



TA21  
**DEPARTMENT OF ENERGY**  
National Nuclear Security Administration  
Los Alamos Site Office  
Los Alamos, New Mexico 87544



**NOV 15 2009**  
CERTIFIED MAIL

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



Dear Mr. Bearzi:

This letter provides the New Mexico Environment Department Hazardous Waste Bureau written notice the Department of Energy, National Nuclear Security Administration, Los Alamos Site Office (LASO) intent to transfer Tract A-10 (DP-Road 3 (East)), under section III.Y.1.a of the Compliance Order on Consent for Los Alamos National Laboratory. LASO intends to convey this tract of land to the County of Los Alamos within 120 days. Accordingly, LASO is requesting a meeting between NMED, LASO and the County of Los Alamos within 30 days of receipt of this letter, to discuss this conveyance, any remedial actions taken, and the County's intended use of the property. The previously stated intended use is open space and utilities.

Solid Waste Management Units (SWMU) or Areas of Concern (AOC) located within or adjacent to the tract are SWMU 21-029 and AOC C-00-021. Enclosed for your use is a map of the tract and a table which lists documents sent to or received from the NMED previously that concern this SWMU and AOC. In addition, the final Environmental Baseline Survey for Tract A-10 is enclosed for your use as needed. The size of the tract is approximately 13 acres.

Please respond to this letter to Ms Vicki Loucks or myself. If you have any questions or comments, please contact Vicki Loucks at (505) 667-6819 or by email at vloucks@doeal.gov.

Sincerely,

Juan L. Griego  
Assistant Manager

26.4 NSM:8VL-212465

Enclosures

cc w/o Enclosures:  
Ms. Neelam Dhawan  
Environmental Specialist, Hazardous Waste Bureau  
New Mexico Environment Department  
2905, Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505

32226



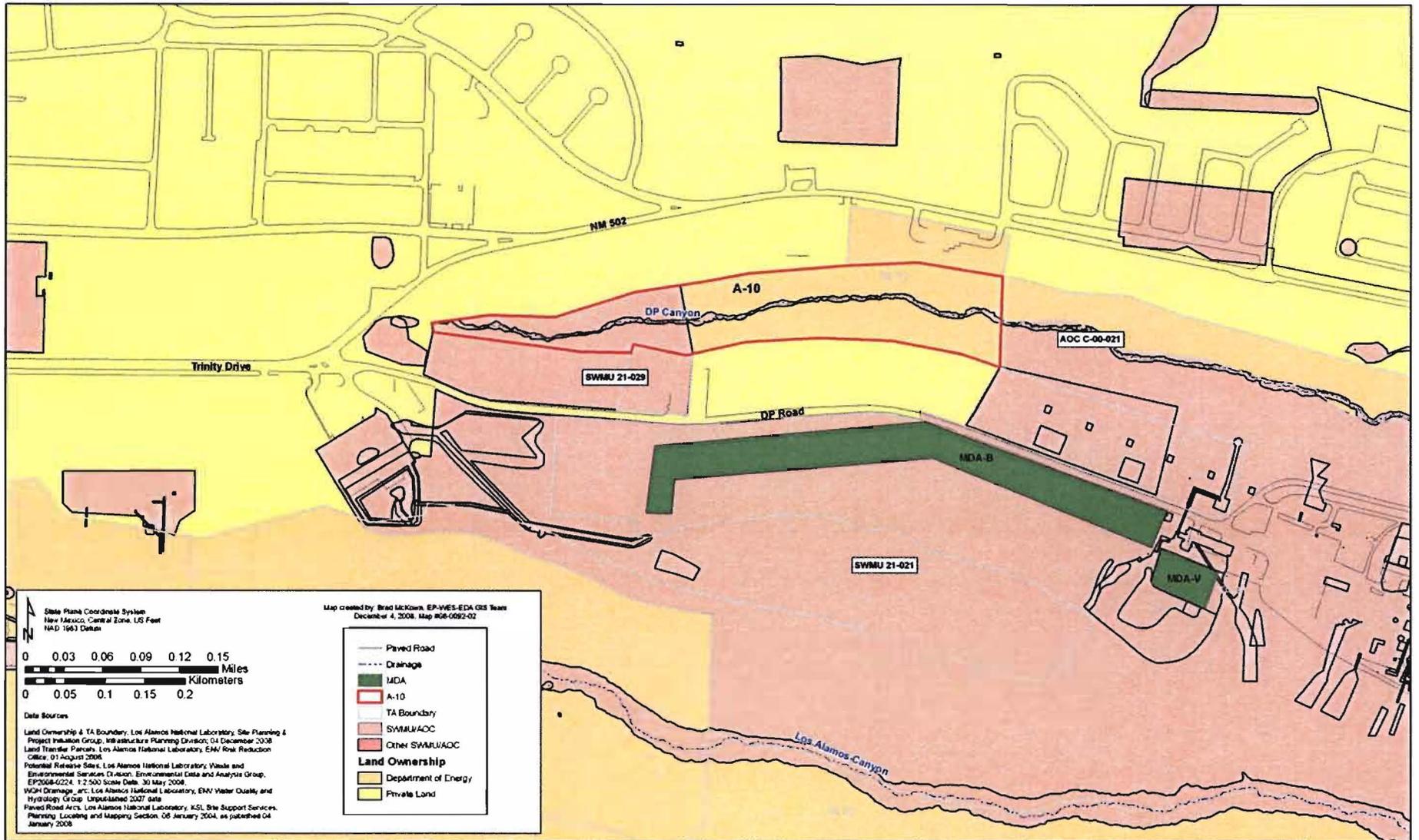
cc w/o Enclosures:

