



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

General

Los Alamos Land Transfer Project Office

OCT 14 2003



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

Dear Ms. Martin:

SUBJECT: NOTICE OF INTENTION TO CONVEY A LAND TRACT TO THE COUNTY OF LOS ALAMOS

The Department of Energy (DOE) and the New Mexico Environment Department (NMED) are currently negotiating a Consent Order. The Order provides that when DOE conveys in fee or transfers any tract of land that is part of the Los Alamos National Laboratory, DOE will provide written notice of the transfer. DOE intends to convey a tract of land to the County of Los Alamos (County). Negotiations between DOE and NMED on the Consent Order have been conducted for quite some time now, and it is unclear when a final agreement might be reached. However, DOE believes that, as a matter of good faith, we should follow the procedure currently being discussed in the negotiations as the one to follow when DOE conveys or transfers land. DOE and the County wish to complete this conveyance as quickly as possible.

It is my understanding that the current draft of the Consent Order provides that DOE, NMED, and the proposed recipient of the land are to meet within 30 days of DOE's notice to NMED of a proposed conveyance. This letter provides DOE's notice of intent to convey the tract, identified as Tract A-15-1 (TA-21 West), to the County, and requests that you meet with DOE and County representatives within 30 days.

The tract that DOE contemplates conveying to the County, Tract A-15-1, is located north of DP Road and east of the commercial area. A map illustrating the location of the tract is contained in Appendix D to the enclosed *Environmental Baseline Survey for A-15-1 TA-21 West Tract*. Also enclosed are two reports: (1) *VCA Completion Report Addendum for SWMU 21-013(d)-99*, and (2) *Voluntary Corrective Action Completion Report for Solid Waste Management Unit 21-024(f) and Areas of Concern C-21-015 and 21-030*. The conclusions from these reports indicate that there is no unacceptable risk to humans or the environment, based on a residential future land use scenario.

The County will use the property only for commercial or industrial uses. Therefore, DOE believes that NMED will find that the corrective measures implemented with regard



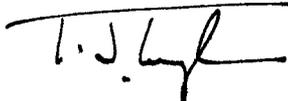
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to the property are protective of human health and the environment in light of the transferee's intended use of the property. The enclosed VCA Reports fully explain the corrective measures taken.

I will contact you in the near future to schedule a meeting to discuss this proposed land conveyance, and I hope to schedule the meeting at your earliest convenience. Please contact me at 505-665-7203 if you have questions or concerns.

Sincerely,



Theodore J. Taylor
Project Manager

Enclosures: As stated

Cc w/ enclosures:

K. Rea, RRES-ECO, UC-LANL, MS M887
A. Ferrell-Brown, Assistant County Administrator, Los Alamos County
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LandTran File

Environmental Baseline Survey

For

A-15-1

TA-21 West Tract

Pursuant to the US Department of Energy

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

October 6, 2003

Environmental Baseline Survey

for

A-15-1 TA-21 West Tract

Executive Summary

This document, “Environmental Baseline Survey for A-15-1, TA-21 West 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 A-15-1, TA-21 West Tract parcel (hereafter referred to as “TA-21 West Tract”) at Los Alamos National Laboratory from the US Department of Energy (DOE), National Nuclear Security Administration (NNSA)¹ 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, TA-21 West 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 the TA-21 West 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 the TA-21 West Tract,
- perform a physical examination of the TA-21 West 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 the TA-21 West Tract was potentially contaminated by activities conducted from the late 1940s through the mid-1950s at or near this location, and has:

- two Solid Waste Management Units (SWMUs) and eight Areas of Concern (AOCs) within its boundaries,
- no record that hazardous substances were ever stored at this site, and
- no requirements for future remedial clean-up activities.

¹ 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 DP Road, immediately south of this site.

There are no known springs or wetlands within the TA-21 West 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 the TA-21 West Tract, and the TA-21 West Tract does not lie within the 100-year or 500-year floodplains.

Habitat for threatened and endangered species overlaps the TA-21 West Tract; 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 TA-21 West Tract. However, no further action is required at the TA-21 West Tract under the provision of the Biological Opinion.

A complete archaeological survey of the TA-21 West Tract revealed no archaeological sites. No known traditional cultural properties (TCPs) exist.

Based on this information, the University of California and NNSA conclude that there are no outstanding environmental issues to prevent conveyance or transfer of the TA-21 West 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 DOE² 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 TA-21 West is located north of DP Road, west of North Rim Road, and east of commercially developed Los Alamos County land. It is near the currently active operations of LANL. The tract is approximately 7.5 acres (3 hectares). Access into the site is from Trinity Drive onto DP Road. Vegetation at the site includes ponderosa pine forest and pinyon-juniper woodlands, both with open shrub, grasslands, and wildflower areas.

The legal property boundary description of this tract is provided by the "LAND SURVEY PLAT, Los Alamos National Laboratory, Tract A-15-1, Part of Section 14, Township 19 North, Range 6 East of the New Mexico P.M., County of Los Alamos, State of New Mexico," filed for record by the Los Alamos County Clerk on March 18, 2003.

² 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.

The scope of this Environmental Baseline Survey was to identify potential environmental issues associated with The TA-21 West 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 the TA-21 West 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 the TA-21 West Tract,
- perform a physical examination of the TA-21 West Tract, 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 TA-21 West Tract 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 TA-21 West Tract 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. "Title Report Technical Area 21 Tract at Los Alamos, New Mexico", 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 2001", Los Alamos National Laboratory, LA-13979-ENV, September 2002.
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. "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 TA-21 West Tract itself is located between the commercially developed lands of Los Alamos County along the north side of DP Road and west of North Rim Road. It is near the currently active operations of LANL. The tract is approximately 7.5 acres, and there are no structures currently located on it. It primarily consists of relatively level land, and is covered with native grasses and shrubs. Portions of DP Canyon are within the tract boundaries and include areas generally too steep for development (slopes greater than 20 degrees). Access to the site is from Trinity Drive onto DP Road.

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 and features in this area.

Laboratory operations began at the TA-21 West Tract in the late 1940s and ended by the mid-1950s. One building, six temporary hutments, and a non-radioactive waste disposal area were historically situated on the parcel. The building, 21-45, was constructed in the mid-1940s and was used as a classroom and a waste research laboratory until it was taken down in 1954. The six temporary hutments were also constructed in the mid-1940s, and were located along the north side of DP Road until they were removed by 1954.

The Laboratory's Remediation Services (RS) Project investigated two SWMUs and eight AOCs on this tract, which are all associated with the structures and areas described in the preceding paragraph. The RS Project recommended no further action at six of the AOCs based on the results of historical research. The DOE approved this recommendation. VCAs were conducted at the remaining SWMUs and AOCs in 2003, resulting in recommendations for no further action.

3.2 Environmental Setting

DP Road to the south, DP Canyon to the north, commercial properties to the west, and TA-21 to the east surround the TA-21 West Tract. Vegetation in this tract consists primarily of grasses, small shrubs, and a few 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, contains 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 TA-21 West Tract 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 TA-21 West tract is located on the mesa top above DP Canyon, an ephemeral drainage, which receives surface water runoff from this tract. DP Canyon also receives stormwater runoff from the Los Alamos townsite via a storm drain at the head of the canyon. There are no known springs or wetlands within the tract, and there are no National Pollutant Discharge Elimination System (NPDES)-permitted outfalls within the tract. In addition, there are no stream gages or other water monitoring devices within the TA-21 West Tract.

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

There is no record of storage tanks or pipelines on this parcel.

3.2.5 Wastewater Treatment and Disposal

Not applicable. No current or historic wastewater treatment and disposal facilities are associated with this site. The parcel was known to have a septic tank associated with Building 21-45, and it received primarily sanitary waste associated with the classroom facilities at the building. It also received liquid waste from a waste research laboratory located in Building 21-45; however, there are no records of the nature of the effluent from the laboratory.

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 TA-21 West Tract is primarily affected by LANL operations at TA-21. Pollutant contributions also arise from traffic on DP Road and on Highway 502, as well as from the airplanes that use the Los Alamos Airport. LANL conducted three quarters of air quality monitoring for radionuclides in the vicinity of the subject property from the beginning of 2000 through the second quarter of 2003, and detected no contaminants at concentrations of concern. Previous ambient air quality monitoring for non-radiological constituents has not shown any contaminants at concentrations of concern.

The TA-21 West Tract 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.

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. There are no records of radioactive materials or wastes being used, stored, or disposed at this site.

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, contains 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 TA-21 West Tract under the provision of the Biological Opinion.

One hundred percent of the TA-21 West Tract has been inventoried for historic and prehistoric cultural resources. Survey results indicate that there are no prehistoric sites present that are 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 TA-21 West Tract.

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 any such identified resources prior to transfer.

There are no known traditional cultural properties (TCPs) located in the TA-21 West. 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 TA-21 West Tract, though potentially contaminated from activities conducted onsite from the late 1940s through the mid-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 commercial, light industrial, 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 one mappable³ site as being within the designated search radii. Specifically, one record of a leaking underground storage tank was identified in the New Mexico LUST database. The tank was located at the Hilltop House and convenience store property located at the convergence of Trinity Drive and Central Avenue. It was reported as leaking in 1992, and a subsequent investigation determined that it had no impact on ground water. According to the database, no further action is recommended for this tank.

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 5 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). One of these orphan sites is located within the boundaries of LANL at TA-21, and is listed as a leaking underground storage tank, specific location unknown. By virtue of the fact that a LANL LUST appears in the records search, it is evident that the leaking tank was reported by LANL to the New Mexico Environment Department, and any actions required are being or have already been undertaken by LANL's water quality group (RRES-WQ). The remaining four orphan sites are located sufficiently distal from the subject property to be deemed not to have an impact on the 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. The townsite was conveyed to Los Alamos County during the late 1950s and early 1960s and subsequently sold to the occupants. At present, the adjacent properties house light industrial and commercial operations.

³The 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.

4.2 Environmental Setting

The adjacent lands consist of light industrial development, commercial development, or undeveloped lands.

4.3 Adjacent Properties with No Known or Suspected Releases

Not applicable.

4.4 Adjacent Properties with Known or Suspected Releases

See 4.3 above.

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. 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 TA-21 West Tract 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 Risk Reduction and Environmental Stewardship division's 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

CERCLA 120(h)

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

A-15-1, TA-21 West Tract, Los Alamos County

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 TA-21 West 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 TA-21 West (A-15-1) 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-15-1 tract]; and any acutely hazardous wastes stored for one year or more and in quantities greater than or equal to 1 kg.

Location:

The TA-21 West tract (the A-15-1 tract) is generally located directly north of DP Road in Los Alamos County, NM, and is approximately 7.5 acres in area. It is bounded to the west by commercially developed Los Alamos County land, to the east by North Rim Road, and to the north by DP Canyon.

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 Environmental Restoration Project, 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-15-1 tract subsequent to 1988 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-15-1 tract subsequent to 1988 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-15-1 tract subsequent to 1988 have been observed. See Appendix C for information on Environmental Restoration Project activities and PRSs.

