mexico State Aboveground Storage Tanks (subject site only).

- We attempted to obtain and review historical Sanborn Fire Insurance land use maps to establish past land uses of the subject property and the surrounding area consistent with the requirements of ASTM Practice E 1527-00. Sanborn Fire Insurance land use maps were not available for this facility or the surrounding area.
- We reviewed historical aerial photographs available from public agency sources to establish past land uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. Aerial photographs dated 1924, 1958, 1974, and 1991 were available from the Environmental Restoration and Los Alamos County photographic archives.
- We located and reviewed abstracts of available historical city directories to establish past uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. A search of the county archives in Los Alamos yielded no historical or current city directories for White Rock that gave addresses for the subject site. In most cases, older city directories listed names and phone numbers without the benefit of the listing address.
- We assessed possible issues of current or future environmental liability. This assessment evaluated operations, both past and present, with respect to: air pollution control (including, but not limited to, applicable requirements of the 1990 Clean Air Act Amendments); asbestos management; water supply and pollution control, including stormwater management; nonhazardous solid waste management; hazardous solid waste management; USTs; materials, products, and pesticide storage and handling practices (including Superfund Amendments and Reauthorization Act (SARA) Title III programs); polychlorinated biphenyls (PCBs) inventory management; past on-site or off-site waste disposal practices; and occupational safety and health (including hazards communication).
- We completed an assessment of the facility's potentially significant liabilities under the Superfund statute and related state statutes pertaining to potential on-site contamination and related to the off-site disposal of wastes.
- LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this environmental assessment. LANL did, however, review environmental surveillance, monitoring, and sampling results that have been collected over time and that were relevant to the parcel.

***ATTACHMENT B***

***ISSUES SUMMARY***

**TABLE Exhibit 3**

**Summary of Environmental Assessment Results for White Rock  
Adjacent to State Road 4, White Rock, NM**

AREA	ISSUE	COMMENT/RECOMMENDATION/LIABILITY/COST
Air Pollution Control	There is no historical record of air pollutants being emitted from any operation or facility within this parcel.	None.
Asbestos Management	There appear to be no environmental liability issues associated with asbestos management on this parcel.	There are no facilities or structures located on this land parcel that contain asbestos as defined by 29 CFR 1926.1101.
Water Supply and Pollution Control, Including Stormwater Management	There appear to be no environmental liability issues concerning the water supply to or the wastewater discharges from this parcel.	None.
Nonhazardous Solid Waste Management	There appear to be no environmental liability issues associated with LANL's nonhazardous waste management practices within the parcel.	No nonhazardous wastes are currently generated on this parcel as a result of LANL operations, and there is no record of historical generation of nonhazardous wastes.
Hazardous Solid Waste Management	There appear to be no environmental liability issues associated with LANL's hazardous waste management practices within the parcel.	No hazardous wastes are currently generated on this parcel as a result of LANL operations, and there is no record of historical generation of hazardous wastes. The Laboratory's Environmental Restoration Project investigated the possibility of sediment contamination resulting from Laboratory activities upstream of the site, and found no contaminants to exist at concentrations exceeding background levels. Laboratory buildings in proximity to this site pose no apparent environmental liability issues.
Underground Storage Tanks	There appear to be no environmental liability issues associated with USTs at this facility.	There is no historical record, employee recollection, or visible indication that there are or were USTs in service on this property. There is no plan to install any USTs.
Materials, Products, and Pesticide	There appear to be no environmental liability issues associated with current materials, products, and pesticide	None. No materials, products or pesticides are handled or stored on the subject parcel.

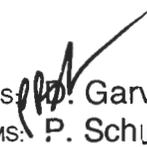
Handling and Storage Practices	handling and storage practice at this parcel.	
PCB Inventory Management	There appear to be no environmental liability issues associated with PCB inventory management at this land parcel.	None.
Potential On-Site Contamination and Waste Disposal	There is no record, employee recollection, or visible indication that waste materials have been disposed on the subject property. The site address is currently not listed on the proposed or final NPL, in the CERCLIS or CERCLIS-NFRAP databases, or on the State's list of designated potential hazardous waste disposal sites. No USTs are known to have been located on this property. In addition, the site address is currently not listed in the state or federal reportable spills databases.	On the days of the site visits, there was no unusually altered topography, unusually stressed vegetation, soil staining, unusual ground depressions, or other visible indications of past spills, releases, or waste disposal. Site contacts reported experiencing no reportable spills.
Past Off-Site Waste Disposal	To the best of LANL ESH-19 staff's knowledge, no issues or concerns have been raised regarding past off-site waste disposal practices from wastes generated on this parcel. LANL has not received or filed notifications under the Comprehensive Environmental Response, Compensation, and Liability Act related to the disposal of any hazardous substances.	None of the off-site disposal facilities known to have received hazardous or nonhazardous wastes from LANL is currently listed on the proposed or final NPL, in the federal CERCLIS or CERCLIS-NFRAP databases, or in the respective state databases that are the equivalent of the federal CERCLIS and NPL databases.
Environmental Data Base Search Results	No apparent environmental liabilities were identified in any of the federal or state environmental databases searched for this assessment (see Attachment A). The database search to assess whether environmental conditions on the subject property have been affected by any off-site source or sources identified no mappable sites as being within the designated search radii. (NOTE: The term "mappable" means that the address information provided is sufficient for the database search vendor to pinpoint the site's location on a street map with a high degree of confidence.).	Given the database search results and based on an inspection of the surrounding properties from publicly accessible areas, none of the neighboring operations is believed to pose a significant potential concern for environmental conditions on the subject property.  The environmental database search also identified 37 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). Based on the area tour, only two of these listed "orphan" sites are believed to be located within 1 mile of the subject property. The Metzger's located on Highway 4 has underground storage tanks that appear on the New Mexico UST registry, and LANL Material Disposal Area J is located at TA-54, west of the subject parcel. Neither of these sites is believed to pose a potential concern for environmental conditions on the subject property.

**Appendix C**  
**Environmental**  
**Restoration**  
**CERCLA Report**



## Memorandum

Environmental Science and Waste Technology (E)  
Environmental Restoration (ER) Project, MS M992

To/MS:  Garvey, ESH-SWI, MS M889  
From/MS: P. Schumann, E/ER, MS M992  
Phone/FAX: 7-5840/5-4747  
Symbol: ER2002-0224  
Date: March 28, 2002

**SUBJECT: ENVIRONMENTAL RESTORATION (ER) PROJECT  
COMPREHENSIVE ENVIRONMENTAL RESPONSE,  
COMPENSATION, AND LIABILITY ACT (CERCLA) 120(h) REPORT  
INFORMATION IN SUPPORT OF THE TRANSFER OF THE WHITE  
ROCK RIGHT-OF-WAY SUB-PARCEL [MAP DESIGNATION C-1] TO  
THE STATE OF NEW MEXICO HIGHWAY DEPARTMENT**

The purpose of this document is to transmit CERCLA 120(h) information to support the transfer of the White Rock Right-of-Way Sub-parcel (Map Designation C-1) to the State Highway Department.

The ER Project has not submitted any previous documentation concerning CERCLA 120(h) requirements specific to this Sub-parcel.

Please note that the CERCLA 120(h) reports provided herein are based on the review of the four maps (Thiel, Vigil, Merrick and Thatcher/Vigil) provided to the ER Project in 1998, and the most current topographic and PRS information maintained by the Laboratory's Facility for Information Management, Analysis, and Display.

In addition, please note that the CERCLA 120(h) information provided relates only to the status of the PRS; other information relevant to current operations and activities, or other regulations at the parcel included in the transfer, are the responsibility of other Los Alamos National Laboratory organizations and is not included herein. The Site-Wide Issues Program Office is the source for this other information necessary to complete the CERCLA 120(h) report.

If you have any questions, please call me at (505) 667-5840 or Kim Birdsall at (505) 665-3486.

KB/vn

Attachment: ER Project Supporting Documentation for the White Rock Right-of-Way Sub-parcel [Map Designation C-1] CERCLA 120(h) Report

D. Garvey  
ER2002-0224

-2-

March 28, 2002

Cy (w./attach.):

K. Birdsall, E/ER, MS M992  
M. Kirsch, E/ER, MS M992  
E. Louderbough, LC-GL, MS A187  
W. Neff, E/ET, MS M992  
V. Smith, E/ER, MS M992  
P. Wardwell, LC-GL, MS A187  
L. Cummings, LAAO, MS A316  
D. Gregory, LAAO, MS A316  
M. Johansen, LAAO, MS A316  
E/ER File, MS M992  
IM-5, MS A150  
RPF, MS M707

Cy (w/o enc.):

J. Canepa, E/ER, MS M992

**ER Project Supporting Documentation  
For The White Rock Right-of-Way Sub-parcel [Map Designation C-1]  
CERCLA 120(h) Report**

**Location:** White Rock

**Description:** The White Rock Right-of-Way Sub-parcel (Map Designation A-19) occupies approximately 20.1 acres of land which includes New Mexico Highway 4 and its right-of-way. The Sub-parcel is bounded by Technical Area 54 to the west, and Los Alamos County lands to the north (former land transfer sub-parcel White Rock-1 South). White Rock commercial and residential areas are located to the south and east of the Sub-parcel. The Sub-parcel spans the lower reaches of Cañada del Buey within the Mortandad Canyon watershed. Prior to the 1999 investigation described below, it was believed that the Sub-parcel could have been adversely impacted by environmental contaminants within surface water or sediments carried downstream from Los Alamos National Laboratory (LANL) operations because of its location within the Mortandad Canyon watershed.