Mr. Anthony J. Mortillaro  
County Administrator  
County of Los Alamos  
P.O. Box 30  
Los Alamos, New Mexico 87544

Ms. Mary McInerny  
County Legal  
County of Los Alamos  
P.O. Box 30  
Los Alamos, New Mexico 87544

Mr. Seth Kirshenberg  
Kutak Rock LLP  
1101 Connecticut Avenue, NW  
Suite 1000  
Washington, D.C. 20036

L. Cummings, CCS, LASO  
V. Loucks, NSM, LASO  
J. Isaacson, ENV-RRO, LANL, MS-K404  
J. Nisengard, ENV-RRO, LANL, MS-K404  
Records Center, LASO  
Official Contract File, LASO



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Fact Sheet					
Description in 1990 SWMU Report					
Figure(s)/Map(s) of Site (including respect to TA)					
Site Photograph(s)					
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Figure(s)/Map(s) of Site (including respect to TA)					
Site Photograph(s)					
<b>Section II—Regulatory History and Correspondence</b>					
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\* Not Applicable: Item is not included because the activity was not conducted or the information does not exist.

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LA-UR-

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**Environmental Baseline Survey**

**for**

**Tract A-10, DP Road-3 East (DP Canyon)**

Prepared Pursuant to the U.S. Department of Energy

*Cross-Cut Guidance on Environmental Requirements*

*For DOE Real Property Transfers*

LA-UR-06-5607

May 2009

## EXECUTIVE SUMMARY

This document was prepared to support the conveyance of ownership of Tract A-10 at Los Alamos National Laboratory (LANL or the Laboratory) from the U.S. Department of Energy (DOE), National Nuclear Security Administration (NNSA)<sup>1</sup>, to Los Alamos County pursuant to Public Law 105-119, Section 632. It also documents DOE's finding that, despite the presence of trace levels of contamination (from sources external to this tract), Tract A-10 is in such condition that DOE/NNSA may issue deeds on the basis that "all remedial action necessary to protect human health and the environment has been taken."

Tract A-10 is one of three sub-parcels of the original DP Road land transfer tract. A small portion of Tract A-10 was taken from Tract AA, the remainder was taken from Parcel 2. A-10 is located in Eastern Area No. 2 in Los Alamos County, and is also designated as "DP Road-3 East" to identify its historical relationship to the original DP Road Tract. Because Tract A-10 constitutes the upper section of DP Canyon, it is also commonly referred to as the "DP Canyon" tract.

The western end of the 13.8 acre A-10 tract is approximately 200 ft east of Trinity Drive and consists of an undeveloped, approximately 2000 ft stretch of the bottom of DP Canyon (see Figure D-1). A-10 is north of the commercial-use land along the north side of DP road. The western half of A-10 is south of commercial property on the south side of Trinity Drive, and the eastern half of A-10 is south of undeveloped land along the south side of Trinity Road.

This Environmental Baseline Survey Report (EBSR) was prepared in accordance with the *Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers* (DOE 2005). It discusses NNSA compliance with the environmental requirements associated with real property transfers, including Section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The methodology used in preparation of LANL EBSRs is described in RRO-GUIDE-001, *Land Conveyance and Transfer: Developing the Environmental Baseline Survey Report*, and is consistent with the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-05), and the U.S. Environmental Protection Agency's (EPA's) final rule *Standards and Practices for All Appropriate Inquiries* (the "AAI Rule") found at 40 CFR Part 312. The components of the study include

- Reviews of historical and current information, documents, and government records pertinent to the A-10 tract;

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<sup>1</sup> Congress established the National Nuclear Security Administration within the DOE/NNSA to manage the nuclear weapons program for the United States. Los Alamos National 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.

- Visual inspections of the A-10 tract and adjoining properties; and
- Consultations with both DOE/NNSA and LANL staff to confirm existing information or develop additional information related to the identification of recognized environmental conditions, and any potential impacts on the property transfer.

Based on this assessment, the following findings have been made regarding the A-10 tract:

- There is one area of concern (AOC C-00-021) within A-10: the canyon bottom (See Figure D-2.).
- SWMU 21-021-99 (potential soil contamination from air-fall during historical TA-21 operations) has been delineated so as not extend into Tract A-10.
- There is one remediated solid waste management unit (SWMU 21-029) adjacent to and south of Tract A-10 associated with a former tank farm.
- No records were found indicating hazardous substances were ever stored at this site.
- Solid debris such as concrete rubble, iron scrap, and car parts have been historically disposed into the tract from commercial operations along the tract's southern boundary.
- Trace levels of residual contamination exist on A-10 from activities conducted by LANL in nearby areas from the late 1940s through the 1980s and from run-off from surrounding commercial and residential properties; however, DOE/NNSA believe no additional remedial activities are needed on the A-10 tract.
- The significant levels of polyaromatic hydrocarbons (PAHs) identified in DP Canyon are thought to have been leached from asphalt parking lots in the Los Alamos townsite and adjacent properties .

Analyses indicate air quality is good and is primarily impacted by vehicles using DP Road and Trinity Drive, commercial activities along DP Road, and the commercial and residential activities of the Los Alamos townsite. Additional impacts may arise from operations at the Los Alamos Neutron Science Center (LANSCE) facility on the mesa to the south. Future air quality impacts may arise from planned remediation activities at TA-21 east of the tract and at MDA B, south of the tract; however, air monitors have been installed between A-10 and TA-21 to measure this.

This tract is located in DP Canyon, an ephemeral drainage that receives surface water runoff from the surrounding properties. 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.

The tract contains no water supply wells and no active water quality monitoring wells for which LANL currently requires an easement. There are no future plans

for additional environmental monitoring on this property, but future environmental monitoring could be required.