Current Regulatory Status: The TA-21 West (A-15-1) 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 TA-21 West (A-15-1), Los Alamos County Portion

**Prepared For: THE DEPARTMENT OF
ENERGY**

September 30, 2003

EXECUTIVE SUMMARY

This report presents a findings summary for an assessment of the actual and potential environmental concerns associated with the portion of the TA-21 West parcel slated for transfer to the County of Los Alamos. This portion of the TA-21 West parcel (the A-15-1 tract) is generally located directly north of DP Road and west of North Rim Road in Los Alamos County, NM, and is approximately 7.5 acres in area. It is bounded to the west by commercially developed Los Alamos County land; to the east by North Rim Road; to the north by DP Canyon, and to the south by DP Road. For linguistic ease, the portion of the TA-21 parcel that is the subject of this report is hereinafter called the "TA-21 West (A-15-1)" parcel. Exhibit 1 (at the end of this executive summary) provides a descriptive summary for the TA-21 West (A-15-1) 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 preliminary assessment of this parcel in August of 2000, and its final assessment on September 28-30, 2003, 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-21 West (A-15-1) 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-21 West (A-15-1) Parcel Description Summary

# of Acres	# of Buildings (approx. total sq. ft)	# of Potential Release Sites (and remediation status)	Current Activities
Approximately 7.5 acres.	There are currently no buildings located on the parcel.	Two Solid Waste Management Units (SWMUs) and eight Areas of Concern (AOCs). The two SWMUs, 21-013(d)-99 and 21-024(f), were a waste disposal area and a septic system, respectively. Six of the AOCs (C-21-016 – 021) were temporary storage hutments erected in the late 1940s and removed by the mid-1950s. AOC 21-030 was a laboratory sink and a concrete sump that received effluent from a waste research laboratory. AOC C-21-015 is the footprint of the former Building 21-45, which was demolished in 1954. The LANL Remediation Services Project (formerly the Environmental Restoration Project) recommended no further action (NFA) at AOCs C-21-016 – 021 in 1995, and DOE approved the recommendation. Voluntary corrective actions (VCAs) were conducted at SWMUs 21-013(d)-99 and 21-024(f), and they were recommended for NFA to NMED in 2003. VCAs were also conducted at AOCs 21-030 and C-21-015, and they were recommended for NFA to DOE in 2003.	None.

Exhibit 2. TA-21 West (A-15-1) Parcel Site History Summary

Site History Prior to LANL Occupancy	<p>Prior to LANL occupancy (pre-1943), there was little development in this remote area. In 1918 Detroit businessman Ashley Pond purchased 800 acres from three homesteaders to begin the Los Alamos Ranch School for Boys. The Ranch School was the only development in the area prior to LANL occupancy.</p> <p>During this period, most of the Ranch School's development was south of Ashley pond at the center of Los Alamos. Fuller Lodge (built in 1928) and several other buildings were constructed to provide a framework for the school. Aerial photographs of the area and drawings associated with the Los Alamos Ranch School for Boys shows a cleared area around the pond with the only development being a constructed "ice house" located at what is now the site of the Manhattan Monument.</p>
Site History After LANL's Occupancy	<p>The TA-21 West parcel is located on the north side of DP Road, and west of North Rim Road. One building and six temporary hutments were historically situated on the parcel. The building, 21-45, was used as a classroom and a waste research laboratory until it was taken down in 1954. The six temporary hutments were historically located along the north side of DP Road, and were removed by 1954. The SWMUs and AOCs located on this parcel are all associated with Laboratory operations that began in the late 1940s and ended by the mid-1950s.</p> <p>The ER Project investigated two SWMUs and eight AOCs, and recommended no further action at six of the AOCs based on the results of historical research. The DOE approved this recommendation. VCAs were conducted at the remaining SWMUs and AOCs in 2003, resulting in recommendations for no further action.</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 consulted with the following individuals at LANL to discuss parcel-specific environmental and occupational health and safety (EH&S) issues:
 - Mr. Albert Dye, RRES-SWRC, PCB Database Manager (8/2000);
 - Ms. Debra Archuleta, ESH-17, Asbestos Program Manager (8/2000);
 - Mr. David Ortiz and Ms. Josie Encinias, HSR-5, Asbestos Management Program (8/2000);
 - Ms. Geri Rodriguez, RRES_SWRC, HSTD Database Manager (9/2003);
 - Ms. Alice Barr, RRES-SWRC, RCRA Subject Matter Expert on offsite disposal (9/2003);
 - Mr. Harvey Decker, ESH-18, SPCC and SWPPP Plans (8/2000);
 - Mr. William Flor, HAZMAT Spills Database Manager (8/2000);
 - Mr. Terry Rust, Remedial Services Project, Potential Release Sites (9/2003);
and
 - Mr. Craig Eberhart, RRES-MAQ, Air Quality Program (9/2003).

- We visited the parcel in August 2000, and subsequently on September 24, 2003 to gather more detailed information concerning possible on-site contamination, and to determine the compliance status of the parcel. Before, during and after the August 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 repeated only select interviews in September 2003: specifically, 1) air quality, because the results of a study of ambient air quality recently became available, 2) offsite disposal, to determine whether any institutional issues related to offsite disposal had arisen since 2000, and 3) hazardous waste < 90-day storage areas and satellite storage areas, to confirm that no such storage area was established during the voluntary corrective actions conducted by the Remediation Services Project in 2003. The remainder of the interviews were not repeated because there are no ongoing LANL operations on or near the parcel, and so the information we were provided in 2000 would not have changed. Finally, we 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 on September 30, 2003 to determine if hazardous sites or serious local environmental problems may exist on or immediately adjacent to the facility (see radius specifications):¹
- *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 only);
 - 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);
- FIFRA/TSCA Tracking System (FFTS) (subject site only);
- U.S. Brownfields (subject site and 0.5-mile radius);
- Toxic Substance Control Act (TSCA) (subject site only);
- Department of Defense sites (DOD) (subject site and 0.5-mile radius); and
- Section 7 Tracking System (SSTS) (subject site only).

State ASTM Records

¹The 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.

- New Mexico State leaking underground storage tank (LUST) 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);
- Indian UST (USTs on Indian lands) (subject property and 0.25-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 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-21 West (A-15-1)

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.	LANL conducted three quarters of air quality monitoring for radionuclides in the vicinity of the subject property from the beginning of 2000 through the second quarter of 2003, and detected no contaminants at concentrations of concern. Previous ambient air quality monitoring for non-radiological constituents has not shown any contaminants at concentrations of concern.
Asbestos Management	There appear to be no environmental liability issues associated with asbestos on this parcel.	None. There are no structures located on the subject property.
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, and there are no water monitoring wells located on the property.
Nonhazardous Solid Waste Management	There appear to be no environmental liability issues associated with nonhazardous waste within the parcel.	No nonhazardous wastes are currently 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 generated or 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 record of USTs having been installed on the subject property.
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 parcel.	LANL's PCB database shows that no PBC-containing equipment was used, stored or disposed on this parcel.

<p>Potential On-Site Contamination and Waste Disposal</p>	<p>Other than the two SWMUs and eight AOCs that were the subject of investigation and remediation by the ER Project, there appear to be no issues related to on-site contamination or waste disposal at this parcel.</p>	<p>A site walk-through was conducted on September 24, 2003; no unusual or suspect site conditions were noted at that time.</p>
<p>Past Off-Site Waste Disposal</p>	<p>To the best of LANL RRES-SWRC 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.</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 one mappable site 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.) Specifically, one record of a leaking underground storage tank was identified in the New Mexico LUST database. The tank was located at the Hilltop House and convenience store property located at the convergence of Trinity Drive and Central Avenue. It was reported as leaking in 1992, and a subsequent investigation determined that it had no impact on ground water. According to the database, no further action is recommended for this tank.</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 5 "orphan" sites (i.e., sites not mapped by the database search vendor because of poor or inadequate address information). One of these orphan sites is located within the boundaries of LANL at TA-21, and is listed as a leaking underground storage tank, specific location unknown. By virtue of the fact that a LANL LUST appears in the records search, it is evident that the leaking tank was reported by LANL to the New Mexico Environment Department, and any actions required are being or have already been undertaken by LANL's water quality group (RRES-WQ). The remaining four orphan sites are located sufficiently distal from the subject property to be deemed not to have an impact on the property.</p>



The EDR Radius Map with GeoCheck[®]

**TA-21 West (A-15)
DP Road/North Rim Road
Los Alamos, NM 87544**

Inquiry Number: 01055415.1r

September 29, 2003

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06890

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

DP ROAD/NORTH RIM ROAD
LOS ALAMOS, NM 87544

COORDINATES

Latitude (North): 35.879200 - 35° 52' 45.1"
Longitude (West): 106.282100 - 106° 16' 55.6"
Universal Transverse Mercator: Zone 13
UTM X (Meters): 384265.6
UTM Y (Meters): 3971109.0
Elevation: 7156 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 2435106-H3 GUAJE MOUNTAIN, NM
Source: USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP..... CERCLIS No Further Remedial Action Planned
CORRACTS..... Corrective Action Report
RCRIS-TSD..... Resource Conservation and Recovery Information System
RCRIS-LQG..... Resource Conservation and Recovery Information System
RCRIS-SQG..... Resource Conservation and Recovery Information System
ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

SHWS..... This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

EXECUTIVE SUMMARY

SWF/LF..... Solid Waste Facilities
UST..... Listing of Underground Storage Tanks
INDIAN UST..... Underground Storage Tanks on Indian Land

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
FINDS..... Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
DOD..... Department of Defense Sites
US BROWNFIELDS..... A Listing of Brownfields Sites
RAATS..... RCRA Administrative Action Tracking System
TRIS..... Toxic Chemical Release Inventory System
TSCA..... Toxic Substances Control Act
SSTS..... Section 7 Tracking Systems
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

AST..... Aboveground Storage Tanks List

BROWNFIELDS DATABASES

US BROWNFIELDS..... A Listing of Brownfields Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in *bold italics* are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STATE ASTM STANDARD

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the New Mexico Environmental

EXECUTIVE SUMMARY

Department's List of Past & Current Leak Sites by Location.