**History:** Although the White Rock Right-of-Way Sub-parcel contains no solid waste management units (SWMUs) within its boundaries, a portion of the stream channel and flood plain of Cañada del Buey, an area of concern (AOC), and therefore, by definition, a potential release site, bisects the Sub-parcel. Cañada del Buey may have received contaminants from multiple PRSs within the watershed, including PRSs within Technical Areas 46, 51, 54 and 4. However, an investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Cañada del Buey (CDB-4) located within the White Rock land transfer parcel. Although a series of inorganic chemicals were detected at levels above Laboratory-wide sediment background levels, these levels were attributed to a local background that differs from that of areas previously sampled for background geochemistry.

**Is there any record of a hazardous substance having been stored on site?**

No. There is no information that suggests that hazardous substances were stored on site.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater?**

Not applicable.

**Was the amount disposed of or released greater than or equal to the RQ?**

Not applicable.

**Current Regulatory Status:** The White Rock Right-of-Way Sub-parcel contains no SWMUs within its boundaries and has not been adversely impacted by contaminants transported downstream from PRSs within the watershed. Cañada del Buey, which bisects the White Rock Right-of-Way Sub-parcel, is a PRS that is not currently on the Hazardous and Solid Waste Amendments (HSWA) module

**ER Project Supporting Documentation  
For The White Rock Right-of-Way Sub-parcel [Map Designation C-1]  
CERCLA 120(h) Report**

of LANL's Resource Conservation and Recovery Act permit; therefore, it is regulated under DOE's authority. In October 2000, the DOE concurred with the ER Project's recommendation that no further remedial action is required for that portion of the stream channel and flood plain within the White Rock parcel. Therefore, this Sub-parcel meets the Comprehensive Environmental Response, Compensation and Liability Act Section 120(h) requirements because all necessary remedial action (none in this case) has been taken prior to transfer.

**Future Actions Required:** None

**References:** *"Evaluation of Possible Sediment Contamination in the White Rock Land Transfer Parcel: Reach CDB-4,"* Environmental Restoration Project, October 2000, LA-UR-00-5071.

*"Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico, Report to Congress Under Public Law 105-119,"* United States Department of Energy, September 2000.

*"Combined Data Report to Congress to Support Land Conveyance and Transfer Under Public Law 105-119,"* United States Department of Energy, January 2000.

*"RFI Work Plan for Sandia Canyon and Canada del Buey,"* Environmental Restoration Project, September 1999, LA-UR- 99-3610.

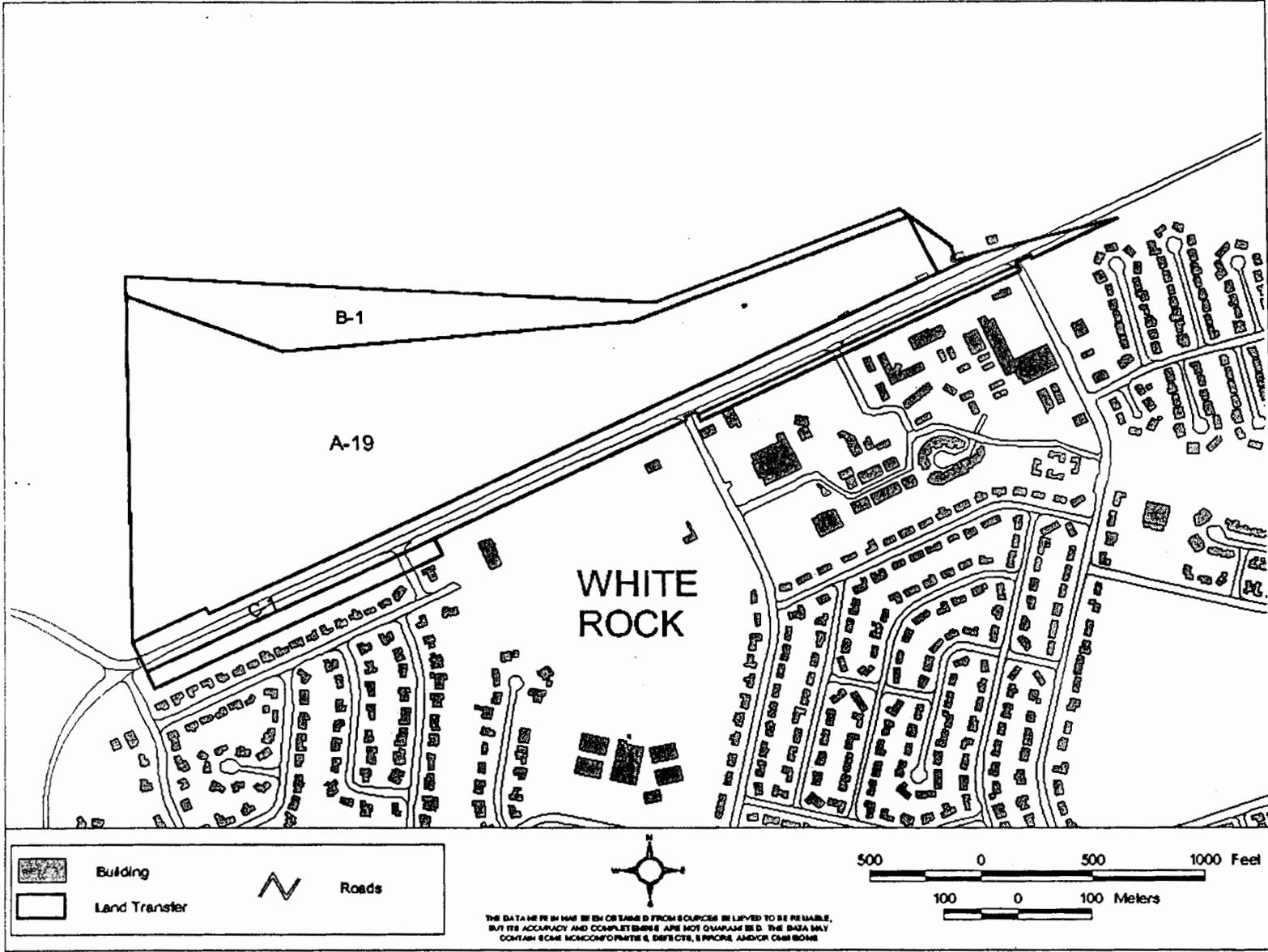
*"Environmental Restoration Report to Support Land Conveyance and Transfer Under Public Law 105-119,"* Environmental Restoration Project, August 1999, LA-UR-99-4187.

*"Summary of ER Activities to Support Land Conveyance and Transfer at Los Alamos National Laboratory Under Public Law 105-119,"* Environmental Restoration Project, August 1999, LA-UR-99-1018.