Habitat for threatened and endangered species, specifically the Mexican Spotted Owl, overlaps the A-10 tract; however, according to the Biological Opinion issued by the U.S. Fish and Wildlife Service, no further action is required at A-10 to address Endangered Species Act issues (FWS 2002).

Tract A-10 has been thoroughly inventoried for historic and prehistoric cultural resources. Although the inventory report<sup>2</sup> does not specify results for the canyon bottom, the subject matter expert for this survey confirmed that there are no archeological sites in A-10 eligible for the National Register of Historic Places (NRHP).

Based on this information, LANL and NNSA conclude that there are no outstanding environmental issues on the A-10 tract itself that would prevent conveying it to Los Alamos County.

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<sup>2</sup> Cultural Resources Status of Proposed Conveyance and Transfer Tracts at Los Alamos National Laboratory Los Alamos, New Mexico. LA-UR-98-2713.

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## 1.0 PURPOSE OF THE ENVIRONMENTAL BASELINE SURVEY

The purpose of this document, *Environmental Baseline Survey for A-10 (DP Canyon) Tract, DP Road-3 East* (herein referred to as Tract A-10), is to support the conveyance of ownership of Tract A-10 at Los Alamos National Laboratory (LANL, or the Laboratory) from the U.S. Department of Energy (DOE)/National Nuclear Security Administration (NNSA), to Los Alamos County pursuant to Public Law (PL) 105-119. A-10 is an approximately 13.8-acre portion of the DP Road-3 East Tract (see Figure D-1).

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—tracts of land under the jurisdictional administrative control of the Secretary at or in the vicinity of Los Alamos National Laboratory.

To be considered eligible, tracts of land must meet the following suitability criteria established by PL105-119 on or before November 26, 2007:

- It is no longer needed by DOE for the national security mission.
- It can be restored or remediated by November 2012.
- The land is suitable for historic, cultural, or environmental preservation, economic diversification, or community self-sufficiency.

DOE's *Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers* (DOE 2005) provides guidance on the types of information needed to support real property transfers. The information was gathered by conducting an environmental site assessment of A-10 consistent with the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-05), and the U.S. Environmental Protection Agency's (EPA's) final rule, *Standards and Practices for All Appropriate Inquiries* (the "AAI Rule"), at 40 CFR Part 312. This environmental site assessment is provided in Appendix B.

This information, such as the presence of floodplains and wetlands, critical habitats, historic properties, and any current or past practices potentially involving 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 for additional details.

## 2.0 BOUNDARIES OF PROPERTY AND SCOPE OF SURVEY

The DP Road-3 East Tract is located between the western boundary of Technical Area-21 (TA-21) and the eastern boundaries of the commercial districts of the Los Alamos townsite (see Figure D-1). World War II and Cold War facilities at TA-21 used for nuclear weapons work are planned to be decontaminated and demolished; contaminated areas will be remediated in the near term as stipulated in the Consent Order (NMED 2005).

The tract consists of undeveloped canyon bottom accessed from DP Road. Vegetation includes ponderosa and piñon-juniper woodlands with open shrub, grasslands, and wildflower areas; A-10 is considered potentially sensitive wildlife habitat.

This approximately 13.8-acre tract is located southwest of Los Alamos County (LAC) Airport (transferred from DOE to LAC in October 2008) and other variously owned County land and private properties. It is bounded on the north by commercial properties, on the south by LAC and commercial properties on DP Mesa, on the west by active and vacant commercial land, and on the east by DOE/NNSA land. The legal property boundary description of this tract is provided by the U.S. Army Corps of Engineers' *Land Survey Plat, Los Alamos National Laboratory, Tract A-10, Being a Part of Tract AA and Parcel 2, Eastern Area No. 2, County of Los Alamos, State of New Mexico*, recorded by the Los Alamos County Clerk on March 18, 2003.

## 3.0 SURVEY METHODOLOGY

Survey methodology was consistent with the American Society of Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-05), and the AAI rule and included:

- Reviews of historical and current information, documents, and government records pertinent to the A-10 tract
- Visual inspections of the A-10 tract and adjoining properties
- Consultations with both LANL and DOE/NNSA staff to confirm existing information or develop additional information related to the identification of recognized environmental conditions, and any potential impacts on the property conveyance

### 3.1 Approach and Rationale

LANL assessors reviewed historical and current information for A-10 and visually surveyed the site. After determining the nature and quality of available information, cognizant LANL and DOE/NNSA subject matter experts (SMEs) were consulted to confirm existing information and 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, the following assumptions were made:

- The A-10 tract boundaries have not been changed since the plat was recorded by the LAC Clerk on March 18, 2003, as specified in Section 2.0.
- The nature and quality of the document reviews and site surveys were independent of, and unaffected by, the recipients' intended use—trail user and extended backyard scenario<sup>3</sup>—identified in the Conveyance and Transfer Plan (DOE 2000a).
- Assessors would conduct a final inspection or “walk-through” of the tract prior to conveyance.

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

A partial list of documents reviewed to prepare this report is provided in the Environmental Site Assessment (Appendix B).

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

The visual inspections that were performed are discussed in the Environmental Site Assessment (Appendix B). It also identifies personnel contacted and interviews conducted for this evaluation.

## **4.0 SUMMARY OF DATA**

This section of the EBS report summarizes the results of the data reviews.

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

Historical maps from the pre-LANL era (1924), aerial photographs (1935), and historical accounts of life in the area show little development prior to LANL occupancy (pre World War II). Detroit businessman Ashley Pond started the “Los Alamos Ranch School” in 1917. The school began with a few ranch buildings from the Harold H. Brook homestead.