A review of the LUST list, as provided by EDR, and dated 09/04/2003 has revealed that there is 1 LUST site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>WATERCHRIS DBA HILLTOP HOUSE</i>	<i>TRINITY AND CENTRAL AVE</i>	<i>1/4 - 1/2 WNW 1</i>		<i>5</i>

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

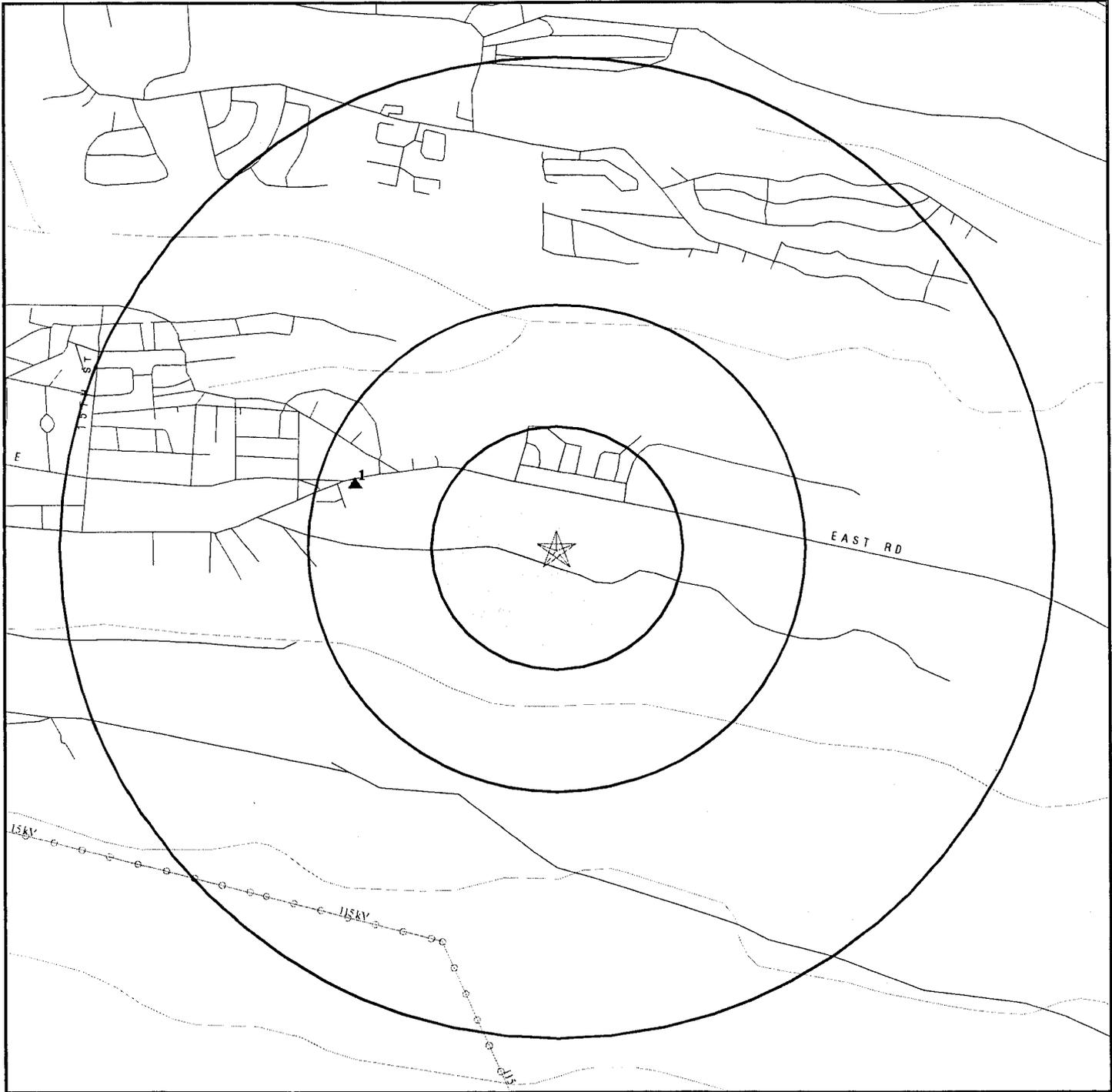
Site Name

LOS ALAMOS COUNTY LANDFILL
LANL TA-21/2
TOTAVI PHILLIPS 66
LOS ALAMOS COUNTY LANDFILL
2 MILES WEST OF ST RD 4

Database(s)

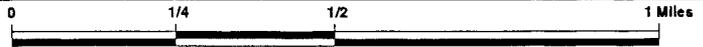
SWF/LF
LUST
UST
RCRIS-SQG, FINDS
ERNS

OVERVIEW MAP - 01055415.1r - Adelante Consulting



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- ▨ National Priority List Sites
- ▨ Landfill Sites
- ▨ Dept. Defense Sites

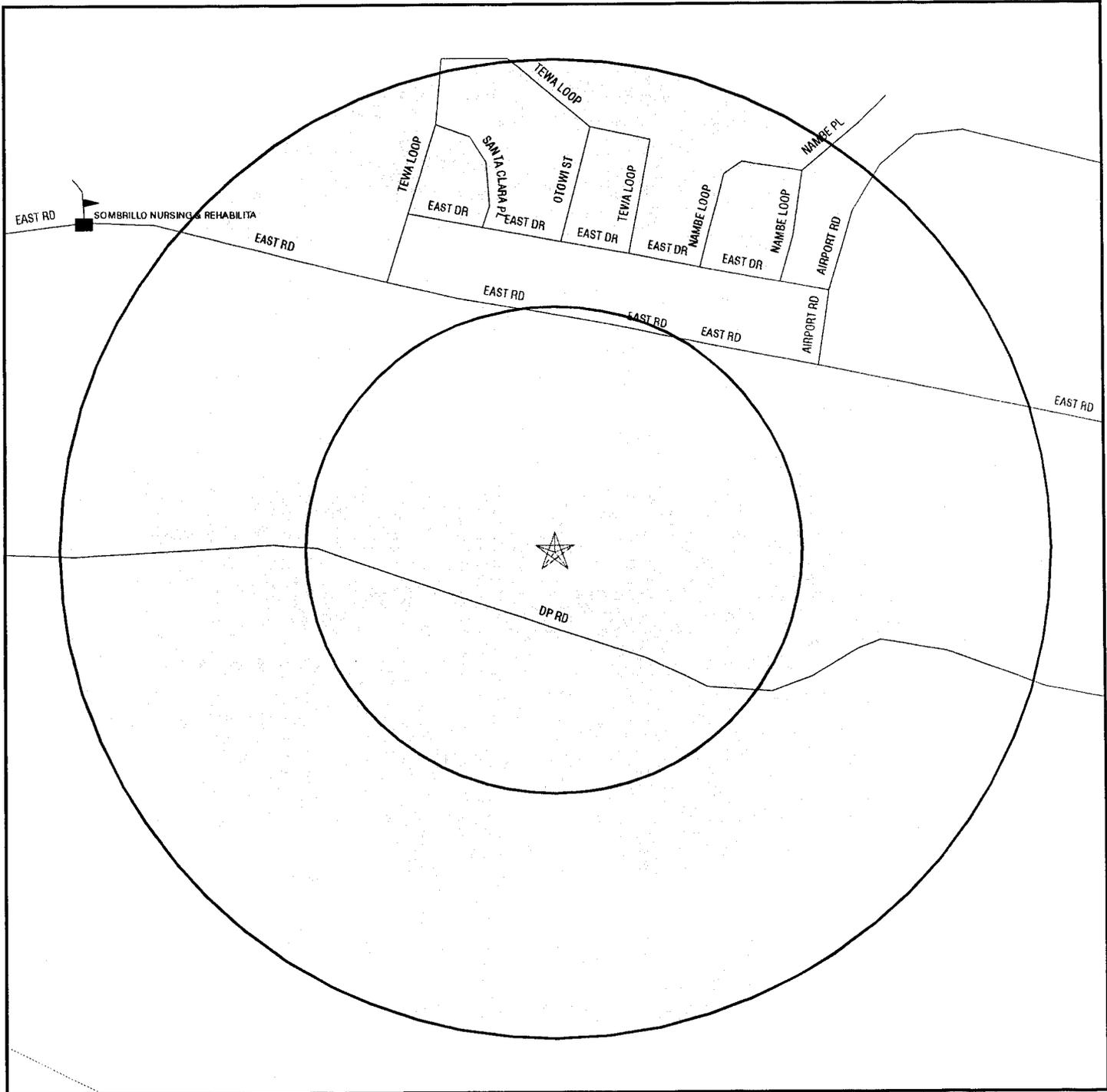
- Power transmission lines
- Oil & Gas pipelines



TARGET PROPERTY: TA-21 West (A-15)
 ADDRESS: DP Road/North Rim Road
 CITY/STATE/ZIP: Los Alamos NM 87544
 LAT/LONG: 35.8792 / 106.2821

CUSTOMER: Adelante Consulting
 CONTACT: Virginia Smith
 INQUIRY #: 01055415.1r
 DATE: September 29, 2003 7:22 pm

DETAIL MAP - 01055415.1r - Adelante Consulting



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- ♣ Sensitive Receptors
- ▣ National Priority List Sites
- ▣ Landfill Sites
- ▣ Dept. Defense Sites



 Oil & Gas pipelines



TARGET PROPERTY: TA-21 West (A-15) ADDRESS: DP Road/North Rim Road CITY/STATE/ZIP: Los Alamos NM 87544 LAT/LONG: 35.8792 / 106.2821	CUSTOMER: Adelante Consulting CONTACT: Virginia Smith INQUIRY #: 01055415.1r DATE: September 29, 2003 7:22 pm
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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>FEDERAL ASTM STANDARD</u>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.250	0	0	NR	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
<u>STATE ASTM STANDARD</u>								
State Haz. Waste		N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Landfill		0.500	0	0	0	NR	NR	0
LUST		0.500	0	0	1	NR	NR	1
UST		0.250	0	0	NR	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<u>FEDERAL ASTM SUPPLEMENTAL</u>								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
<u>STATE OR LOCAL ASTM SUPPLEMENTAL</u>								
AST		TP	NR	NR	NR	NR	NR	0
<u>BROWNFIELDS DATABASES</u>								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0

NOTES:

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Database(s) EDR ID Number
EPA ID Number

Coal Gas Site Search: EDR does not presently have coal gas site information available in this state.

1
WNW
1/4-1/2
2244 ft.

WATERCHRIS DBA HILLTOP HOUSE
TRINITY AND CENTRAL AVE
LOS ALAMOS, NM 87544

LUST U003543692
UST N/A

Relative:
Higher

LUST:

Actual:
7236 ft.