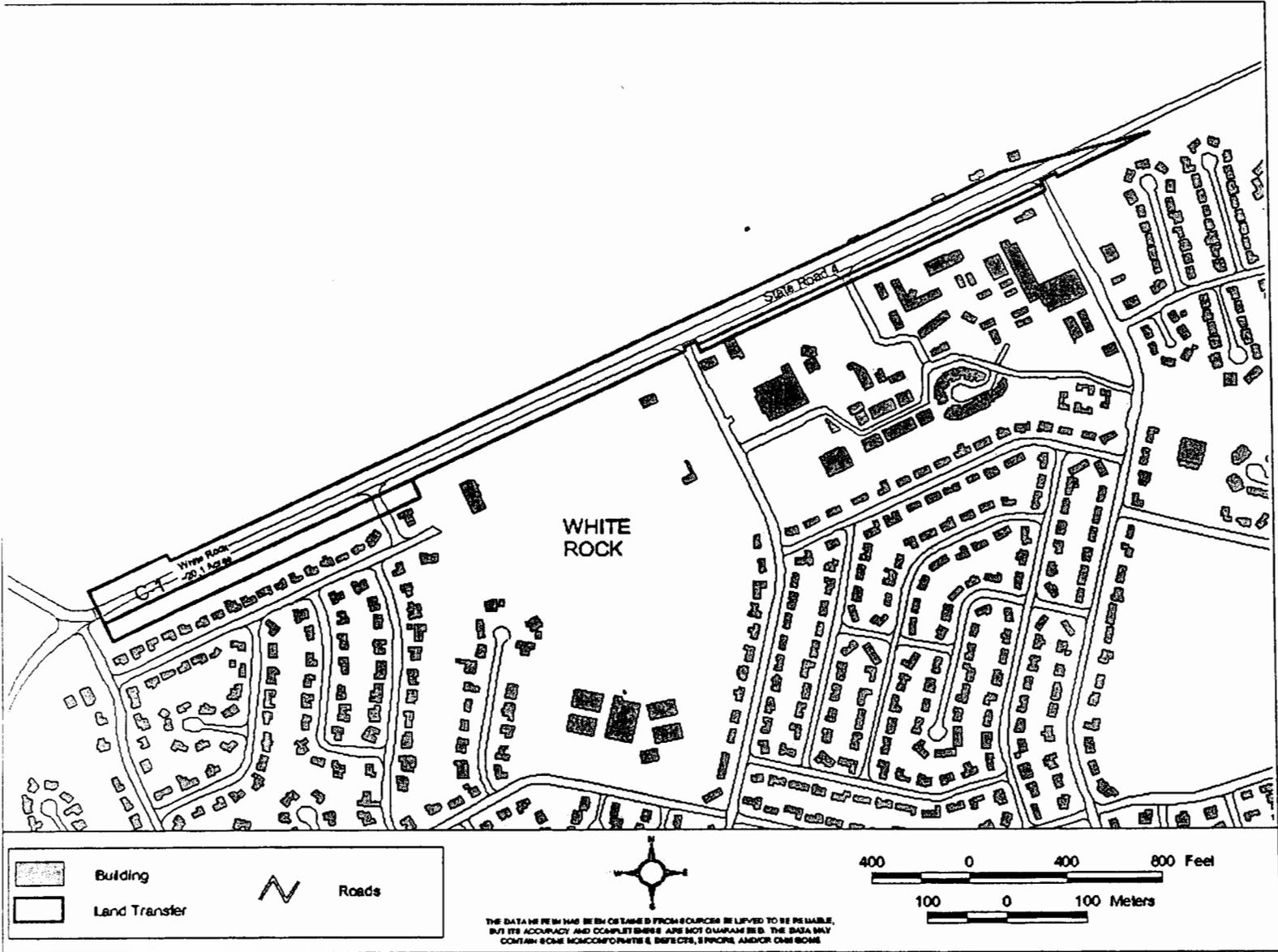
# **Appendix D**

## **Site Map**

# WHITE ROCK TRACTS



# WHITE ROCK TRACT (C-1)



**Environmental Baseline Survey**

**for**

**A-19**

**White Rock-1 Tract**

Pursuant to the US Department of Energy

Cross-Cut Guidance on Environmental Guidance  
for DOE Real Property Transfers

March 18, 2002

# Environmental Baseline Survey

for

## A-19 White Rock Tract

### Executive Summary

This document, "Environmental Baseline Survey for A-19, White Rock-1 Tract", was prepared in accordance with the "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers" in preparation of transferring ownership of the White Rock-1 Tract (hereafter referred to as "White Rock Tract") at Los Alamos National Laboratory from the US Department of Energy (DOE), National Nuclear Security Administration (NNSA)<sup>1</sup> to Los Alamos County pursuant to Public Law 105-119, Section 632. It discusses NNSA compliance with the environmental requirements associated with real property transfers. It also demonstrates that, although potentially contaminated, White Rock Tract is in such condition that NNSA may issue deeds on the basis that "all remedial action necessary to protect human health and the environment has been taken".

The methodology used to prepare this report was to:

- conduct an environmental site assessment of White Rock Tract consistent with the American Society of Testing and Materials (ASTM) "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to White Rock Tract,
- perform a physical examination of the White Rock Tract, and
- consult with both University of California and NNSA staff to confirm existing information or develop additional information.

Based on this assessment, it has been determined that White Rock Tract has:

- one potential release site (PRS) within its boundaries; however, an investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Canada del Buey located within the White Rock Tract,
- a pole mounted transformer (removed from service in 1991) that contained PCBs; however, there are no records of any spills, releases, or disposal on the White Rock Tract, and

---

<sup>1</sup> Congress established the National Nuclear Security Administration (NNSA) within the DOE to manage the nuclear weapons program for the United States. Los Alamos National Laboratory (LANL or Laboratory) is one of the facilities now managed by the NNSA. The NNSA officially began operations on March 1, 2000. Its mission is to carry out the national security responsibilities of the DOE, including maintenance of a safe, secure, and reliable stockpile of nuclear weapons and associated materials capabilities and technologies; promotion of international nuclear safety and nonproliferation; and administration and management of the naval nuclear propulsion program.

- no requirements for future remedial clean-up activities.

Analyses indicate that air quality is good.

There are no known springs or wetlands within White Rock Tract boundaries, nor do regional aquifer groundwater test or supply wells exist within the tract or within a distance of 0.5 miles of the tract. No surface or groundwater contamination is known to exist at White Rock Tract, and White Rock Tract does not lie within the 100-year or 500-year floodplains.

No habitat for threatened and endangered species overlaps White Rock Tract.

A complete archaeological survey of White Rock Tract identified several prehistoric resources, and known traditional cultural properties (TCPs) exist. A Programmatic Agreement among the DOE, Advisory Council on Historic Preservation, New Mexico Historic Preservation Officer, Incorporated County of Los Alamos, New Mexico, and Pueblo of San Ildefonso, concerning the conveyance of certain parcels of land to Los Alamos County, New Mexico, provides for mitigating these resources prior to transfer.

Based on this information, the University of California and NNSA conclude that there are no outstanding environmental issues to prevent conveyance or transfer of White Rock Tract to Los Alamos County.

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## **1.0 Purpose of the Environmental Baseline Survey**

On November 26, 1997, Congress passed Public Law 105-119. Section 632 of that law directed the Secretary of Energy to convey to the Incorporated County of Los Alamos, New Mexico, or to the designee of the County and transfer to the Secretary of the Interior, in trust for the Pueblo of San Ildefonso, parcels of land under the jurisdictional administrative control of the Secretary at or in the vicinity of Los Alamos National Laboratory. Such parcels, or tracts, of land must meet the suitability criteria established by the law, that is, they are not required for the national security mission before the end of 11/26/2007; can be restored or remediated by 11/26/2007; and are suitable for historic, cultural or environmental preservation, economic diversification, or community self-sufficiency. The DOE<sup>2</sup> identified 10 tracts of land for potential transfer to the County of Los Alamos or to San Ildefonso Pueblo. These 10 tracts of land have been further divided into sub-parcels for transfer purposes.

DOE's "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers (DOE/EH-413/9712) provides guidance on the types of information needed to support real property transfers. Information such as the presence of floodplains and wetlands; critical habitats; historic properties; and hazardous substances must be gathered and provided to the potential recipients of the property. This document provides the relevant environmental information as outlined in the Cross-Cut Guidance and provides references to more detailed information.

### **1.1 Boundaries of Property and Scope of Survey**

The White Rock Tract consists of about 72 acres and is located north of the White Rock residential community (see Appendix D). Lands belonging to the Pueblo of San Ildefonso lie to the north of the tract, and to the west is LANL's current low-level radioactive waste facility located in Technical Area (TA) 54. State Road 4 provides the primary access to the site (DOE 1998b).

The legal property boundary description of the whole White Rock tract is provided by the Army Corps of Engineers Title Report, "White Rock Tract at Los Alamos, New Mexico", September 14, 1998. The description of subparcel A-19 is contained in the Army Corps of Engineers survey and property description.

The scope of this Environmental Baseline Survey was to identify potential environmental issues associated with White Rock Tract that might impact transfer of ownership.

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<sup>2</sup> Congress established the National Nuclear Security Administration (NNSA) within the DOE to manage the nuclear weapons program for the United States. Los Alamos National Laboratory (LANL or Laboratory) is one of the facilities now managed by the NNSA. The NNSA officially began operations on March 1, 2000. Its mission is to carry out the national security responsibilities of the DOE, including maintenance of a safe, secure, and reliable stockpile of nuclear weapons and associated materials capabilities and technologies; promotion of international nuclear safety and nonproliferation; and administration and management of the naval nuclear propulsion program.

## **2.0 Survey Methodology**

The methodology used to prepare this report was to:

- conduct an environmental site assessment of White Rock Tract consistent with the American Society of Testing and Materials (ASTM) “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” (ASTM E 1527-00) (see Appendix B),
- review historical and current information and documents pertinent to White Rock Tract,
- perform a physical examination of White Rock Tract, and
- consult with both University of California and NNSA staff to confirm existing information or develop additional information.

## **2.1 Approach and Rationale**

Historical and current information (see 2.1.1 below) for White Rock Tract was reviewed, and the site was physically visited and surveyed. After determining the nature and quality of available information, UC and NNSA staff were consulted to confirm existing information or develop new information as needed. Collectively, this survey addressed air quality, water quality (surface and groundwater), soil and sediment contamination, and any structures, waste sites, natural resources or other environmental concerns present at the site.

To conduct this assessment it was assumed that the White Rock Tract parcel boundaries were established and not subject to significant change. Environmental conditions and associated information were evaluated based upon those boundaries. Second, it was assumed that the nature and quality of the document reviews and site surveys were independent of, and unaffected by, the recipients’ intended use as identified in the “Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico” (DOE September 2000). Lastly, it was assumed that a final inspection or “walk-through” of each parcel would occur prior to conveyance or transfer.

### **2.1.1 List and Description of Documents Reviewed**

In addition to the documents listed below, the Environmental Site Assessment (Appendix B) identifies additional resources used in this evaluation.

1. “Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory”, US Department of Energy, DOE/EIS-0238, January 1999.