Laboratory operations began on nearby DP Mesa in the late 1940s. They included warehousing, utility shop operations, and a materials testing laboratory, all located on the mesa-top within Tract A-11, which is south and west of A-10. Waste disposal operations were conducted at what is now designated Material Disposal Area B (MDA B) on the mesa-top south and east of this tract. Plutonium processing operations were also conducted further east on the mesa-top at TA-21. In the past, LANL fueling facilities were located on the mesa-top due south and immediately adjacent to the A-10 tract in Tract A-9. In the 1960s, following the end of LANL's use of tract A-8-a to the south, its western part was used for a residential trailer park and playground area; however, Tract A-10 has remained vacant.

The Potential Release Sites (PRSs) located on and near the A-10 tract are associated with the historical Laboratory operations on the adjacent lands. At the time of this report, LANL had conducted a series of investigations and cleanups of the PRSs (i.e., the contamination resulting from Laboratory activities) on and

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<sup>3</sup> The trail user scenario assumes typical use by hikers, where the extended backyard scenario assumes a child playing in an undeveloped area near a residence for an extended period of time.

near the subject property. Appendix C provides historical details and current status of the PRS activities.

A-10 is unoccupied, vacant land. No structures or facilities associated with LANL's federal, state, or local permits (such as air monitoring stations, radiation monitoring stations, or wastewater discharge outfalls) are located within A-10, although there are several stormwater outfall pipes from businesses located south of A-10.

The DP Road-3 East parcel was never actively used by the Laboratory, no Laboratory operations were conducted within the tract boundaries, and no Laboratory structures were situated within the tract.

## **4.2 Environmental Setting**

The tract supports native vegetation such as ponderosa pines, piñon pines, juniper, and shrub grassland. Animals on the subject property include rats, mice, songbirds, and occasionally deer and coyote. A-10 is a potentially sensitive wildlife habitat, specifically for the Mexican Spotted Owl and bald eagle. This tract includes areas identified as floodplain but does not support wetlands.

Noise in the vicinity of this tract is primarily from motor vehicles, aircraft, and commercial activity along DP Road. There is some night-shine from artificial light sources along DP Road and from surrounding areas of the townsite and the Laboratory.

### **4.2.1 Stormwater Runoff Patterns**

Tract A-10 receives runoff from the Los Alamos townsite, specifically from the parking lot at the Knights of Columbus hall located immediately to the west, the town-house complex to the north, and the commercial businesses on DP Road immediately to the south. DP Canyon extends east-southeast for approximately 2.2 miles to its confluence with Los Alamos Canyon. Organic chemicals associated with urban runoff, such as polyaromatic hydrocarbons, and those associated with automobiles migrate with stormwater runoff onto, through, and off of the tract into lower DP Canyon.

### **4.2.2 Hazardous Materials and Waste Management**

There is no record of hazardous materials or hazardous waste management on this tract.

### **4.2.3 CERCLA-Related Contamination**

See Appendix C of this document: *CERCLA 120(h) Supporting Documentation for Potential Release Sites on the A-10 (DP Canyon) Tract*.

### **4.2.4 Storage Tanks and Pipelines**

There is no record of storage tanks or pipelines existing on this tract, although diesel fuel tanks (designated as SWMU 00-029) were formerly located on the immediately adjacent property on the southern mesa-top (Tract A-9). This SWMU has been remediated, as discussed in Section 4.4.

#### **4.2.5 Wastewater Treatment and Disposal**

There is no record of wastewater treatment or disposal on this tract.

#### **4.2.6 Lead in Drinking Water**

Not applicable. There are no sources of drinking water, nor is there a potable water distribution system on this tract.

#### **4.2.7 Oil/Water Separator**

No current or historic uses of oil/water separators are associated with the subject property.

#### **4.2.8 Asbestos**

There are no current or historic records of asbestos-related issues on this tract.

#### **4.2.9 Air**

Air quality at this tract is primarily affected by vehicular traffic along New Mexico State Highway 502 and DP Road. The one potential contamination source on the subject property subject to the CERCLA 120(h) requirements is resuspension of contaminants known to exist in DP Canyon sediments. LANL site remediation work at TA-21 south east of the tract, and operations at the Los Alamos Neutron Science Center (LANSCE) facility on the mesa to the south, have a lesser effect on A-10's air quality.

There are no emissions of radioactive air pollutants from activities at the tract itself. Air sampling data collected from a station located near the subject property identified very low concentrations of tritium, plutonium, americium, and depleted uranium, which are believed to result from the resuspension of surface contamination. Levels of uranium were comparable to historical concentrations of natural uranium in Los Alamos County soils. The levels of plutonium and americium measured were less than one percent of the EPA public exposure standard. Tritium levels measured were comparable to those found at other locations in the eastern part of the Los Alamos townsite.

Planned decontamination and decommissioning activities at TA-21 to the east and/or remediation activities planned at MDA B to the south could potentially affect air quality when these projects are initiated; air monitors have been installed between A-10 and TA-21 to detect any air quality changes.

A-10 is in New Mexico Region 3, an attainment area that meets National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Analyses indicate that air quality is good.

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

There are no known sources of lead at this site.

#### **4.2.11 PCBs**

There are no known sources of PCBs at this site. No records of PCBs being used or stored at this site were found.

#### **4.2.12 Pesticides**

No records of pesticides being used or stored at this site were found.

#### **4.2.13 Medical Wastes**

There is no known history of medical wastes being generated, stored, or disposed of at this site.

#### **4.2.14 Ordnance**

No records of ordnance being used, stored, or disposed of at this site were found.