Form Number: 1609
Priority Rank: 0
Facility ID: 31554
Status: No Further Action
Score Total: 0
Tie Score: 118
Aggravating Factor Score: 0
Mitigating Factor Score: 0
Water Supply Impact: No
Property Damage Impacts: No
Project Manager: Patrick DeGruyter
Date Release Reported: 11/13/1992
Product: WATERMAN

UST:

Facility ID: 31554
Total Tanks: 5
Tank Status: CURRENTLY IN USE
Owner ID: 14199
Owner: WATERMAN ROBERT E
Owner Address: PO BOX 250
LOS ALAMOS, NM 87544

Facility ID: 31554
Total Tanks: 5
Tank Status: CURRENTLY IN USE
Owner ID: 14199
Owner: WATERMAN ROBERT E
Owner Address: PO BOX 250
LOS ALAMOS, NM 87544

Facility ID: 31554
Total Tanks: 5
Tank Status: CURRENTLY IN USE
Owner ID: 14199
Owner: WATERMAN ROBERT E
Owner Address: PO BOX 250
LOS ALAMOS, NM 87544

Facility ID: 31554
Total Tanks: 5
Tank Status: REMOVED
Owner ID: 14199
Owner: WATERMAN ROBERT E
Owner Address: PO BOX 250
LOS ALAMOS, NM 87544

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)
Elevation Site

Database(s) EDR ID Number
EPA ID Number

WATERCHRIS DBA HILLTOP HOUSE (Continued)

U003543692

Facility ID: 31554
Total Tanks: 5
Tank Status: REMOVED
Owner ID: 14199
Owner: WATERMAN ROBERT E
Owner Address: PO BOX 250
 LOS ALAMOS, NM 87544

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LOS ALAMOS	U003913254	TOTAVI PHILLIPS 66	HWY 502	87544	UST
LOS ALAMOS	1004754572	LOS ALAMOS COUNTY LANDFILL	EAST JEMEZ RD	87544	RCRIS-SQG, FINDS
LOS ALAMOS	S105421505	LOS ALAMOS COUNTY LANDFILL	1/4 MILE EAST OF INTERSECTION OF DI	87544	SWF/LF
LOS ALAMOS	S105510920	LANL TA-21/2	UNKNOWN		LUST
LOS ALAMOS CANYON	94357781	2 MILES WEST OF ST RD 4	2 MILES WEST OF ST RD 4	87544	ERNS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA

Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/22/03

Date Made Active at EDR: 08/26/03

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/04/03

Elapsed ASTM days: 22

Date of Last EDR Contact: 08/04/03

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1

Telephone 617-918-1143

EPA Region 3

Telephone 215-814-5418

EPA Region 4

Telephone 404-562-8033

EPA Region 6

Telephone: 214-655-6659

EPA Region 8

Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites

Source: EPA

Telephone: N/A

Date of Government Version: 06/10/03

Date Made Active at EDR: 08/26/03

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/04/03

Elapsed ASTM days: 22

Date of Last EDR Contact: 08/04/03

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 06/16/03

Date Made Active at EDR: 08/01/03

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 06/23/03

Elapsed ASTM days: 39

Date of Last EDR Contact: 06/23/03

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/11/03
Date Made Active at EDR: 08/01/03
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 06/23/03
Elapsed ASTM days: 39
Date of Last EDR Contact: 06/23/03

CORRACTS: Corrective Action Report

Source: EPA
Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 08/13/03
Date Made Active at EDR: 09/18/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/22/03
Elapsed ASTM days: 27
Date of Last EDR Contact: 09/08/03

RCRIS: Resource Conservation and Recovery Information System

Source: EPA
Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. Transporters are individuals or entities that move hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 07/11/03
Date Made Active at EDR: 08/18/03
Database Release Frequency: Varies

Date of Data Arrival at EDR: 07/30/03
Elapsed ASTM days: 19
Date of Last EDR Contact: 06/26/03

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard
Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/02
Date Made Active at EDR: 02/03/03
Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/27/03
Elapsed ASTM days: 7
Date of Last EDR Contact: 07/28/03

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System

Source: EPA/NTIS
Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99
Database Release Frequency: Biennially

Date of Last EDR Contact: 06/16/03
Date of Next Scheduled EDR Contact: 09/15/03

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices
Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Source: EPA

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/09/03

Database Release Frequency: Annually

Date of Last EDR Contact: 07/07/03

Date of Next Scheduled EDR Contact: 10/06/03

DELISTED NPL: National Priority List Deletions

Source: EPA

Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/22/03

Database Release Frequency: Quarterly

Date of Last EDR Contact: 08/04/03

Date of Next Scheduled EDR Contact: 11/03/03

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA

Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/25/03

Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/02/03

Date of Next Scheduled EDR Contact: 10/06/03

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation

Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/31/03

Database Release Frequency: Annually

Date of Last EDR Contact: 07/23/03

Date of Next Scheduled EDR Contact: 10/20/03

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/23/03

Database Release Frequency: Quarterly

Date of Last EDR Contact: 07/02/03

Date of Next Scheduled EDR Contact: 10/06/03

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959

Date of Government Version: 06/07/03

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 06/30/03

Date of Next Scheduled EDR Contact: 09/29/03

NPL LIENS: Federal Superfund Liens

Source: EPA

Telephone: 202-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 08/25/03
Date of Next Scheduled EDR Contact: 11/24/03

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/30/03
Database Release Frequency: Annually

Date of Last EDR Contact: 08/13/03
Date of Next Scheduled EDR Contact: 11/10/03

DOD: Department of Defense Sites

Source: USGS

Telephone: 703-648-5920

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 04/01/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 08/15/03
Date of Next Scheduled EDR Contact: 11/10/03

US BROWNFIELDS: A Listing of Brownfields Sites

Source: Environmental Protection Agency

Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 07/15/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 09/15/03
Date of Next Scheduled EDR Contact: 12/15/03

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 09/08/03
Date of Next Scheduled EDR Contact: 12/08/03

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-260-1531

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/01
Database Release Frequency: Annually

Date of Last EDR Contact: 06/27/03
Date of Next Scheduled EDR Contact: 09/22/03

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/98

Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 09/02/03

Date of Next Scheduled EDR Contact: 12/08/03

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/15/03

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/03

Date of Next Scheduled EDR Contact: 09/22/03

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/00

Database Release Frequency: Annually

Date of Last EDR Contact: 07/24/03

Date of Next Scheduled EDR Contact: 10/20/03

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/15/03

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/03

Date of Next Scheduled EDR Contact: 09/22/03

STATE OF NEW MEXICO ASTM STANDARD RECORDS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

Source: EPA

Telephone: 703-413-0223

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A

Date Made Active at EDR: N/A

Database Release Frequency: N/A

Date of Data Arrival at EDR: N/A

Elapsed ASTM days: N/A

Date of Last EDR Contact: 07/28/03

SWF/LF: Solid Waste Facilities

Source: New Mexico Environment Department

Telephone: 505-827-0347

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/02
Date Made Active at EDR: 05/29/02
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 04/15/02
Elapsed ASTM days: 44
Date of Last EDR Contact: 09/08/03

LUST: Leaking Underground Storage Tank Priorization Database

Source: New Mexico Environment Department
Telephone: 505-984-1741

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 09/04/03
Date Made Active at EDR: 09/24/03
Database Release Frequency: Varies

Date of Data Arrival at EDR: 09/16/03
Elapsed ASTM days: 8
Date of Last EDR Contact: 08/18/03

UST: Listing of Underground Storage Tanks

Source: New Mexico Environment Department
Telephone: 505-984-1741

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 08/07/03
Date Made Active at EDR: 08/28/03
Database Release Frequency: Varies

Date of Data Arrival at EDR: 08/08/03
Elapsed ASTM days: 20
Date of Last EDR Contact: 08/04/03

INDIAN UST: Underground Storage Tanks on Indian Land

Source: EPA Region 9
Telephone: 415-972-3368

Date of Government Version: N/A
Date Made Active at EDR: N/A
Database Release Frequency: Varies

Date of Data Arrival at EDR: N/A
Elapsed ASTM days: 0
Date of Last EDR Contact: N/A

STATE OF NEW MEXICO ASTM SUPPLEMENTAL RECORDS

AST: Aboveground Storage Tanks List

Source: Environment Department
Telephone: 505-984-1926

Aboveground tanks that have been inspected by the State Fire Marshal.

Date of Government Version: 07/02/03
Database Release Frequency: Varies

Date of Last EDR Contact: 06/30/03
Date of Next Scheduled EDR Contact: 09/29/03

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

BROWNFIELDS DATABASES

US BROWNFIELDS: A Listing of Brownfields Sites

Source: Environmental Protection Agency

Telephone: 202-566-2777

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become BCRLF cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: N/A

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: N/A

Date of Next Scheduled EDR Contact: N/A

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation

Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Daycare Centers: Licensed Child Day Care Providers

Source: Office of Child Development

Telephone: 505-827-7946

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

TA-21 WEST (A-15)
DP ROAD/NORTH RIM ROAD
LOS ALAMOS, NM 87544

TARGET PROPERTY COORDINATES

Latitude (North):	35.879200 - 35° 52' 45.1"
Longitude (West):	106.282097 - 106° 16' 55.5"
Universal Transverse Mercator:	Zone 13
UTM X (Meters):	384265.6
UTM Y (Meters):	3971109.0
Elevation:	7156 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

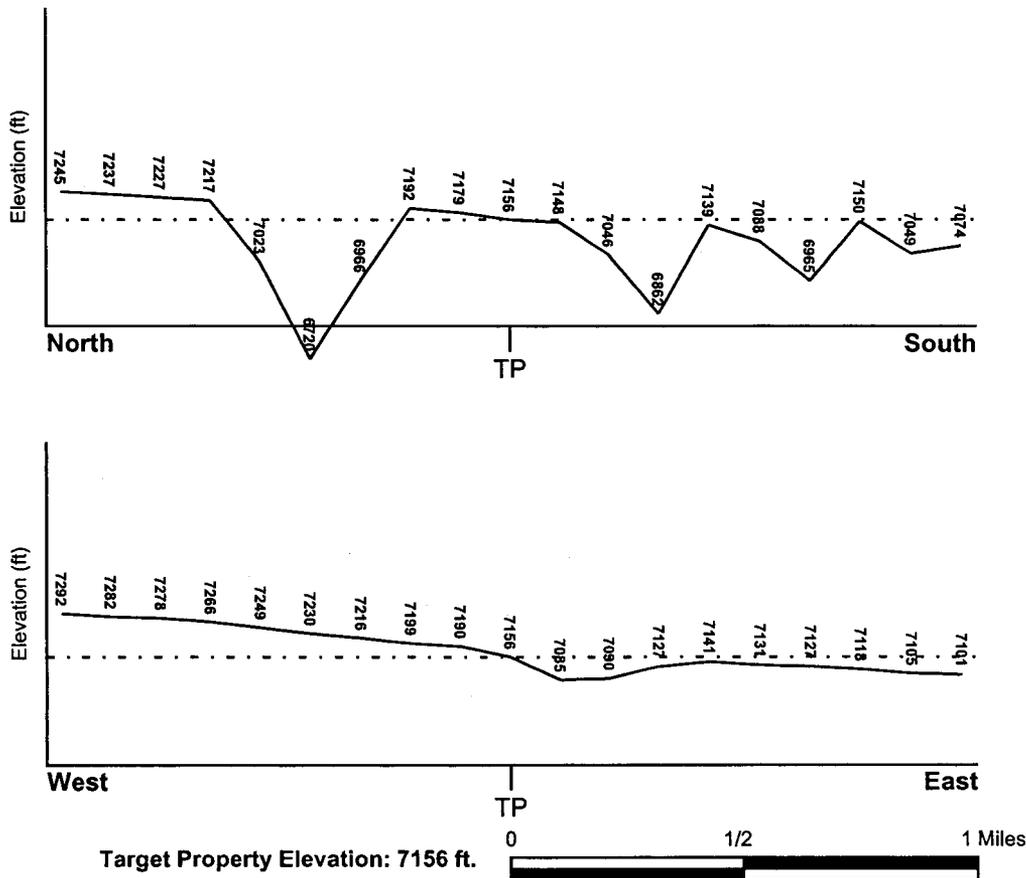
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: 2435106-H3 GUAJE MOUNTAIN, NM
 General Topographic Gradient: General SSE
 Source: USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County
LOS ALAMOS, NM

FEMA Flood
Electronic Data
Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
GUAJE MOUNTAIN

NWI Electronic
Data Coverage
YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data:*