2. "Final Environmental Impact Statement for the Conveyance and Transfer of Certain Tracts Administered by the US DOE and Located at Los Alamos National Laboratory", US Department of Energy, DOE/EIS-0293, October 1999
3. "Final Environmental Restoration Report to Support Land Conveyance and Transfer under Public Law 105-119", Los Alamos National Laboratory, LA-UR-99-4187, August 1999
4. "Combined Data Report to Congress to Support Land Conveyance and Transfer under Public Law 105-119", US Department of Energy, Unnumbered Report, January 2000.
5. "Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico", U.S. Department of Energy, Report to Congress Under Public Law 105-119, Unnumbered Report, September 2000.
6. "White Rock Tract at Los Alamos, New Mexico", U.S. Army Corps of Engineers Title Report, September 14, 1998.
7. LANL Hazardous Waste Facility Permit, NM 0890010515-1, 11/8/89
8. "Environmental Surveillance at Los Alamos During 1999", Los Alamos National Laboratory, LA-13775-ENV, December 2000.
9. "Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers", U.S. Department of Energy, DOE/EH-413/9712, October 1997
10. "Threatened and Endangered Species Habitat Management Plan," Los Alamos National Laboratory, August 1998.
11. "A Status Report on Threatened and Endangered Species, Wetlands, and Floodplains for the Proposed Conveyance and Transfer Tracts at Los Alamos National Laboratory, Los Alamos, New Mexico", Los Alamos National Laboratory, July 1998.
12. LANL Draft Watershed Management Plan
13. LANL Environmental Restoration Project Baseline, WBS 1.4.2.6.01.02.24.JG.
14. "Endangered Species Act", United States Code, Washington, D.C., Title 16, Conservation; Chapter 35, Endanger Species Act, December 1973.

### **2.1.2 Inspections of Properties Conducted and Personnel Contacted**

The Environmental Site Assessment (Appendix B) identifies personnel contacted during this evaluation.

### **3.0 Summary of Data**

The White Rock Tract consists of about 72 acres and is located north of the White Rock residential community (see Appendix D). Lands belonging to the Pueblo of San Ildefonso lie to the north of the tract, and to the west is LANL's current low-level radioactive waste facility located in Technical Area 54. State Road 4 provides the primary access to the site.

Vegetation at the tract includes pinyon-juniper woodlands and juniper savannah. The tract was historically part of Technical Area 54 but is separated from the developed portions of Technical Area 54 by elevation. The tract was never used for LANL activities beyond providing electrical power from a small substation, water from a pump station and water lines, and serving as a buffer area between residents and LANL operations.

Existing land use at the White Rock Tract includes activities associated with a water pump station, and electrical substation, and power lines. A small Visitor Center on land leased to the County is also located on the tract.

Adjacent land uses are based on that of the White Rock commercial and residential activities and include retail and light commercial industry, offices, commercial storage, single-family dwellings, and a small amount of high-density residential areas (approximately 9 acres). The largest and most active businesses serve the local communities, including a supermarket, gas stations, and local retail establishments. Land use to the north includes the open areas of undeveloped Pueblo land. There are no recognized trails within the tract; no other recreational opportunities exist at the tract.

Other land use involves structures or facilities that are associated with Federal, State, or local permits. A water monitoring well and a stream gauging station exist on the tract adjacent to State Road 4.

### **3.1 History and Current Use**

Prior to LANL occupancy (pre-1943), there was little development or other documented activity in this remote area. A 1924 Forest Service map shows a wooded area with a trail winding through the area in approximately the same location as the current State Road 4.

Beginning in 1947, the White Rock townsite was used by the Atomic Energy Commission to temporarily house construction workers working in Los Alamos. More permanent homes in this area were constructed in the early 1960s.

The White Rock parcel has traditionally served to buffer the town of White Rock from Laboratory activities and continues this tradition today. Adjacent to this parcel are several Laboratory air monitoring stations and a monitoring station that is part of a community-based monitoring network. Located on the parcel itself is a stream gauging station maintained by the United States Geological Survey (USGS).

The White Rock parcel is located in the lower reaches of Canada del Buey canyon. An investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Canada del Buey located within the White Rock Tract.

### **3.2 Environmental Setting**

White Rock Tract is vacant land typified by pinyon-juniper woodlands and juniper savannah. There are no known threatened or endangered species present on or adjacent to the tract. Immediately south of the tract is the town of White Rock; the rest of the tract to the north, east, and west is surrounded by undeveloped land. The developed portions of Technical Area 54, west of the tract, is several hundred meters distant.

Noise in the vicinity of this tract is from motorized vehicles on State Road 4 and business operations along the south side of State Road 4. Artificial light sources associated with commercial development and vehicles also are present.

#### **3.2.1 Stormwater Runoff Patterns**

The tract is transected by Cañada del Buey, which is an ephemeral stream in the vicinity of the tract. Surface water from the tract flows into Cañada del Buey, through a culvert under State Road 4, through the community of White Rock and ultimately into the Rio Grande.

There are no known springs within the tract. There is one stream gage within the White Rock Tract, which is the only surface water monitoring station on the tract. There is another stream gage upstream of the tract in Pajarito Canyon where water quality is monitored.

#### **3.2.2 Hazardous Materials and Waste Management**

Not applicable. No current or historic hazardous waste generation or disposal are associated with this site.

#### **3.2.3 CERCLA-Related Contamination**

A pole-mounted transformer containing 6-10 gallons of unidentified PCB-containing oil weighing an estimated 48 to 120 lbs (22-55 kgs) was present on the site. This transformer was removed from service in 1991 according to the PCB database. There are no records of any spills, releases, or disposal on the White Rock Tract.

Although the White Rock parcel contains no solid waste management units (SWMUs) within its boundaries, a portion of the stream channel and flood plain of Canada del Buey, an area of concern (AOC), and therefore, by definition, a potential release site, bisects the parcel. However, an investigation conducted in 1999 by the Environmental

Restoration (ER) Project identified no contaminants in sediments in that reach of Canada del Buey located within the White Rock land transfer parcel. The only structures on the tract are a water pump station, and electrical substation, power lines, and a small Visitor Center.

### **3.2.4 Storage Tanks and Pipelines**

~~None identified. Historical records do not indicate that storage tanks existed at this site.~~

### **3.2.5 Wastewater Treatment and Disposal**

Not applicable. No current or historic wastewater treatment and disposal facilities are associated with this site. There are and have been no wastewaters discharged at this site, and there are no records of septic systems on-site. In addition, there are no process-related water uses on this parcel.

### **3.2.6 Lead in Drinking Water**

Not applicable. There are no water supply wells at this site, and there are no known sources of potential lead contamination associated with this site.

### **3.2.7 Oil Water Separator**

Not applicable. No current or historic use of oil water separators are associated with this site.

### **3.2.8 Asbestos**

Not applicable. There appear to be no facilities or structures located on this land parcel that contain asbestos as defined by 29 CFR 1926.1101.

### **3.2.9 Air**

Not applicable. There are no air emissions from this tract, and it is relatively remote from LANL activities. Because LANL activities are a distance away, contributions to air quality come primarily from the southern borders of this triangular-shaped tract (State Road 4 and the town of White Rock). Air quality at the tract is high. Neither hazardous nor radioactive air pollutant sources exist at the tract. The tract is part of New Mexico Region 3, an attainment area that meets National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

### **3.2.10 Lead-Based Paint Surveys and Other Sources of Lead**

Not applicable. There are no known sources of lead at this site.

### **3.2.11 PCBs**

A pole-mounted transformer containing 6-10 gallons of unidentified PCB-containing oil weighing an estimated 48 to 120 lbs (22-55 kgs) was present on the site. The estimated weight of the PCB contaminated oil is based on the assumption that the oil was either mineral oil or askerel. The installation date for the equipment is presumed to be sometime during the 1960's when the substation was constructed; the transformer was removed from service in 1991 according to the PCB database. The reportable quantity for PCBs is 1 lb. (.454 kgs). There are no records of any spills, releases, or disposal on the White Rock Tract.

There is a transformer station, not associated with LANL, located on this tract, but during the site visit there was no staining or other indications of oil releases to the environment.

### **3.2.12 Pesticides**

Not applicable. There are no records of pesticides being used or stored at this site.

### **3.2.13 Medical Wastes**

Not applicable. There are no records of medical wastes being generated or disposed at this site.

### **3.2.14 Ordnance**

Not applicable. There are no records of ordnance being used, stored, or disposed at this site.

### **3.2.15 Radioactive Materials and Wastes**

A portion of the tract lies within the stream channel and floodplain of Cañada del Buey, and sampling of this canyon system has detected low levels of several radioactive isotopes. However, an investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Canada del Buey located within the White Rock land transfer parcel.

### **3.2.16 Radon**

Not applicable.

### **3.2.17 Groundwater**

Not applicable. There are no supply wells located on this site, and there is no known contamination at this site that would impact these resources.

### **3.3 Natural and Cultural Resources**

The White Rock Tract is covered by approximately 75 percent pinyon-juniper woodland vegetation and 20 percent developed areas (a dirt roadway, pump station, and the Visitor Center). The remaining 5 percent is occupied by shrubs, grasslands, and wildflowers. Flora and fauna present within the tract are characteristic of the region.