#### **4.2.15 Radioactive Materials and Wastes**

There are no records of radioactive materials being used or stored or radioactive wastes being disposed of at this site; however, air fall from historical operations at TA-21—southeast of this tract—may have resulted in surface deposition of some radionuclides, although SWMU 21-021-99, which delineates this air-fall zone, ends at the A-10 boundary. See the discussion of SWMU 21-021 in Appendix C.

#### **4.2.16 Radon**

A review for radon is not applicable to this property transfer action.

#### **4.2.17 Groundwater**

There are no regional aquifer groundwater test or supply wells within the tract or within a distance of 0.5 mile. There is no alluvial groundwater under A-10 and no groundwater monitoring stations are located within A-10. The closest environmental monitoring locations maintained by the LANL Environmental Surveillance Program are for surface water and shallow groundwater in Los Alamos Canyon and for intermediate perched groundwater downstream in lower DP Canyon; they do not pertain to water quality or quantity associated with the A-10 tract.

### **4.3 Natural and Cultural Resources**

**Natural Resources.** Because this tract and other tracts contain areas of environmental interest (AEIs) for the Mexican Spotted Owl, the DOE/NNSA and LANL consulted with the U.S. Fish and Wildlife Service (FWS) to assess the potential effects of the proposed property transfer on that species. DOE's August 28, 2001 Biological Assessment concluded that land transfer of the DP Road tracts "...may affect, [and is] likely to adversely affect" the spotted owl. But the FWS issued a final Biological Opinion (FWS 2002) which concluded that transfer

of this parcel to the county "...is not likely to jeopardize the continued existence of the owl." The Service further concluded that land transfer would not result in an "incidental take" (death) of an owl. It recommended that LANL review and update its owl habitat model and provide annual copies of owl AEI survey data to the Service, which LANL has done.

**Cultural Resources.** One hundred percent of the DP Road-3 East Tract has been inventoried for historic and prehistoric cultural resources. No prehistoric sites eligible for the National Register of Historic Places (NRHP) were identified within the tract. There is a potential for unidentified resources such as subsurface archaeological deposits or unrecorded burials.

A Programmatic Agreement was signed by the DOE, the Advisory Council on Historic Preservation, the New Mexico State Historic Preservation Officer, the Incorporated County of Los Alamos, the Pueblo of San Ildefonso, and the Pueblo of Santa Clara. The Programmatic Agreement provides for mitigation of adverse effects to any such resources that might be identified prior to conveyance of this property out of federal ownership.

#### **4.4 Identification of Uncontaminated Properties**

Section 120(h)(4) of CERCLA directed federal agencies with real property on which federal government operations have ended to identify parcels of the real property "...on which no hazardous substances and no petroleum products or their derivatives were stored for one year or more, known to have been released, or disposed of." The statute, and interpretive EPA policy documents (see U.S.EPA, 1994) define such parcels as "uncontaminated" within the meaning of CERCLA 120(h)(4). For parcels of property at a facility not on the National Priorities List, such as the LANL land transfer tracts, CERCLA 120(h)(4) states that this identification is not complete until the appropriate state official concurs in the results.

Tract A-10 does not meet the CERCLA 120(h) "uncontaminated" definition, even though DOE/NNSA and LANL believe all remedial actions necessary to address the known contamination on this tract, and allow its unrestricted transfer, have been completed according to the requirements of PL 105-119. Because Tract A-10 is not "uncontaminated," CERCLA Section 120(h)(4) is not applicable.

#### **5.0 SUMMARY OF DATA FOR ADJACENT PROPERTIES**

"Adjacent" properties are properties that share a common property boundary with Tract A-10. "Local" properties are properties that do not share a boundary but are in the local area. Appendix E, the Environmental Data Resources (EDR) report identifies local properties within one mile of the center of Tract A-10 that government databases associate with any potential environmental liabilities. Local properties are discussed briefly in Section 5.2 and in more detail in Appendix B, the *Environmental Survey Assessment*. Adjacent properties are discussed below.

## 5.1 Adjacent Properties

Adjacent properties are as follows (see Figure D-1): To the north, LAC Fire Station 6 and private commercial properties; to the south, commercial properties, Tract A-9 (previously conveyed to LAC), and LAC Fire Station 2; to the east, LANL property; and to the west commercial properties belonging to the Knights of Columbus.

### 5.1.1 Adjacent Properties with No Known or Suspected Releases

Except for Tract A-9, a former fuel tank farm south of A-10, and the Knights of Columbus property, which included a second former fuel tank farm west of A-10 (before Knights of Columbus ownership), there are no known releases from the remaining properties adjacent to Tract A-10.

### 5.1.2 Adjacent Properties with Known or Suspected Releases

SWMU 21-029 and Consolidated Unit 21-021-99 are located immediately south of the A-10 tract. The remainder of the DP Canyon PRS, AOC C-00-021 is located directly east (downgradient) of the A-10 tract. See Appendix C for the history of use, site investigation and remediation activities, and current regulatory status of the PRSs in this tract.

AOC 00-027, the former DP Road storage area, was located at the intersection of Trinity Drive and DP Road at the current location of the Knights of Columbus hall. AOC 00-027 has been removed from LANL's Hazardous Waste Permit and so does not appear on Figure D-2. This site was used as a fuel tank farm beginning in 1946 and was converted to a product container storage area in mid-1948. The storage capacity of the site was approximately 600 to 700 55-gal. containers. The storage area was decommissioned in the late 1950s. Numerous investigations and corrective measures were implemented at AOC 00-027 between 1992 and 2004, as summarized in the June 2005 *Addendum to the Completion Report for the Voluntary Corrective Action Using a Soil Vapor Extraction System at AOC 00-027*. The soil vapor extraction system was operated for 20 months to remove subsurface organic vapors. Sample results confirmed the corrective measures are protective of human health and the environment for the intended use of the property.