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era: Cenozoic
System: Quaternary
Series: Quaternary felsic volcanic rocks
Code: Qf (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Volcanic Rocks

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: CARJO
Soil Surface Texture: loam
Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 20 inches

Depth to Bedrock Max: > 40 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	4 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 7.30 Min: 6.60
2	4 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.20 Min: 0.06	Max: 7.30 Min: 6.60
3	20 inches	25 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 2.00 Min: 0.60	Max: 7.80 Min: 7.40
4	25 inches	29 inches	unweathered bedrock	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: extremely gravelly - coarse sandy loam
 very fine sandy loam
 cobbly - loam
 very gravelly - loam

Surficial Soil Types: extremely gravelly - coarse sandy loam
 very fine sandy loam
 cobbly - loam
 very gravelly - loam

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: very gravelly - sand
 cobbly - clay
 extremely gravelly - clay loam

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile

FEDERAL USGS WELL INFORMATION

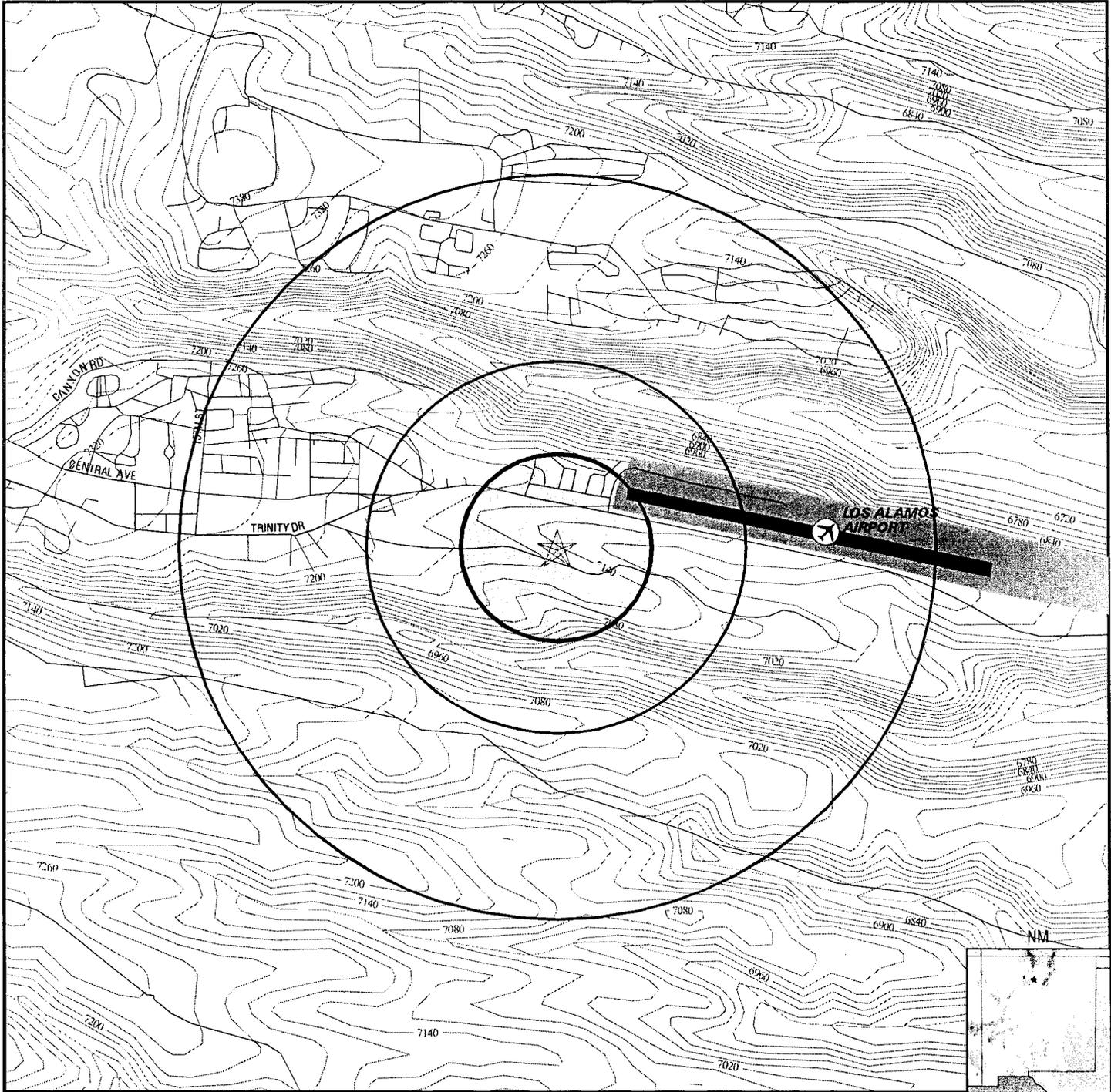
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

PHYSICAL SETTING SOURCE MAP - 01055415.1r



County Boundary

Major Roads

Contour Lines

Airports

Earthquake epicenter, Richter 5 or greater

Water Wells

Public Water Supply Wells

Cluster of Multiple Icons



Groundwater Flow Direction

Indeterminate Groundwater Flow at Location

Groundwater Flow Varies at Location

Closest Hydrogeological Data

Oil, gas or related wells



TARGET PROPERTY: TA-21 West (A-15)
 ADDRESS: DP Road/North Rim Road
 CITY/STATE/ZIP: Los Alamos NM 87544
 LAT/LONG: 35.8792 / 106.2821

CUSTOMER: Adelante Consulting
 CONTACT: Virginia Smith
 INQUIRY #: 01055415.1r
 DATE: September 29, 2003 7:22 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for LOS ALAMOS County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 87544

Number of sites tested: 37

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.886 pCi/L	78%	22%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	4.100 pCi/L	50%	50%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

Oil and Gas Well Locations

Source: New Mexico Institute of Mining and Technology
Telephone: 505-835-5142

RADON

Area Radon Information

Source: USGS
Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA
Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration



"Linking Technology with Tradition"

Sanborn® Map Report

Ship to: Virginia Smith

Adelante Consulting

P.O. Box 24065

Santa Fe, NM 87502

Order Date: 9/29/2003

Inquiry #: 1055415.2S

P.O. #: NA

Site Name: TA-21 West (A-15)

Address: DP Road/North Rim Road

City/State: Los Alamos, NM 87544

Cross Streets:

Customer Project: TA-21 NW (A-15)

2018513MER

505-920-4150

Completion Date: 9/30/2003 10:49

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client-supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

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LOS ALAMOS NATIONAL LABORATORY
Hazardous Waste Storage Area Self-Assessment

30-SEP-03

03:32 PM

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(HUTA=21) AND

Site Id	TA	Bldg	Room	Location	Facility Type	Status	Group	Contact	Phone
2441	21	0000	0	S. side of road, across from	< 90 DAY	REMOVED	FWO-UI	TRUJILLO CHARLES P	6670491
2161	21	0000	0	Outside - East side of TSSI	< 90 DAY	REMOVED	E-ER	HOPKINS JOHN K	6679551
1525	21	0000	0	OUTDOOR MDA-T	< 90 DAY	REMOVED	EM-ER	ALLEN GARRY R	6673394
1557	21	0000	0	OUTSIDE OF BLDG 152	< 90 DAY	REMOVED	NMT-7	TRUJILLO LORENZO A	6672317
1896	21	0000	0	MDA B	< 90 DAY	REMOVED	EM-ER	EVANS S R	6621337
2450	21	0000	0	Outside - SWMU 21-011 (K)	SAA	REMOVED	RRES-R	BENSON THOMAS A	6616621
2077	21	0000	0	Adjacent to < 90 day area #2	SAA	REMOVED	E-ER	DAYMON DEBORAH J	6679021
1938	21	0000	0	SWMU-21-027 NEAR BLDG.	SAA	REMOVED	EM-ER	MCMATH GARY M	6654969
2086	21	0000	0	Outside - DP Tank on north s	SWA	REMOVED	E-ER	BERTINO PAULA M	6652198
1970	21	0000	0	SWMU 21-014 NTISV	SWA	REMOVED	E-ER	DAYMON DEBORAH J	6679021
1432	21	0000	000	MDA V	SAA	REMOVED	EM-ER	BAYHURST GREGORY K	6654156
1422	21	0000	0000	SWMU 24 - SW BLDG 21-14	< 90 DAY	REMOVED	EM-ER	BAYHURST GREGORY K	6654156
2050	21	0000		MDA B	< 90 DAY	REMOVED	E-ER	DAYMON DEBORAH J	6679021
2215	21	0000		Outside - Accumulation area	SAA	REMOVED	E-ER	BERTINO PAULA M	6652198
1438	21	0002	0000		< 90 DAY	REMOVED	EM-ER	STOUT DANIEL S	6673459
996	21	0002	201	UNDER HOOD ON N WALL	SAA	REMOVED	CST-4		
1598	21	0002	201	CABINETS UNDER HOOD E	SAA	REMOVED	CST-18	BRAINARD JAMES R	6672726
1599	21	0002	201	ACID CABINET N. WALL	SAA	REMOVED	CST-4	HANNERS JOHN L	6656490
1292	21	0002	206	WEST SIDE OUTSIDE ROOM	SAA	REMOVED	CST-18	KUBAS GREGORY J	6675767
1608	21	0002	207	VAULT	SAA	REMOVED	CST-25	CHANDLER KAREN	6653260
1202	21	0002	213	D&D	SAA	REMOVED	EM-ER	STOUT DANIEL S	6673459
11	21	0002	22A	OUTSIDE, NORTH DOCK	SAA	REMOVED	EES-3	GONZALES JOHN A	6678464
867	21	0002	2J	STORAGE ROOM	SAA	REMOVED	CST-3	UNKEFER PAT J	6652554
913	21	0002	2J	WEST SIDE BLDG 2, STOR	SAA	REMOVED	CST-4		
99992	21	0002	602	NOT SURE	NONE	REMOVED	CST-25	RODRIGUEZ GERALDINE E	6676259
99991	21	0002		OUTSIDE	NONE	REMOVED	CST-25		
169	21	0003	301	OUTSIDE DOOR BY DOCK	SAA	REMOVED	CST-14	WAGEMAN WILLIAM E	6675046
1314	21	0003	301	EASTROOM OF 301	SAA	REMOVED	CST-25	KUBICEK JIRI	6676660
883	21	0003	301	CABINET UNDER HOOD	SAA	REMOVED	CST-18	EHLER DEBORAH SUE	6675552
995	21	0003	301	UNDER HOOD N WALL	SAA	REMOVED	CST-18	KUBICEK JIRI	6676660
1313	21	0003	301	MIDDLE ROOM OF 301	SAA	REMOVED	CST-25	KUBICEK JIRI	6676660
972	21	0003	306		SAA	REMOVED	CST-10		
729	21	0003	306A	BLDG 3N OUTSIDE	SAA	REMOVED	CST-10		
713	21	0003	317	UNDER FUME HOOD	SAA	REMOVED	CST-3	SMITH ROBERT G	6674457
835	21	0003	326	UPSTAIRS	SAA	REMOVED	CST-3	IAMS HELEN D	6677494
150	21	0003	360	IN CORNER OUTSIDE...	SAA	REMOVED	CST-3	FRANKCOM TRACEY M	6659307
974	21	0003	363	ENTIRE ROOM	SAA	REMOVED	CST-25	KUBICEK JIRI	6676660
109	21	0003	N/A	BLDG 3 NE OUTSIDE CAB N	SAA	REMOVED	CST-OU	SATTELBERGER A P	6674457
943	21	0003	N/A	OUTSIDE CABINET N	SAA	REMOVED	CST-OU	KUBICEK JIRI	6676660
1419	21	0004	0	OUTSIDE	< 90 DAY	REMOVED	EM-ER	STOUT DANIEL S	6673459
930	21	0004	3154	STORAGE ROOM	SAA	REMOVED	CST-3	FITZPATRICK JOHN R	6651761
1116	21	0004	412	D&D PROJECT BLDG SOUT	SAA	REMOVED	EM-ER	STOUT DANIEL S	6673459
715	21	0004	4J	STORAGE ROOM	< 90 DAY	REMOVED	CST-3	WHITTINGTON J G II	6651314
1485	21	0005	0	SOUTH	SAA	REMOVED	CST-25	ROYBAL MATTHEW J	6650363
170	21	0005	500A	LOCATED OUTSIDE 500A O	SAA	REMOVED	CST-18	WATKIN JOHN G	6652628
1535	21	0005	500A	CENTER HOOD ON WEST W	SAA	REMOVED	CST-25	RICHARDSON JOE W	
716	21	0005	500A	OUTSIDE N OF 500A	SAA	REMOVED	CST-3	BRYAN JEFFREY C	6658014
714	21	0005	508	OUTSIDE WEST WALL RM.5	SAA	REMOVED	CST-4	MARTINEZ RODOLFO A	6671000
1423	21	0005	512	FLAMMABLE CABINETS	< 90 DAY	REMOVED	CST-25	RICHARDSON JOE W	
1066	21	0005	512		SAA	REMOVED	CST-18	WATKIN JOHN G	6652628
1584	21	0014	0	OUTSIDE OF S SIDE OF BL	SAA	REMOVED	FSS-6	NUNES HENRY P	6677496
1403	21	0021	0000	OUTSIDE	< 90 DAY	REMOVED	EM-ER	STOUT DANIEL S	6673459
1508	21	0030	0	WEST SIDE	SAA	REMOVED	NMT-2	PUNJAK WAYNE A	6676053
1276	21	0030	0000	AGAINST EAST WALL	SAA	REMOVED	NMT-2	GRAY DEVIN W	6673584
530	21	0030	N/A	OUTSIDE, EAST OF BLD	SAA	REMOVED	NMT-2	GRAY DEVIN W	6673584
674	21	0030	N/A	OUTSIDE E OF BLDG ACID	SAA	REMOVED	NMT-3	PALMER MICHAEL J	6653038
377	21	0031	103	ON DOCK OUTSIDE ROOM	SAA	REMOVED	FSS-DO	KELLEY FREDERICK H	6650404
398	21	0031	106		SAA	REMOVED	C-4	YOUNGBLOOD RUSSELL	6650646
2561	21	0055			SWA	REMOVED	FWO-SWO	ARMUO JODY A	6650547
1699	21	0061	0	WEST OF DP-61 SHED	< 90 DAY	REMOVED	EM-SWO	HOLMES STEVE V	8271557
455	21	0061	N/A		INTERIM STATUS	CLOSED	CST-5	CORPION JUAN C	6655873
1611	21	0066	0	SHED	SAA	REMOVED	EM-SWO	STIMMEL JAY J	6674932
1493	21	0116	0	SE CORNER OF BLDG	SAA	REMOVED	ESH-1	ELLKOTT JOHN W	6657461
1494	21	0116	0	OUTSIDE BLDG 116	UWA	REMOVED	ESH-1	LAFRATE PATRICK J JR	6678366
1551	21	0150	0	CABINET SOUTH END 21-15	< 90 DAY	REMOVED	CST-25	RICHARDSON JOE W	
2284	21	0150	301		UWA	ACTIVE	FWO-WFM	HAGERMANN GARY D	6676036
372	21	0150	601A		SAA	REMOVED	CST-3	STRIETLMEIER E A	6659986
167	21	0150	603	UNDER HOOD	SAA	REMOVED	CST-3	WATKIN JOHN G	6652628
1280	21	0150	604	WEST WALL - FLAMMABLE	SAA	REMOVED	CST-10	REILLY SEAN D	6654623