One hundred percent of the White Rock Tract has been inventoried for historic and prehistoric cultural resources. Survey results indicate that there are four prehistoric sites and one historic site within the tract. Three of the prehistoric sites have been evaluated as eligible for listing on the National Register of Historic Places (NRHP) and one as potentially eligible. The one historic site, a Cold War era structure, has been evaluated as not eligible for the NRHP. There is a potential for unidentified resources, including subsurface archaeological deposits and unrecorded burials. Formal consultations to identify traditional cultural property (TCP) resources have not been conducted. It is probable that TCPs will be identified during further consultations with Native American and Hispanic groups regarding the traditional uses of this tract. The Pueblo of San Ildefonso has indicated, in general terms, that TCPs are present on this tract. TCPs would not be anticipated in developed parts of the tract. Additional information on the cultural resources of the White Rock Tract is presented in Appendix E of the CT EIS.

A Programmatic Agreement among the DOE, Advisory Council on Historic Preservation, New Mexico Historic Preservation Officer, Incorporated County of Los Alamos, New Mexico, and Pueblo of San Ildefonso, concerning the conveyance of certain parcels of land to Los Alamos County, New Mexico, provides for mitigating these resources prior to transfer.

### **3.4 Identification of Uncontaminated Properties**

The entire White Rock Tract is uncontaminated. White Rock Tract does not have environmental contamination as defined by CERCLA 120(h)(4).

### **3.5 All Other Properties**

Not applicable. There are no other properties associated with this site

### **4.0 Summary of Data for Adjacent Properties**

The adjacent properties consist of the town of White Rock to the south and TA-54 to the west. The remaining lands are undeveloped.

The White Rock Highway Tract is not listed in any of the databases searched in accordance with the requirements of the ASTM Standard Practice for Environmental Site Assessments (ASTM E 1527-00). Given the database search results and based on an inspection of the surrounding properties from publicly accessible areas, none of the

neighboring operations is believed to pose a significant potential concern for environmental conditions on the subject property.

The environmental database search also identified 37 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). Based on the area tour, only two of these listed "orphan" sites are believed to be located within 1 mile of the subject property. The Metzger's located on Highway 4 has underground storage tanks that appear on the New Mexico UST registry, and LANL Material Disposal Area J is located at TA-54, west of the subject parcel. Neither of these sites is believed to pose a potential concern for environmental conditions on the subject property.

#### **4.1 History and Current Use**

Beginning in 1947, the White Rock townsite was used by the Atomic Energy Commission to temporarily house construction workers working in Los Alamos. More permanent homes in this area were constructed in the early 1960s.

#### **4.2 Environmental Setting**

The adjacent lands to the south are industrialized and mostly paved (the business strip that support the town of White Rock). The area to the west contains the Laboratory's solid radioactive waste management facility (Area G). To the north and east the lands are undeveloped. Vegetation in this region is typified by pinyon-juniper woodlands intermingled with shub-grassland.

#### **4.3 Adjacent Properties with No Known or Suspected Releases**

The undeveloped lands to the north and east of the White Rock Tract are not known to contain contaminants.

#### **4.4 Adjacent Properties with Known or Suspected Releases**

Both Technical Area 54 to the west, and the town of White Rock to the south would be expected to have the typical releases associated with towns and the handling of wastes.

### **5.0 Conclusions and Recommended Courses of Action**

NNSA and UC health and safety professionals have reviewed environmental conditions at this parcel and have determined that no special precautions are required.

Based on best available environmental information, the University of California and the Department of Energy conclude that there are no outstanding environmental issues to prevent conveyance or transfer of this tract. NNSA may issue deeds on the basis that "all

remedial action necessary to protect human health and the environmental have been taken”.

### **5.1 Facility Matrix**

This site contains several structures:

- Stream gage station
- Two power lines
- Water pump station and water line
- Electrical substation
- Visitor Center

### **5.2 Property Categorization**

Not applicable. All lands at White Rock Tract are categorized the same.

### **5.3 Resource Map**

Not applicable. No hazardous materials were identified, and no water supply wells are located on this property.

### **6.0 Certification of Environmental Baseline Survey**

Los Alamos National Laboratory staff and Environmental Contractors conducted this Environmental Baseline Survey. The information contained in this document is accurate to the best of our knowledge.



Kenneth Rea, RRES-ECO  
LANL Land Transfer

# **Appendix A**

## **CERCLA 120(h)**

**NOTICE of CERCLA 120(h) INFORMATION FOR PROPERTY SUBJECT TO  
CONVEYANCE AND TRANSFER:**

**A-19, White Rock-1 Tract  
(Los Alamos County Portion)**

**Purpose:**

The purpose of this document is to meet the reporting requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Section 120(h) for the conveyance and transfer of the parcel of land identified as sub-parcel A-19, White Rock-1 (WR) Tract (hereafter referred to as White Rock Tract). *The information contained in this notice is required under authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) 42 U.S.C. section 9620(h).* This report describes the methodology used to evaluate whether any hazardous substances meeting the CERCLA reporting requirements were stored, released, or otherwise managed at the White Rock Tract and identifies those materials.

CERCLA 120(h) and the implementing regulations at 40 CFR 373 require DOE, when entering into the sale or transfer of real property, to disclose whether any hazardous substances [as defined by CERCLA] have been stored for more than one year in quantities greater than or equal to 1000 kg or the reportable quantity (RQ); any hazardous substances known to be released or disposed of; and any acutely hazardous wastes stored for one year or more and in quantities greater than or equal to 1 kg.

**Location:**

The White Rock tract is located at the southeastern extremity of TA-54, on the north side of, and roughly parallel to, State Road 4 between its intersections with Pajarito Road to the west and with Rover Boulevard to the east. There are several structures on the tract, only one of which appears to have a LANL structure number, TA-54-75, the White Rock Pump Station. The remaining structures include an electrical substation, two overhead power lines, water supply pipelines, a visitor center building with parking lot, and a surface water gauging station (E230) in the Canada del Buey drainage channel.

**Description:**

The White Rock Tract consists of about 72 acres and is located north of the White Rock residential community (see Appendix D). Lands belonging to the Pueblo of San Ildefonso lie to the north of the tract, and to the west is LANL's current low-level radioactive waste facility located in Technical Area 54. State Road 4 provides the primary access to the site.

**Methodology:**

The information in this report is based on a review of available records and interviews. The reviews conducted by the Laboratory's Water Quality Group, the Hazardous and Solid Waste Group, and the Air Quality Group, included a review of Laboratory and group files and databases on chemical inventories and usage; solid and hazardous waste management and storage; releases and spills; emergency response, and PCB equipment.

The Laboratory's Structure Location Maps for TA-54 (last revision 3/26/01) lists structures TA-54-75, the White Rock Pump Station; 54-88, an electrical substation, two overhead power lines, and a surface water gauging station.

The PCB database includes information on polychlorinated biphenyls (PCBs) and PCB containing items. There is one record for a PCB Item, a pole-mounted transformer, that was removed from service in 1991.

**Is there any record of a hazardous substance having been stored on site?**

Yes, a PCB containing transformer was in service until approximately 1991. The specific PCB was not identified so the applicable CASRN is 1336363 for PCBs and Aroclors.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater; and, was the hazardous substance stored for one year or longer?**

Yes, a pole-mounted transformer containing 6-10 gallons of unidentified PCB-containing oil weighing an estimated 48 to 120 lbs (22-55 kgs) was present on the site. The estimated weight of the PCB contaminated oil is based on the assumption that the oil was either mineral oil or askerel. The installation date for the equipment is presumed to be sometime during the 1960's when the substation was constructed; the transformer was removed from service in 1991 according to the PCB database. The reportable quantity for PCBs is 1 lb. (.454 kgs).

**Was the amount disposed of or released greater than or equal to the RQ?**

No. There are no records of any spills, releases, or disposal on the White Rock Tract.

**Current Regulatory Status:**

The White Rock tract does not currently have any operations that are included in the Laboratory's Hazardous Waste Facility Permit. However, any potential release sites (PRS) are subject to RCRA corrective action requirements and associated conditions in Module VIII of the permit.

A portion of the stream channel and flood plain of Canada del Buey bisects the White Rock tract. This stream channel and flood plain are an area of concern (AOC), and therefore, by definition, a PRS. However, an investigation conducted in 1999 by the Environmental Restoration Project identified no contaminants in sediments in the White Rock reach of Canada del Buey. In October 2000, the DOE concurred that no further remedial action is required for this PRS within the

White Rock parcel. Therefore, the White Rock parcel meets the CERCLA 120(h) requirements that all necessary remedial action (non in this case) has been taken prior to transfer.