SWMU 21-029, the DP Tank Farm, located on the mesa-top in Tract A-9, is directly south of and adjacent to the A-10 tract. The DP Tank Farm was operational from 1946 to 1985 and is a 3.5-acre site located between the eastern boundary of the Knights of Columbus property and the western boundary of Los Alamos County Fire and Training Station No. 2. The tank farm was the primary fueling station supporting Los Alamos Scientific Laboratory (LASL, now LANL) operations until the late 1970s. It consisted of 15 storage tanks and 2 fill stations that contained various petroleum hydrocarbon products. Tank capacities ranged between approximately 2,100 and 51,000 gal. with a total capacity of 281,364 gal. Thirteen of the tanks were installed below ground and two were installed aboveground. The site was decommissioned in 1988. Numerous investigations and corrective actions implemented at the site are summarized in the September

2001 Phase II RCRA Facility Investigation (RFI) Report for SWMU 21-029. The RFI concluded that human health risks for contaminants released from the DP Tank Farm are within acceptable risk ranges for present-day and foreseeable future land uses and that there are no adverse ecological effects observed within terrestrial and aquatic systems in the western-most portion of DP Canyon.

## 5.2 Local Properties

Nearby DOE-owned lands include several PRSs, notably PRSs 21-015 and 21-021 on Tract A-9.

For this assessment, federal and state environmental databases were searched to assess whether environmental conditions on the subject property have been affected by any off-site source or sources nearby (see Appendices B and E).

The database search identified 2 mappable sites and 19 unmappable sites within the designated search radii. The term “mappable” means the site’s location can be mapped to a local street address with a high degree of confidence. Conversely, the “unmappable” sites (also called “orphan” sites in Appendix E) could not be mapped based on their reported addresses, generally because these are offsite addresses (see Table 4-1). None of the sites identified pose an adverse risk to the subject property. Other than MDA B, no apparent environmental liabilities associated with the nearby properties and lands were identified in any of the searches.

<b>Table 4-1 Environmental Database Search Results</b>	
<b>Mappable Sites (2)</b>	
2 sites with records of leaking underground storage tanks (LUSTs):	
1 – Hilltop House Conoco - requires no further action	
1 – Los Alamos Public Schools - requires no further action	
1 site with registered underground storage tanks (UST- not leaking)	
1 – Hilltop House Conoco - No indication of a release	
<b>Unmappable Sites (19)</b>	
12 sites associated with LANL technical areas; none located on DP mesa	
3 – A gas station, a storage yard, and a patrol yard – located below the mesa near the intersection of State Highway 4 and State Highway 502	
1- Aviation gas provider at Los Alamos County Airport	
1 – Listed as a registered RCRA small-quantity generator	
1 – Listed as a “solid waste facility/landfill” and a RCRA small-quantity generator; separated from the subject property by a canyon	
1 – Listed as a “solid waste facility/landfill”	

The database search to assess whether environmental conditions on the subject property have been affected by any off-site source or sources (see reports in Appendix E) identified 3 mappable sites within the designated search radii (NOTE: The term “mappable” means that the address information provided was sufficient for the database searcher or vendor to pinpoint the site’s location on a street map with a high degree of confidence.):

- Two of the mappable sites were reported as having leaking underground storage tanks (LUSTS). The closest was located at the Los Alamos public school complex; it was removed and requires no further action. The next closest LUST, located at the Hilltop House Conoco station, does not require further action.
- One of the mappable sites was a second underground storage tank located at the Hilltop House Conoco station. There is no report that this tank ever leaked.

Nineteen “orphan” sites were also identified in the database search:

- Twelve are associated with LANL technical areas and none of these are located on DP mesa or in the townsite.
- Three sites—the Totavi Phillips gas station, the New Mexico State Highways and Transportation Division (NMSHTD) storage yard, and the New Mexico Department of Transportation (NMDOT) patrol yard—are located below the mesa near the intersection of State Highway 4 and State Highway 502.
- Four of the sites—Portage Environmental (a LANL contractor for environmental remediation listed because it is a registered RCRA small-quantity generator), the Household Hazardous Waste Collection Facility, Los Alamos County landfill, and aviation gas provider at the County Airport—are identified in the EBR report (Appendix E) as hazardous materials handlers, but no toxic releases are known to have occurred at these sites.

None of the identified “mappable” or “orphan” sites pose an adverse risk to the subject property.

Given the database search results, and based on visual inspections of the surrounding properties from publicly accessible areas, none of the neighboring properties is believed to present any environmental concerns that would affect the subject property. (See Section 5.1)

## **6.0 DISCUSSION, CONCLUSIONS, AND RECOMMENDED COURSES OF ACTION**

### **6.1 Discussion**

Appendix B provides more detailed discussion of the following issues (which address key provisions of the AAI rule):

- This inquiry identified conditions indicative of releases or threatened releases of hazardous materials on, at, in, or to the subject property. Most are historical releases, which have been fully remediated, but polyaromatic hydrocarbons (PAHs) may exist in the canyon sediments that exceed levels deemed acceptable for the trail user and extended backyard scenarios. The PAHs are believed to result from the accumulation of chemicals in urban runoff from the Los Alamos townsite and adjacent commercial properties.
- The degree of obviousness of the presence or likely presence of contamination at the property—apart from solid debris— was/is very low. However, there are no conditions impacting the ability to detect the contamination by appropriate investigation. Appendix C and Section 4.4 discuss the investigations and remedial actions conducted on and near the tract.
- This inquiry identified no data gaps affecting the investigators' ability to identify conditions indicative of releases or threatened releases in each area of inquiry.
- A discussion of the relationship of the purchase price to the value of the property, if the property was not contaminated (required per 40 CFR 312.29) is not applicable to property transfers under PL 105-119.