**LOS ALAMOS NATIONAL LABORATORY
Hazardous Waste Storage Area Self-Assessment**

30-SEP-03
03:32 PM

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Site Id	TA	Bldg	Room	Location	Facility Type	Status	Group	Contact	Phone
163	21	0150	605	OUTSIDE EAST DOCK	SAA	REMOVED	CST-4		
982	21	0150	605	OUTSIDE, EAST DOCK	SAA	REMOVED	CST-4		
368	21	0150	606	OUTSIDE EAST DOCK	SAA	REMOVED	CST-4	SPRINGER PAUL T	
1605	21	0150	606	HOOD ON SOUTH WALL	SAA	REMOVED	CST-25	CHANDLER KAREN	6653260
1594	21	0150	607	INCLUDING 606 & 605	< 90 DAY	REMOVED	CST-25	CHANDLER KAREN	6653260
193	21	0150	607	CHEM LAB AND ADJ LAB	SAA	REMOVED	CST-3	TWARY SCOTT N	6676752
1165	21	0150	607	OUTSIDE ROOM ON EAST D	SAA	REMOVED	CST-3	TWARY SCOTT N	6676752
1291	21	0150	607	OUTSIDE RM 607	SAA	REMOVED	CST-18	WATKIN JOHN G	6652628
22	21	0150	B2	BASEMENT	SAA	REMOVED	CST-4	MORRIS DAVID E	6656487
2015	21	0150			SAA	REMOVED	FWO-WFM	HAGERMANN GARY D	6676036
1854	21	0152	0	OUTSIDE	SAA	REMOVED	E-ER	BERTINO PAULA M	6652198
1863	21	0152	0	NW EQUIPMENT ROOM	SAA	REMOVED	ESA-TSE	HARVEY EDWARD F	6672858
1235	21	0152	0000	EAST OF BUILDING	< 90 DAY	REMOVED	NMT-6	STARK WALTER A JR	6655501
1501	21	0152	5208	LAST BAY ADJACENT TO D	< 90 DAY	REMOVED	NMT-7	TRUJILLO LORENZO A	6672317
508	21	0152	5208		SAA	REMOVED	NMT-6	SMITH STEPHEN A	6620606
1672	21	0152	5217		SAA	REMOVED	ESA-FM	TRUJILLO JOE	6676066
505	21	0152	5225	SHOP	SAA	REMOVED	ESA-TSE	LUCERO GERALD RAY	6654079
2518	21	0152	5225A		< 90 DAY	REMOVED	ESA-TSE	TESCH CHARLES	6655602
1633	21	0155	1513		SAA	REMOVED	ESA-TSE	WALKER LARRY V	
2528	21	0155	5203		SAA	REMOVED	ESA-TSE	TESCH CHARLES	6655602
2332	21	0155	5501	North end of bldg.	SAA	REMOVED	ESA-TSE	TESCH CHARLES	6655602
550	21	0155	5501	SOUTH END OF RM 5501	SAA	REMOVED	ESA-TSE	HAWES RICHARD S	6671772
1730	21	0155	5510		UWA	REMOVED	ESA-TSE	HAWES RICHARD S	6671772
2333	21	0155	5512		SAA	REMOVED	ESA-TSE	TESCH CHARLES	6655602
1399	21	0155	5512		SAA	REMOVED	ESA-TSE	WALKER LARRY V	
506	21	0155	5523	SOUTH SIDE	SAA	REMOVED	ESA-TSE	MOYA JOHN S	6654406
2265	21	0155			SAA	REMOVED	ESA-TSE	FRAME KANDY J	6652386
1483	21	0167	100		SAA	REMOVED	ESA-TSE	WALKER LARRY V	
1188	21	0209	0000	179 DOCK	< 90 DAY	REMOVED	ESA-TSE	FRAME KANDY J	6652386
512	21	0209	125		SAA	REMOVED	ESA-3		
507	21	0209	129	LAB HOOD	SAA	REMOVED	ESA-3		
1325	21	0209	129	CHEMICAL HOOD NORTH W	SAA	REMOVED	NMT-6	SMITH STEPHEN A	6620606
911	21	0209	136		SAA	REMOVED	ESA-TSE	FRAME KANDY J	6652386
2240	21	0209	137		SAA	ACTIVE	ESA-TSE	FRAME KANDY J	6652386
511	21	0209	137	LAB	SAA	REMOVED	ESA-TSE	STEINKRUGER F J	6670435
513	21	0209	141	LAB HOOD	SAA	REMOVED	ESA-3	BIENIEWSKI THOMAS	6656440
509	21	0209	143		SAA	REMOVED	ESA-3	GETTEMY DONALD J	6673573
1627	21	0209	151		UWA	ACTIVE	ESA-TSE	HOISINGTON JOE D JR	6675500
1189	21	0209	166	RECEIVING ROOM	SAA	REMOVED	ESA-TSE	WALKER LARRY V	
356	21	0209	174	SHOP AREA	SAA	REMOVED	ESA-3	ORTIZ GEORGE RALPH	6675878
1262	21	0209	176	TRITIUM SCIENCE FAB. FA	SAA	ACTIVE	ESA-TSE	HARVEY EDWARD F	6672858
2550	21	0209	178		SAA	ACTIVE	ESA-TSE	TESCH CHARLES	6655602
510	21	0209	178		SAA	REMOVED	ESA-3	TALCOTT CAROL LYNN	6671899
1005	21	0209	179	DECON BOX SOUTH END	< 90 DAY	REMOVED	ESA-TSE	FRAME KANDY J	6652386
313	21	0209	179	UNDER GLOVE BOX	SAA	REMOVED	ESA-TSE	HARVEY EDWARD F	6672858
514	21	0209	BASE		SAA	REMOVED	ESA-3	ENCINAS PETE D	6655718
314	21	0209	N/A	OUTSIDE, N. DOCK	< 90 DAY	REMOVED	ESA-3	PURSON JOHN D	6678196
1636	21	0209	RCRM	RECEIVING ROOM	SAA	REMOVED	ESA-TSE	WALKER LARRY V	
1554	21	0210	0	EAST DOCK	SAA	REMOVED	ESH-20	SALISBURY MARY E	6658212
1917	21	0210	0	OUTSIDE - NORTHEAST SID	SAA	REMOVED	C-FM	GALLEGOS GERALD A	6656100
566	21	0210	0000	Ambilical Corridor	SAA	ACTIVE	RRES-ECO	SHERWOOD SHERRI R	6659876
176	21	0210	0128		SAA	REMOVED	EES-3	HOMUTH EMIL F	2954900
110	21	0210	120	ROCK MECHANICS LAB	SAA	REMOVED	EES-3	PLANNERER HARRY N	6650298
1100	21	0210	201		SAA	REMOVED	EES-3		
2279	21	0210		Outside	SWA	ACTIVE	RRES-ECO	BENNETT KATHRYN D	6655715
2174	21	0210		Outside	UWA	REMOVED	C-FM	RODRIGUEZ ALICE M	6658311
2319	21	0212		Designated area w ithin bldg.	< 90 DAY	REMOVED	NMT-2	BIRD GREGORY D	6678484
2475	21	0228			< 90 DAY	REMOVED	FWO-SWO	GARCIA DARRYL C	6672410
2149	21	0228			< 90 DAY	REMOVED	FWO-SWO	SALAZAR RENEE C	6671948
2258	21	0257			SAA	INACTIVE	FWO-WFM	TORREZ STEVE R	6674301
1307	21	0286	0000		SAA	REMOVED	ESH-DO	LARSON ELAINE M	6673961
2592	21	0357		Outside	SAA	ACTIVE	KSL	STANTON JAMES K	6670104
2593	21	0357		Outside	SWA	ACTIVE	KSL	STANTON JAMES K	6670104
2349	21	0357		Outside	SWA	ACTIVE	FWO-UI	PADILLA DAVID A	6672408
809	21	0427	N/A	SHED S OF BLDG 14	< 90 DAY	REMOVED	JCNM-	LUJAN GEORGE R	6652988
1647	21	0458	0		< 90 DAY	REMOVED	CST-25	CHANDLER KAREN	6653260
2407	21	0489			SWA	REMOVED	FWO-CGRP	STAFFORD DARRIK G	6671638
1588	21	1002	0	BAYB	< 90 DAY	REMOVED	JCNM-	SWICK DONALD E	6675991
1649	21	1002	0	BREEZEWAY	SAA	REMOVED	JCNM-	CHAMP LESLIE S	6655529