#### List of Materials Consulted

1. 40 CFR §260 – §280
2. 40 CFR §302.4
3. 40 CFR §373
4. Civilian Federal Agency Task Force Guide on Evaluating Environmental Liability for Property Transfers, August 1998.
5. Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers, DOE/EH-413-8712, Oct. 1997
6. Draft Lease Agreement for the ICON Facility, Technical Area 46 by and between the US DOE and LADC, 10/4/00
7. Hazardous Waste Tracking System database, ESH-19, 1989 - present
8. LANL ESH-10 Hazardous Material Response Incident logs
9. LANL ESH-17 Automated Chemical Inventory System (ACIS), 1992 – present
10. LANL ESH-18 Spill reports 1987 – present
11. LANL ESH-19 Correspondence log, 1986 – present
12. LANL Hazardous Waste Facility Permit, 12/89
13. LANL Log Books, TA-50-1 Acid Neutralization records 1986 – present
14. PCB Database, ESH-19, 1985 - present
15. Phase I Environmental Site Assessment: TA-46-88 ICON Facility, 4/2000 PMC Environmental
16. Title III List of Lists, EPA 550-B-98-017, 11/98

**Appendix B**  
**Environmental**  
**Assessment**

# **ENVIRONMENTAL ASSESSMENT**

## **Land Transfer Parcel, White Rock, Los Alamos County Portion**

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**Prepared For: THE DEPARTMENT OF  
ENERGY**

**March 26, 2002**

Revision 0

## **EXECUTIVE SUMMARY**

This report presents a findings summary for an assessment of the actual and potential environmental concerns associated with the portion of the White Rock parcel being conveyed to the County of Los Alamos. The White Rock parcel is located adjacent to State Road 4 in White Rock, Los Alamos County, NM. The portion of the parcel that is the subject of this report includes the all land except for a strip along the northern and eastern boundaries, which is being transferred to the U.S. Department of Interior in trust for San Ildefonso Pueblo; and a narrow strip that begins just north of State Road 4 and ends at the southern boundary of the White Rock parcel, which is being conveyed to the New Mexico State Highway Department. For linguistic ease, the portion of the parcel that is the subject of this report is simply referred to as the White Rock parcel for the remainder of this report. Exhibit 1 (at the end of this executive summary) provides a descriptive summary for the White Rock parcel and Exhibit 2 (also at the end of this executive summary) summarizes the known history of this site. Los Alamos National Laboratory conducted its first assessment on August 28, 2000 and a subsequent assessment on September 10, 2001, at the request of the U.S. Department of Energy. The LANL site assessors for this assignment were Ms. Jennifer Pope and Ms. Virginia Smith.

This assessment (hereafter referred to as an environmental site assessment (ESA)) was conducted pursuant to a scope of work consistent with the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-00); along with an additional off-site disposal practices review (including evaluating whether the subject site is listed as a potentially responsible party (PRP) at an off-site waste disposal site); and an examination of possible asbestos-containing materials (ACMs). A specific discussion of the tasks undertaken is set forth in Attachment A. LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this assessment.

It is LANL's understanding and agreement that the DOE may provide this report to the recipient of the subject parcel, as well as to the public. The parcel recipient may provide this report to third parties and other financing institutions and institutional lenders connected with the contemplated transaction (including, without limitation, any such party providing financing on or after consummation of the contemplated transaction and all assignees and participants of any of the foregoing), and that these parties may rely on the information in the report to the same extent as and subject to the same restrictions agreed to by DOE.

## **1.2            *LIMITATIONS***

All the information contained in this report, including any engineering conclusions, is based on the information made available to LANL's site assessor during the investigation, which we assume to have been provided in good faith. This report represents an assessment of the White Rock parcel performed in accordance with generally accepted industry standards regarding environmental assessments. LANL makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to ownership of any property or the application of any law to the facts set forth herein. Except as otherwise may be requested by DOE, LANL disclaims any obligation to update the report for events taking place after the time during which we conducted our assessment.

**Exhibit 1. White Rock Parcel Description Summary**

<b># of Acres</b>	<b># of Buildings (approx. total sq. ft)</b>	<b># of Potential Release Sites (and remediation status)</b>	<b>Current Activities</b>
Approximately 71.6 in the portion of the parcel designated for conveyance to Los Alamos County.	One (1620 sq. ft.) building that houses a pumping station associated with the County-owned water supply system. In addition, there is a fenced, non-LANL-owned structure in which electrical equipment is situated.	None. Canada del Buey is an area of concern that was characterized by the LANL Environmental Restoration Project in 2000, and results demonstrated that no contaminants are present at levels greater than background.	No LANL operations are undertaken at this parcel.

**Exhibit 2. White Rock Parcel Site History Summary**

<b>Site History Prior to LANL Occupancy</b>	Prior to LANL occupancy (pre-1943), there was little development or other documented activity in this remote area. A 1924 Forest Service map shows a wooded area with a trail winding through the area in approximately the same location as the current State Road 4.
<b>Site History After LANL's Occupancy</b>	<p>Beginning in 1947, the White Rock townsite was used by the Atomic Energy Commission to temporarily house construction workers working in Los Alamos. More permanent homes in this area were constructed in the early 1960s.</p> <p>The White Rock parcel has traditionally served to buffer the town of White Rock from Laboratory activities and continues to serve in this capacity today. Several Laboratory air monitoring stations are immediately adjacent to the parcel, as is a monitoring station that is part of a community-based monitoring network. Located on the parcel itself is a stream gauging station maintained by the USGS. The closest Laboratory operations to the parcel are the waste management activities conducted at TA-54, which is situated to the west of the parcel.</p> <p>The White Rock parcel is located in the lower reaches of Canada del Buey. The Environmental Restoration Project (LANL) conducted sampling in July 2000 in Canada del Buey to determine if contamination resulting from Laboratory activities exists at this site. The results demonstrated that no contaminants exist at levels exceeding background concentrations.</p>

**ATTACHMENT A**

**ASSESSMENT METHODOLOGY**

This environmental assessment, consistent with the ASTM Practice E 1527-00 (with added evaluations of ACMs, and possible wetland areas), consisted, in general, of the following steps:

- We met with the following individuals at LANL to discuss parcel-specific environmental and occupational health and safety (EH&S) issues:
  - Mr. Albert Dye, ESH-19, PCB Database Manager;
  - Ms. Debra Archuleta, ESH-17, Asbestos Program Manager;
  - Mr. David Ortiz and Ms. Josie Encinias, ESH-5, Asbestos Management Program;
  - Ms. Louann Romero, ESH-19, HSTD Database Manager;
  - Mr. Harvey Decker, ESH-18, SPCC and SWPPP Plans;
  - Mr. William Flor, HAZMAT Spills Database Manager; and
  - Ms. Jean Dewart, ESH-17, Air Quality Program.
  
- We visited the facility on August 28, 2000, and again on September 10, 2001 and March 22, 2002 to gather more detailed information concerning possible on-site contamination, and to determine the compliance status of the parcel. Before, during and after the first visit, we interviewed site personnel about past and present site operations, raw materials and waste management practices, and significant environmental liability problems, if any. We did not conduct additional interviews after the second or third site visits, because there are no ongoing LANL operations at the subject parcel. We also observed actual site conditions in an attempt to identify and assess the status of potential liabilities such as past disposal areas, waste management units and systems, and sites of environmental releases.
  
- We reviewed ES&H-related files, correspondence, and other documents supplied by LANL.
  
- We visited the Los Alamos County Archives office in Los Alamos, NM to review aerial photographs of the area and to collect information on site use prior to the Manhattan Project.
  
- We performed a walk-by and drive-by survey of the immediate neighboring properties in August 2000, September 2001, and March 2002 from publicly accessible areas for obvious signs of environmental concerns and how those concerns may have environmentally degraded the property under study, and to assess the proximity of the subject property to sensitive ecological areas (e.g., wetlands).
  
- We reviewed a search of the following computerized environmental databases in September 2001 to determine if hazardous sites or serious local environmental problems may exist on or immediately adjacent to the facility (see radius specifications):<sup>1</sup>

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<sup>1</sup>The environmental database searches were completed for LANL by Environmental Data Resources. The database-specific radii specified for these searches either match the ASTM E 1527-00 requirements or are larger than specified in E 1527-00.

*Federal ASTM Records*

- Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) (subject site and 0.5-mile radius);
- Emergency Response Notification System (subject site);
- National Priority List (NPL) and proposed NPL (subject site and 1-mile radius);
- RCRA Corrective Action Sites (CORRACTS) list (subject site and 1-mile radius);
- Resource Conservation and Recovery Information System (RCRIS) (subject site and 0.25-mile radius for generators and 0.5-mile radius for treatment, storage, and disposal facilities); and
- CERCLIS-No Further Remedial Action Planned (CERCLIS-NFRAP) (subject site and 0.25-mile radius).

*Additional Federal Records*

- Biennial Reporting System (subject site only);
- PCB Activity Database System (subject site only);
- RCRA Administrative Action Tracking System (RAATS) list (subject site only);
- Toxic Release Inventory System (subject site only);
- Facility Index Data Base System (FINDs) (subject site only);
- Consolidated Docket Enforcement System (subject site and company name only);
- Hazardous Materials Incident Reporting System (subject site only);
- Delisted NPL Sites (subject site and 1-mile radius);
- Federal Superfund Liens (subject site only);
- Superfund Consent Decrees (subject site and 1-mile radius);
- Toxic Substances Control Act data base (subject site only);
- Materials License Tracking System (subject site only);
- Mines Master Index File (subject site and 0.25-mile radius);
- Records of Decision data base (subject site and 1-mile radius); and
- FIFRA/TSCA Tracking System (FFTS) (subject site only).

*State ASTM Records*

- New Mexico State leaking underground storage tank (UST) database list (subject site and 0.5-mile radius);
- New Mexico State permitted solid waste facilities/landfill sites (subject site and 0.5-mile radius); and
- New Mexico State registered USTs (subject site and 0.25-mile radius).