### **6.2 Facility Matrix**

This analysis is not applicable. No structures exist on the tract.

### **6.3 Property Categorization**

This analysis is not applicable. All lands in this tract are in a single category.

### **6.5 Resource Map**

Not applicable. There were no hazardous materials, underground tanks, or water wells identified on the subject property.

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

Based on best available environmental information, LANL and the DOE/NNSA conclude there are no outstanding environmental issues to prevent conveyance or transfer of this tract. However, in order to comply with Consent Order requirements, PRS issues with NMED must be resolved and NMED concurrences obtained, as discussed above in Appendix C, Section 1.3.

Regarding the levels of polyaromatic hydrocarbons in this sub-tract, see Appendix C, Section 1.1.2.

The lower reaches of DP Canyon below the eastern boundary of A-10 are known to include both chemical and radiological contamination.

When DOE/NNSA and LANL obtain NMED's concurrence pursuant to the provisions of the Consent Order, DOE/NNSA will then be able to issue deeds on the basis that "all remedial actions necessary to protect human health and the environment have been taken."

#### 7.0 Certification

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

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John Isaacson  
Land Conveyance & Transfer Project Manager  
Environmental Protection Division–Risk Reduction Office

**APPENDICES**

Appendix A - CERCLA 120(h) Notification

Appendix B - Environmental Site Assessment

Appendix C - CERCLA 120(h) Report

Appendix D - Site Maps

Appendix E - EDR Reports

## APPENDIX A

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

#### Tract A-10, DP Road-3 East (DP Canyon)

#### **Purpose:**

The purpose of this notice is to meet the reporting requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), Section 120(h), 42 U.S.C. Section 9620(h), for the conveyance of a tract of land from ownership by the Department of Energy/National Nuclear Security Administration (DOE/NNSA) to Los Alamos County. The information contained in this notice is required by CERCLA.

The tract to be conveyed was historically identified as the DP Road Tract. This tract was subsequently subdivided to facilitate conveyance, the subparts being variously designated over time. The tract to be conveyed is now designated as Tract A-10, and is shown on a survey plat recorded March 18, 2003 as "Tract A-10, being a Part of Tract AA and a Part of Parcel 2, Eastern Area No. 2, County of Los Alamos, State of New Mexico."

CERCLA and its implementing regulations at Title 40 CFR Part 373 require DOE/NNSA to disclose whether any hazardous substances (as defined by CERCLA) have been stored on the subject property for more than one year in quantities greater than or equal to 1000 kg (or the reportable quantity [RQ]). DOE/NNSA must also disclose whether any hazardous substances are known to have been released or disposed of on the subject property, and whether any acutely hazardous wastes were stored on the subject property for one year or more in quantities greater than or equal to 1 kg.

The methodology DOE/NNSA used to evaluate whether any hazardous substances meeting the CERCLA reporting requirements were stored, released, disposed of, or otherwise managed on Tract A-10 is discussed in Section 2.0 of the EBS report, and the results of the evaluation are discussed in detail in Appendices B and C.

#### **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-10 tract subsequent to 1988 have been identified. Activity prior to 1988, if any, would have been associated with one or more of the Potential Release Sites (PRSs) affecting this tract, which are discussed in detail in Appendix C.

#### **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?**

There are no records indicating hazardous substances have ever been used, stored, released, or disposed on the tract in amounts exceeding 1000 kg or the RQ. Activity prior to 1988, if any, would have been associated with one or more of the PRSs affecting this tract, and are discussed in detail in Appendix C.

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

Not applicable. There are no records indicating hazardous substances have ever been used, stored, released, or disposed on the tract. Activity prior to 1988, if any, would have been associated with one or more of the PRSs affecting this tract, and are discussed in detail in Appendix C.

The history and current regulatory status of the PRSs affecting this tract are discussed in detail in Appendix C. DOE/NNSA believes this tract meets the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Section 120(h) requirements for conveyance because all necessary remedial actions have been taken prior to conveyance.

**APPENDIX B**  
**ENVIRONMENTAL SITE ASSESSMENT for**  
**Tract A-10, DP Road-3 East (DP Canyon)**

## **1.0 INTRODUCTION**

This appendix presents the findings of an environmental site assessment (ESA) addressing any actual or potential environmental concerns associated with the A-10 tract, a portion of the DP Road-3 East Tract slated for conveyance to the County of Los Alamos. The A-10 tract (hereinafter referred to as A-10; see Figure D-1, Appendix D) occupies approximately 13.0 acres of undeveloped Los Alamos National Laboratory (LANL) land in DP Canyon.

Tract A-10 is the uppermost (westernmost) reach of DP Canyon (see Figure D-1). The legal property boundary description of DP Road-1 South Tract is provided on a survey plat recorded March 18, 2003 as *Tract A-10, being a Part of Tract AA and a Part of Parcel 2, Eastern Area No. 2, County of Los Alamos, State of New Mexico*. Section 3.0 provides a descriptive summary about the A-10 tract and summarizes the known history of this tract.

Los Alamos National Laboratory representatives conducted this assessment in September 2000, December 2005, July-August 2006, and May-July 2008 at the request of the U.S. Department of Energy (DOE), National Nuclear Security Administration (NNSA). The LANL site assessors for this assignment were Dr. Bruce Swanton, Dr. John Isaacson, Dr. Jennifer Nisengard, Dr. Paul Schumann, Ms. Jennifer Pope, Ms. Virginia Smith, and Ms. Kim Birdsall.