LOS ALAMOS NATIONAL LABORATORY
Hazardous Waste Storage Area Self-Assessment

30-SEP-03

03:32 PM

(HUTAE-21) AND

Site Id	TA	Bldg	Room	Location	Facility Type	Status	Group	Contact	Phone
1359	21	1002	0000	BAY C OUTSIDE OF S. SID	< 90 DAY	REMOVED	JCNNM-	MARTIN GARY E	6675702
807	21	1002	BAYA	WELDING SCHOOL/BAY A	SAA	REMOVED	JCNNM-	JOHNSON MEREL W	6651925
812	21	1002	BAYC	SATATIONARY EQU SHOP	SAA	REMOVED	JCNNM-	MARTIN GARY E	6675702
2558	21	1002		Outside - small asphalt contz	SAA	ACTIVE	FWO-SWO	TYMKOWYCH JOHN M	6679603
2341	21	1002			UWA	REMOVED	KSL	PULSKAMP C J	6640120
2019	21			PRS 21-027(D)	< 90 DAY	REMOVED	E-ER	DAYMON DEBORAH J	6679021
2505	21			Outside - PRS 21-011(k)	SWA	ACTIVE	RRES-R	EVANS S R	6621337

Total Number of Sites : 145

Ambient Air Radionuclide Concentrations at and near TA-21 from 2000 through the First Half of 2003

Craig Eberhart
September 24, 2003

The radiological air-sampling network, referred to as AIRNET, at Los Alamos National Laboratory (LANL or the Laboratory) is operated by the Air Quality Monitoring Team in the Meteorology and Air Quality Group (RRES-MAQ). AIRNET is designed to measure environmental levels of airborne radionuclides that may be released from Laboratory operations. These emissions include plutonium, americium, uranium, tritium, and activation products. The Laboratory currently operates about 50 environmental air samplers to sample radionuclides by collecting water vapor and particulate matter. This data analysis is a review of particulate matter AIRNET data near TA-21 from the beginning of 2000 through the second quarter of 2003 to evaluate the potential impact of the remediation activities at PRS-21-011(k) during 2002 and 2003. Several radionuclides were determined to be above background levels in the soils for this site. These included Cs-137, Am-241, Sr-90, Pu-238, and Pu-239 (which includes Pu-240). The following sites and groups of sites (identified as clumps) were included in this review and can be found in the attached maps (Figures 1 and 2):

Site Number	Site Name
09	Los Alamos Airport
10	Eastgate
20	TA-21 Area B
62	Crossroads Bible Church
68	Los Alamos Airport Road
69	DP Road - West Entrance
71	TA-21.01 (NW Bldg 344)
72	TA-21.02 (N Bldg 344)
73	TA-21.03 (NE Bldg 344)
74	TA-21.04 (SE Bldg 344)
75	TA-21.05 (S Bldg 344)
90	Eastgate - Backup
CB	TA-21 Station Clump
CD	LA East Station Clump
CH	On-site Station Clump

Generally, each AIRNET sampler continuously collects particulate matter for approximately two weeks per sample. Particulate matter is collected on 47-mm polypropylene filters at airflow rates of about 0.11 m³ per minute. Individual particulate matter filters are analyzed for gross alpha and gross beta activities. These filters are also grouped across sites, designated as "clumps," and analyzed for gamma-emitting radionuclides. Clumps typically range from five to ten filters. Gamma-emitting

radionuclides have also been measured at individual stations by grouping the filters collected each quarter. We also combine half-filters from the six or seven sampling periods at each site during the quarter to prepare a quarterly composite for isotopic analyses for each AIRNET station. These composites are dissolved, separated chemically, and then analyzed for isotopes of americium, plutonium, and uranium using alpha spectroscopy. A limited subset of these samples is also analyzed for Sr-90. All analytical procedures meet the requirements of 40 Code of Federal Regulations (CFR) 61, Appendix B, Method 114. The AIRNET project plan provides a summary of the target minimum detectable activity (MDA) for the biweekly and quarterly samples.

All AIRNET concentrations and doses are total measurements without any type of regional background subtractions. The AIRNET air concentrations are blank corrected to include corrections for the radioactivity from the filter material and the analytical process.

The Meteorology and Air Quality Group (RRES-MAQ) compares ambient air concentrations, as calculated from the AIRNET sample measurements, with environmental compliance standards or workplace exposure standards depending on the location of the sampler. For this analysis, annual concentrations are compared with the 10-mrem equivalent concentration established by the Environmental Protection Agency (EPA 1989) and published in 40 CFR Part 61 Appendix E Table 2—"Concentration Levels for Environmental Compliance." All radiation doses were calculated by using this 10 mrem concentration as the conversion factor.

Ambient Air Concentrations

As previously noted, the radionuclides that could potentially be above background include Cs-137, Am-241, Sr-90, Pu-238, and Pu-239. Except for Cs-137, air concentrations from individual samples are shown in Table 1 for these radionuclides and for the three uranium isotopes (U-234, U-235, and U-238). Radionuclide concentrations are graphically compared between sites in Figures 3, 4, 5, 6, 7, 8, and 9. Many of these measurements are less than their 2s uncertainties, as shown in the table, but the measurements are estimated concentrations instead of "less than" values. Annual isotopic concentrations were calculated from these results (Table 2).

No detectable concentrations of Cs-137 were measured in any of the quarterly samples or any of the clumped filters. Because these were measured by gamma spectroscopy all Cs-137 values are expressed as "less than" values. Annual averages of these values are shown in Table 3. The maximum "less than" value was 1.42 fCi/m³ which, if it were an actual concentration, would result in a dose of about 0.75 mrem. However, since all measurements were "less than" values the actual concentration would be much lower.

Particulate matter samples in and around TA-21 occasionally have measurable concentrations of plutonium and americium which have been related to previous remediation activities and to soil disturbances including dirt roads. During the latter half of 2002 and the first half of 2003 there were no major increases at any site, as shown in Figures 4, 5, and 6. Concentrations of plutonium and americium did increase slightly during the second quarter of 2003 at site 72, just south of PRS-21-011(k) with the Pu-239

concentration being above its 2s uncertainty. None of the strontium measurements exceeded their 2s uncertainties as shown in Figure 3. Uranium concentrations were primarily due to natural uranium from suspended soils with a few samples showing small amounts of depleted uranium. Measurable concentrations of depleted uranium have increased Laboratory-wide since the Cerro Grande fire, but concentrations are still similar to natural levels.

Doses and Conclusion

Radiation doses from Sr-90, Pu-238, Pu-239, Am-241, U-234, U-235, and U-238 were calculated from the annual air concentrations and summed by site as shown in Table 4. Usually more than half of these doses are from uranium that, based on their isotopic signatures, appear to be natural. The maximum estimated dose was 0.08 mrem which is less than 1% of the EPA standard of 10 mrem for DOE facilities.

Appendix C
Environmental
Restoration
CERCLA Report

**Remediation Services Project Supporting Documentation
For The TA-21-1 West Sub-parcel [Map Designation A-15-1]
CERCLA 120(h) Report**

Location: Technical Area (TA)-21, DP Mesa

Description: The TA-21-1 West Sub-parcel (Map Designation A-15-1) occupies approximately 7.5 acres of formerly developed Los Alamos National Laboratory land on DP Mesa. The Sub-parcel is bounded by DP Canyon to the north, DP Road to the south, North Rim Road to the east, and commercially developed Los Alamos County land to the west.

History: The TA-21-1 West Sub-parcel contains 2 solid waste management units (SWMUs) and 8 areas of concern (AOCs) within its boundaries: 21-013(d)-99, 21-024(f), 21-030, and C-21-015 thru C-21-021.

Consolidated **SWMU 21-013(d)-99** consists of former SWMUs 21-013(d) and 21-013(e). Former SWMU 21-013(d) was a disposal area located north of the former laundry building (Building 21-20) and north of DP Road. This area was also referred to as the "cold dump" and is believed to have been a disposal site for non-radioactive waste chemicals and/or materials. No records are available to identify the types and quantities of wastes or the dates when wastes may have been disposed of at former SWMU 21-013(d). Former SWMU 21-013(e) was used to dispose of construction debris including soil piles and drainpipes. Little was known about this former SWMU except that its location is northwest of former SWMU 21-013(d) and north of the fence along DP Road. It is not known when this SWMU operated.

Remediation Services Project (RSP), formerly the Environmental Restoration Project, conducted a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) at former SWMUs 21-013(d) and 21-013(e) in 1994 to confirm the presence or absence of contamination. Based on the sampling results, RSP implemented voluntary corrective actions (VCAs) at these SWMUs in 1995 and confirmatory samples were obtained from each of the SWMUs to verify the effectiveness of the site cleanup.

RSP completed a VCA at consolidated SWMU 21-013(d)-99 in 2003. This VCA collected additional media samples to define the nature and extent of contamination and assess the potential risks to human health and the environment. Based on previous corrective action activities and the analytical data obtained during this VCA, the VCA Completion Report concludes that consolidated SWMU 21-013(d)-99 does not pose an unacceptable risk to human health or the environment and that no further remedial action is necessary.