*Additional State Records*

- New Mexico State Aboveground Storage Tanks (subject site only).

- We attempted to obtain and review historical Sanborn Fire Insurance land use maps to establish past land uses of the subject property and the surrounding area consistent with the requirements of ASTM Practice E 1527-00. Sanborn Fire Insurance land use maps were not available for this facility or the surrounding area.
- We reviewed historical aerial photographs available from public agency sources to establish past land uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. Aerial photographs dated 1924, 1958, 1974, and 1991 were available from the Environmental Restoration and Los Alamos County photographic archives.
- We located and reviewed abstracts of available historical city directories to establish past uses of several of the subject properties and the surrounding areas consistent with the requirements of ASTM Practice E 1527-00. A search of the county archives in Los Alamos yielded no historical or current city directories for White Rock that gave addresses for the subject site. In most cases, older city directories listed names and phone numbers without the benefit of the listing address.
- We assessed possible issues of current or future environmental liability. This assessment evaluated operations, both past and present, with respect to: air pollution control (including, but not limited to, applicable requirements of the 1990 Clean Air Act Amendments); asbestos management; water supply and pollution control, including stormwater management; nonhazardous solid waste management; hazardous solid waste management; USTs; materials, products, and pesticide storage and handling practices (including Superfund Amendments and Reauthorization Act (SARA) Title III programs); polychlorinated biphenyls (PCBs) inventory management; past on-site or off-site waste disposal practices; and occupational safety and health (including hazards communication).
- We completed an assessment of the facility's potentially significant liabilities under the Superfund statute and related state statutes pertaining to potential on-site contamination and related to the off-site disposal of wastes.
- LANL performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this environmental assessment. LANL did, however, review environmental surveillance, monitoring, and sampling results that have been collected over time and that were relevant to the parcel.

**ATTACHMENT B**

**ISSUES SUMMARY**

**TABLE Exhibit 3**

**Summary of Environmental Assessment Results for White Rock  
Adjacent to State Road 4, White Rock, NM**

AREA	ISSUE	COMMENT/RECOMMENDATION/LIABILITY/COST
Air Pollution Control	There is no historical record of air pollutants being emitted from any operation or facility within this parcel.	None.
Asbestos Management	There appear to be no environmental liability issues associated with asbestos management on this parcel.	There appear to be no facilities or structures located on this land parcel that contain asbestos as defined by 29 CFR 1926.1101. No suspect materials were noted during the site inspection; however, neither the interior of the pumping station nor the interior of the transformer building was inspected during the site visit. Los Alamos County owns the pumping station, and so transfer of land on which the pumping station structure is situated poses no material risk to the County. The transfer station is not a LANL structure, and so any environmental liabilities that may be associated with this structure are not the responsibility of DOE or the Laboratory.
Water Supply and Pollution Control, Including Stormwater Management	There appear to be no environmental liability issues concerning the water supply to or the wastewater discharges from this parcel.	There is a potable water pumping station located on this land parcel. Los Alamos County owns the pumping station and associated distribution lines. There are and have been no water supply wells located on-site. There are and have been no wastewaters discharged to the County's sanitary sewer system from the parcel, and there are no records of septic systems on-site. There are no process-related water uses on this parcel. A LANL environmental groundwater monitoring well is situated on the parcel, and is expected to remain in use after transfer of the parcel.
Nonhazardous Solid Waste Management	There appear to be no environmental liability issues associated with LANL's nonhazardous waste management practices within the parcel.	No nonhazardous wastes are currently generated on this parcel as a result of LANL operations, and there is no record of historical generation of nonhazardous wastes.
Hazardous Solid Waste	There appear to be no environmental liability issues associated with LANL's hazardous waste management	No hazardous wastes are currently generated on this parcel as a result of LANL operations, and there is no record of

Management	practices within the parcel.	historical generation of hazardous wastes. The Laboratory's Environmental Restoration Project investigated the possibility of sediment contamination resulting from Laboratory activities upstream of the site, and found no contaminants to exist at concentrations exceeding background levels. Laboratory buildings in proximity to this site pose no apparent environmental liability issues.
Underground Storage Tanks	There appear to be no environmental liability issues associated with USTs at this facility.	There is no historical record, employee recollection, or visible indication that there are or were USTs in service on this property. There is no plan to install any USTs.
Materials, Products, and Pesticide Handling and Storage Practices	There appear to be no environmental liability issues associated with current materials, products, and pesticide handling and storage practice at this parcel.	None. No materials, products or pesticides are handled or stored on the subject parcel.
PCB Inventory Management	There appear to be no environmental liability issues associated with PCB inventory management at this land parcel.	LANL's PCB database shows that no PBC-containing equipment was used, stored or disposed on this parcel. There is a transformer station, not associated with LANL, located on this parcel. During the site visits there was no staining or other indications of oil releases to the environment. Any potential liability associated with PCBs at this site are the responsibility of the Public Service Company of New Mexico.
Potential On-Site Contamination and Waste Disposal	There is no record, employee recollection, or visible indication that waste materials have been disposed on the subject property. The site address is currently not listed on the proposed or final NPL, in the CERCLIS or CERCLIS-NFRAP databases, or on the State's list of designated potential hazardous waste disposal sites. No USTs are known to have been located on this property. In addition, the site address is currently not listed in the state or federal reportable spills databases.	On the days of the site visits, there was no unusually altered topography, unusually stressed vegetation, soil staining, unusual ground depressions, or other visible indications of past spills, releases, or waste disposal. Site contacts reported experiencing no reportable spills.
Past Off-Site Waste Disposal	To the best of LANL ESH-19 staff's knowledge, no issues or concerns have been raised regarding past off-site waste disposal practices from wastes generated on this parcel. LANL has not received or filed notifications under the Comprehensive Environmental Response, Compensation, and Liability Act related to the disposal of any hazardous	None of the off-site disposal facilities known to have received hazardous or nonhazardous wastes from LANL is currently listed on the proposed or final NPL, in the federal CERCLIS or CERCLIS-NFRAP databases, or in the respective state databases that are the equivalent of the federal CERCLIS and NPL databases.

Environmental Data Base Search Results	<p>substances.</p> <p>No apparent environmental liabilities were identified in any of the federal or state environmental databases searched for this assessment (see Attachment A). The database search to assess whether environmental conditions on the subject property have been affected by any off-site source or sources identified no mappable sites as being within the designated search radii. (NOTE: The term "mappable" means that the address information provided is sufficient for the database search vendor to pinpoint the site's location on a street map with a high degree of confidence.).</p>	<p>Given the database search results and based on an inspection of the surrounding properties from publicly accessible areas, none of the neighboring operations is believed to pose a significant potential concern for environmental conditions on the subject property.</p> <p>The environmental database search also identified 37 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). Based on the area tour, only two of these listed "orphan" sites are believed to be located within 1 mile of the subject property. The Metzger's located on Highway 4 has underground storage tanks that appear on the New Mexico UST registry, and LANL Material Disposal Area J is located at TA-54, west of the subject parcel. Neither of these sites is believed to pose a potential concern for environmental conditions on the subject property.</p>
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**Appendix C**  
**Environmental**  
**Restoration**  
**CERCLA Report**

**ENVIRONMENTAL  
RESTORATION  
PROJECT**

**Memorandum**

Environmental Science and Waste Technology (E)  
Environmental Restoration (ER) Project, MS M992

To/MS: D. Garvey, ESH-SWI, MS M889  
From/MS: P. Schumann, E/ER, MS M992  
Phone/FAX: 7-5840/5-4747  
Symbol: ER2002-0215  
Date: March 21, 2002

**SUBJECT: ENVIRONMENTAL RESTORATION (ER) PROJECT  
COMPREHENSIVE ENVIRONMENTAL RESPONSE,  
COMPENSATION, AND LIABILITY ACT (CERCLA) 120(h) REPORT  
INFORMATION IN SUPPORT OF THE TRANSFER OF THE WHITE  
ROCK-1 SOUTH SUB-PARCEL [MAP DESIGNATION A-19] TO LOS  
ALAMOS COUNTY**

The purpose of this document is to transmit CERCLA 120(h) information to support the transfer of the White Rock-1 South Sub-parcel (Map Designation A-19) to Los Alamos County.

The ER Project has not submitted any previous documentation concerning CERCLA 120(h) requirements specific to this Sub-parcel.

Please note that the CERCLA 120(h) reports provided herein are based on the review of the four maps (Thiel, Vigil, Merrick and Thatcher/Vigil) provided to the ER Project in 1998, and the most current topographic and Potential Release Site (PRS) information maintained by the Laboratory's Facility for Information Management, Analysis, and Display.

In addition, please note that the CERCLA 120(h) information provided relates only to the status of the PRS; other information relevant to current operations and activities, or other regulations at the parcel included in the transfer, are the responsibility of other Los Alamos National Laboratory organizations and is not included herein. The Site-Wide Issues Program Office is the source for this other information necessary to complete the CERCLA 120(h) report.

If you have any questions, please call me at (505) 667-5840 or Kim Birdsall at (505) 665-3486.