SWMU 21-024(f) was a septic system that received effluent from Building 21-45 from 1947 to 1954. The footprint of Building 21-45 is designated as **AOC C-21-015**. Initially Building 21-45 was used for safety training and effluent from the two restrooms in the building flowed into the septic system. However, in 1949 one of the restrooms was converted into a waste research laboratory. As part of that conversion, a laboratory sink and concrete sump (**AOC 21-030**) were installed. The effluent from the restroom and laboratory sink both drained into the 1,000-gal. steel, septic tank which discharged to a rock-lined pit (outfall) at the northern edge of DP Mesa through vitrified clay piping. The septic system was abandoned in place when the Building 21-45 was removed in 1954. The volume of liquid discharged to the septic system is unknown.

**Remediation Services Project Supporting Documentation
For The TA-21-1 West Sub-parcel [Map Designation A-15-1]
CERCLA 120(h) Report**

Effluent from the sump flowed to an existing, aboveground, steam line which passed over DP Road and continued into the laundry building (TA-21-20) and the main laundry sump. The main laundry sump subsequently discharged to the Material Disposal Area (MDA) V absorption beds.

SWMU 21-024(f) has been sampled during three discreet sampling events. In 1988, analytical results from one soil sample collected from beneath the outfall pipe indicated that lead, mercury, plutonium-239/240 and tritium were greater than background values. In 1992 and 1993, subsequent RFI activities were conducted that included a radiological field survey, installation of two boreholes, and collection of nine soil samples. The radiological field survey and soil sampling analytical results indicated that there were no inorganic chemicals or radionuclides present that exceeded screening action levels (SALs) and that there were no semi-volatile organic compounds (SVOCs) reported above detection limits. However, three volatile organic compounds (VOCs) (acetone, methylene chloride, and toluene) were detected. Analytical results from samples collected in the two boreholes indicated that no inorganic analytes or radionuclides were present above their respective SALs and that no organic analytes were present above detection limits.

Because VOCs were identified at SWMU 21-024(f) and the extent of these contaminants had not been adequately defined, a VCA was conducted by RSP in 2003 to characterize and remove the SWMU 21-024(f) septic tank and associated lines and outfall pit and to define the nature and extent of the VOC contamination. This VCA also addressed AOCs C-21-015 and 21-030 and included the; characterization and removal of the sump and outlet lines associated with 21-030; the collection of confirmatory samples beneath all structures; characterization of the footprint of AOC C-21-015 (a building); and sampling of the slope below the outfall of 21-024(f). The VCA Completion Report concludes that SWMU 21-024(f) and AOCs C-21-015 and 21-030 do not pose an unacceptable risk to human health or the environment and that no further remedial action is necessary.

AOCs C-21-016 thru C-21-021 were a series of storage hutments that were located along the north side of DP Road. These hutments were built in 1946 and removed approximately 7 to 8 years later. The 1991 Operable Unit 1106 RFI Work Plan recommended that no further remedial action be taken at these AOCs and in 1995, DOE concurred with this recommendation.

In 1993, a Zia Company employee was interviewed regarding various structures at TA-21, including the hutments. The records of communication from these interviews indicate that a Zia Company contractor disposed of all but one of the hutments as construction debris. One of the hutments, however, was disposed of in MDA-C inferring that it may have been contaminated at the time of disposal. Regardless of the type of contamination that may have been present, it was determined that subsequent corrective action activities have thoroughly investigated the area previously occupied by that hutment and that these investigations have failed to identify contamination posing an unacceptable level of risk to human health or the environment. Therefore, investigations subsequent to the 1991 recommendation for no further action continue to support the decision that no further remedial action is necessary.

**Remediation Services Project Supporting Documentation
For The TA-21-1 West Sub-parcel [Map Designation A-15-1]
CERCLA 120(h) Report**

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

No. There is no information that documents 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 TA-21-1 West Sub-parcel contains 2 SWMUs and 8 AOCs within its boundaries.

In 1995, AOCs C-21-016 thru C-21-021 were recommended for NFA and approved by the Department of Energy who maintains administrative authority over AOCs.

In September 2002, AOCs 21-030 and C-21-015 were recommended for NFA in a document submitted to the DOE. These two AOCs were again recommended for NFA in a 2003 VCA completion report.

In 2003, SWMUs 21-013(d)-00 and 21-024(f) were recommended for NFA (in two separate VCA completion reports) and submitted to the New Mexico Environment Department who maintains administrative authority over SWMUs.

All necessary remedial actions have been taken at these SWMUs and AOCs prior to transfer. Therefore, this Sub-parcel meets the Comprehensive Environmental Response, Compensation and Liability Act Section 120(h) requirements.

Future Actions Required: The Laboratory will petition the NMED to remove SWMUs 21-013(d)-99 and 21-024(f) from the Laboratory's operating permit.

References:

"Voluntary Corrective Action Completion Report for SWMU 21-013(d)-99," Remediation Services Project, September 2003, LA-UR-0475.

"Voluntary Corrective Action Completion Report for Solid Waste Management Unit 21-024(f) and Areas of Concern C-21-015 and 21-030," Remediation Services Project, September 2003, LA-UR-0472.

"Voluntary Corrective Action Completion Report for Areas of Concern C-21-015 and 21-030 at Technical Area 21," Environmental Restoration Project, September 2002, LA-UR-02-5402.

"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

**Remediation Services Project Supporting Documentation
For The TA-21-1 West Sub-parcel [Map Designation A-15-1]
CERCLA 120(h) Report**

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.*

*"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.*

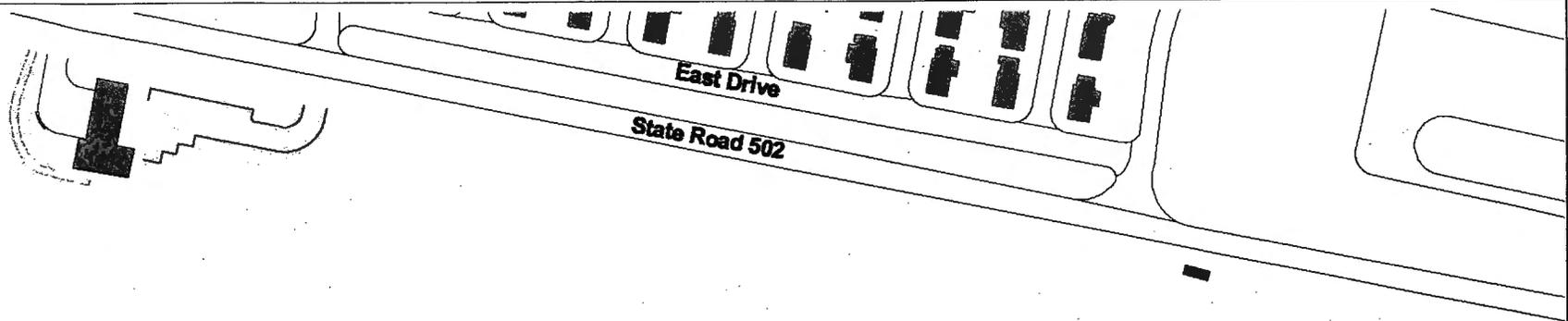
*"Voluntary Corrective Action Plan for PRS 21-024(f) and C-21-015," Environmental
Restoration Project, July 1999, LA-UR-99-3407.*

*"Request for Permit Modification, Units Proposed for NFA, March 1995," Environmental
Restoration Project, March 1995, LA-UR-95-0767.*

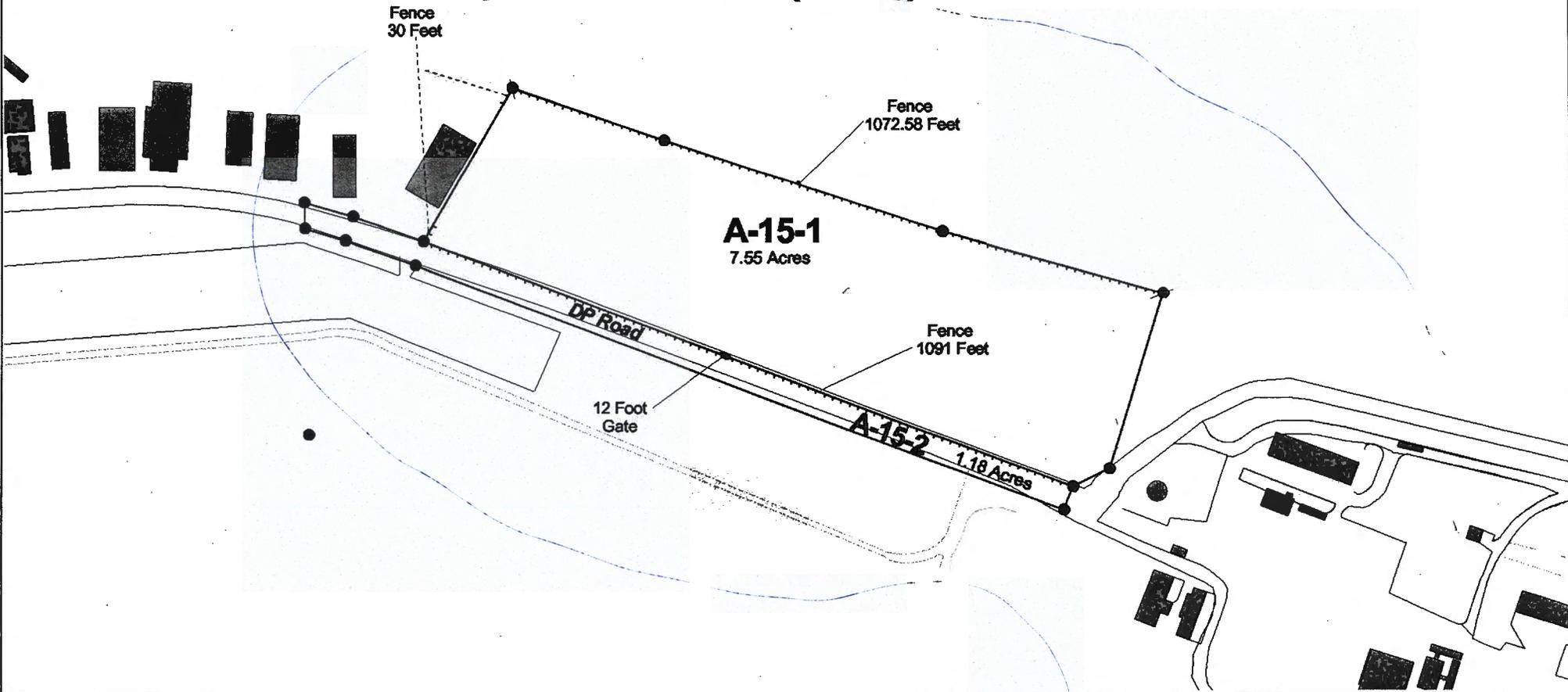
*"RFI Work Plan for Operable Unit 1106," Environmental Restoration Project, May 1991,
LA-UR-91-962.*

Appendix D

Site Map

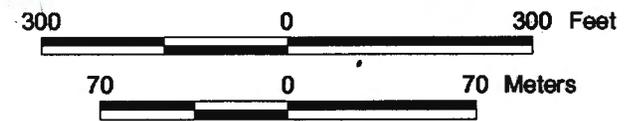
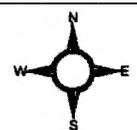


TA-21-1 (West)



 Building
 Land Transfer

 Roads
 Fence



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.