Attachment: ER Project Supporting Documentation for the White Rock-1 South Sub-parcel [Map Designation A-19] CERCLA 120(h) Report

Cy (w/enc.):

K. Birdsall, E/ER, MS M992  
M. Kirsch, E/ER, MS M992  
E. Louderbough, LC-GL, MS A187  
W. Neff, E/ET, MS M992  
V. Smith, E/ER, MS M992  
P. Wardwell, LC-GL, MS A187  
L. Cummings, LAAO, MS A316  
D. Gregory, LAAO, MS A316  
M. Johansen, LAAO, MS A316  
E/ER File, MS M992  
IM-5, MS A150  
RPF, MS M707

Cy (w/o enc.):

J. Canepa, E/ER, MS M992

**- 1 -ER Project Supporting Documentation  
For The White Rock-1 South Sub-parcel [Map Designation A-19]  
CERCLA 120(h) Report**

**Location:** White Rock

**Description:** The White Rock-1 South Sub-parcel (Map Designation A-19) occupies approximately 71.6 acres of land. The Sub-parcel contains 2 power lines and a substation building. A water line and pumping station located along the southern boundary of the Sub-parcel was previously transferred to Los Alamos County in September 2001. The Sub-parcel is bounded by Technical Area 54 to the west, and New Mexico Highway 4 and its right-of-way (land transfer sub-parcel designated as the White Rock Right-of-Way) to the south. White Rock commercial and residential areas are located further to the south and east of the Sub-parcel.

The Sub-parcel spans the lower reaches of Cañada del Buey within the Mortandad Canyon watershed. Prior to the 1999 investigation described below, it was believed that the Sub-parcel could have been adversely impacted by environmental contaminants within surface water or sediments carried downstream from Los Alamos National Laboratory (LANL) operations because of its location within the Mortandad Canyon watershed.

**History:** Although the White Rock -1 South Sub-parcel contains no solid waste management units (SWMUs) within its boundaries, a portion of the stream channel and flood plain of Cañada del Buey (which is an area of concern (AOC), and therefore, by definition, a potential release site) bisects the Sub-parcel. Cañada del Buey may have received contaminants from multiple PRSs within the watershed, including PRSs within Technical Areas 46, 51, 54 and 4. However, an investigation conducted in 1999 by the Environmental Restoration (ER) Project identified no contaminants in sediments in that reach of Cañada del Buey (CDB-4) located within the White Rock land transfer parcel. Although a series of inorganic chemicals were detected at levels above Laboratory-wide sediment background levels, these levels were attributed to a local background that differs from that of areas in the region previously sampled for background geochemistry.

**Is there any record of a hazardous substance having been stored on site?**

No. There is no information that suggests that hazardous substances were stored on site.

**Was the amount stored greater than or equal to 1,000 kg or the Reportable Quantity (RQ), whichever is greater?**

Not applicable.

**Was the amount disposed of or released greater than or equal to the RQ?**

Not applicable.

**- 2 -ER Project Supporting Documentation  
For The White Rock-1 South Sub-parcel [Map Designation A-19]  
CERCLA 120(h) Report**

**Current Regulatory Status:** The White Rock-1 South Sub-parcel contains no SWMUs within its boundaries and has not been adversely impacted by contaminants transported downstream from PRSs within the watershed. Cañada del Buey, which bisects the White Rock-1 South Sub-parcel, is a PRS that is not currently on the Hazardous and Solid Waste Amendments (HSWA) module of LANL's Resource Conservation and Recovery Act permit; therefore, it is regulated under DOE's authority. In October 2000, the DOE concurred with the ER Project's recommendation that no further remedial action is required for this PRS within the White Rock parcel. Therefore, this Sub-parcel meets the Comprehensive Environmental Response, Compensation and Liability Act Section 120(h) requirements because all necessary remedial action (none in this case) has been taken prior to transfer.

**Future Actions Required:** None

**References:** *"Evaluation of Possible Sediment Contamination in the White Rock Land Transfer Parcel: Reach CDB-4,"* Environmental Restoration Project, October 2000, LA-UR-00-5071.

*"Conveyance and Transfer Plan for Certain Land Tracts Administered by the U.S. Department of Energy Located at the Los Alamos National Laboratory, Los Alamos and Santa Fe Counties, New Mexico, Report to Congress Under Public Law 105-119,"* United States Department of Energy, September 2000.

*"Combined Data Report to Congress to Support Land Conveyance and Transfer Under Public Law 105-119,"* United States Department of Energy, January 2000.

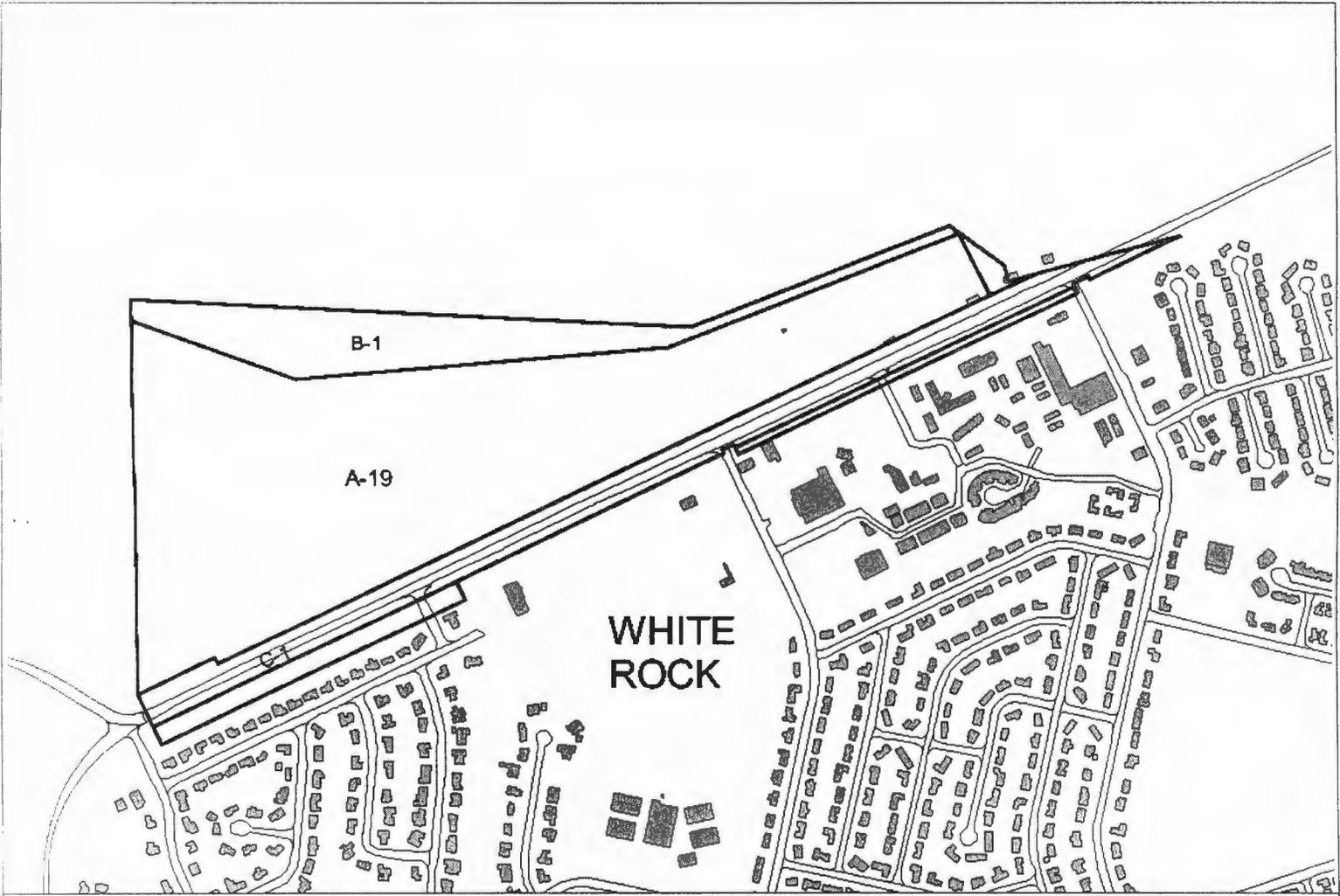
*"RFI Work Plan for Sandia Canyon and Canada del Buey,"* Environmental Restoration Project, September 1999, LA-UR- 99-3610.

*"Environmental Restoration Report to Support Land Conveyance and Transfer Under Public Law 105-119,"* Environmental Restoration Project, August 1999, LA-UR-99-4187.

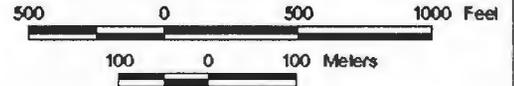
*"Summary of ER Activities to Support Land Conveyance and Transfer at Los Alamos National Laboratory Under Public Law 105-119,"* Environmental Restoration Project, August 1999, LA-UR-99-1018.

# **Appendix D**

## **Site Map**



	Building		Roads
	Land Transfer		



THE DATA HEREIN HAS BEEN OBTAINED FROM A SOURCE BELIEVED TO BE RELIABLE, BUT ITS ACCURACY AND COMPLETENESS ARE NOT GUARANTEED. THE DATA MAY CONTAIN SOME MISREPRESENTATIONS, OMISSIONS, ERRORS, AND/OR OMBG SOME