This assessment 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 1527-05); DOE's *Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers* (DOE/EH-413/9712 (revised March, 2005)); and the U.S. Environmental Protection Agency's (EPA's) rule, *Standards and Practices for All Appropriate Inquiries* (the AAI Rule), at 40 CFR Part 312. In addition, the following evaluations were conducted: a review of off-site disposal practices (including evaluating whether the subject site is listed as a potentially responsible party (PRP) at any off-site waste disposal facilities, and an assessment for the presence of asbestos-containing materials (ACMs). A discussion of the specific tasks undertaken is provided in Section 4.

The assessors reviewed sampling and analysis site data for Tract A-10 provided by the Environment and Remedy Services Group (formerly called the Environmental Restoration [ER] Project); no sampling and analysis of soil, groundwater, surface water, air, building material, or other environmental media were performed specifically for this ESA.

It is LANL's understanding and agreement that the DOE/NNSA will 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/NNSA.

**2.0 LIMITATIONS**

This ESA of the A-10 tract was performed in accordance with generally accepted environmental-assessment industrial standards. All the information contained in this report is based on the information made available to LANL’s site assessors during the investigation, which is assumed to have been provided in good faith.

LANL makes no other representations whatsoever, including those concerning the legal significance of its findings or other legal matters that may be 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 this report for events taking place subsequent to the performance of this assessment.

**3.0 A-10 Tract – SUMMARY DESCRIPTION**

<b>Area</b>	13.8 acres (approx.)
<b>Number of buildings/ structures</b>	none
<b>Current Activities</b>	Currently, there is no LANL activity on the tract itself. It is unoccupied, vacant land.
<b>Site History Prior to LANL Occupancy</b>	<p>Historical maps from the pre-LANL era (1924), aerial photographs (1935), and historical accounts of life in the area show little development prior to LANL occupancy (pre World War II). Detroit businessman Ashley Pond started the “Los Alamos Ranch School” in 1917. The school began with a few ranch buildings from the Harold H. Brook homestead.</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 show a cleared area around the pond, with the only development being an ice house constructed at what is now the site of the Manhattan Monument, west of this tract.</p>
<b>Site History After LANL’s Occupancy</b>	<p>Laboratory operations began on nearby DP Mesa in the late 1940s, including warehousing, utility shop operations, and a materials testing laboratory, all located on the mesa-top (in Tracts A-8-a and A-11; Figure D-1) south and west of A-10, and waste disposal operations (at MDA B) on the mesa-top south and east of A-10. Plutonium processing operations were conducted at TA-21 further east on the mesa-top. In the past, LANL fueling facilities were located on the mesa-top west of A-10 on land now occupied by the Knights of Columbus Facilities. After this land was conveyed to the Knights of Columbus, a second fueling facility was constructed south of and immediately adjacent to the A-10 tract (in Tract A-9). In the 1960s, following the end of LANL’s use of Tract A-8-a to the south, its western part was used for a residential trailer park and playground area. However, the subject property (A-10, in DP Canyon) has always remained vacant.</p> <p>The PRSs located on and near the A-10 tract were associated with the historical Laboratory operations on the adjacent lands. LANL, at the time of this report, had conducted a series of investigations and cleanups of the PRSs (i.e., contaminated areas resulting from Laboratory activities) on and near the subject property. Appendix C provides historical details and the current status of these PRSs.</p>

#### 4.0 ASSESSMENT METHODOLOGY

This environmental assessment consisted in general of the activities listed below. They are consistent with ASTM Practice E 1527-05 and EPA's AAI rule at 40 CFR 312 (with added evaluations of ACMs and possible wetland areas).

- Consistent with the objectives and performance factors of the AAI rule, the LANL assessors met with and/or interviewed current property owner representatives at DOE/NNSA and occupants of neighboring properties between 1998 and July 2008 for the purpose of obtaining information about A-10. The interviews were conducted to obtain and/or confirm information regarding the presence of recognized environmental conditions, present and past uses of the subject property, building conditions; and other potential environmental liabilities. There was no A-10 occupant available to interview, since the subject property is and always has been vacant.
- The assessors contacted and/or interviewed the following subject matter experts at LANL to discuss parcel-specific environmental and occupational health and safety (EH&S) issues:

Subject	Subject Matter Expert
Archaeological/Cultural Sites and Historic Properties	Ms. Ellen McGehee
Air Quality	Ms. Jean Dewart, Ms. Jackie Hurtle
Asbestos	Ms. Debra Archuleta, Mr. David Ortiz, Ms. Josie Encinias, Mr. Michael Trujillo
Building/Facility and Tract History and Current Conditions	Ms. Becky Coel-Roback, Mr. Terry Rust
Groundwater And Wells	Dr. Steve McLin
Hazardous Waste Management	Ms. Geri Martinez, Ms. Louann Romero
Natural/Biological Resources	Ms. Leslie Hansen
PCBs	Mr. Albert Dye
Pesticides	Mr. Jim Stanton
Potential Release Sites	Ms. Kim Birdsall, Ms. Paula Bertino, Ms. Becky Coel-Roback, Mr. Joe English, Mr. Terry Rust
SPCC and SWPPP Plans	Mr. Harvey Decker
Spills	Mr. William Flor

Subject	Subject Matter Expert
Surface Water	Mr. Joe English
Wastewater Treatment	Mr. Marc Bailey, Mr. Edward Hoth

- The assessors visited the tract in September 2000, August 2004, July-August 2006, and November 2008 to gather more detailed information concerning possible on-site contamination, and to determine the compliance status of the parcel. The visual inspections were conducted to verify the information concerning potential liabilities including past disposal areas or waste management units and to assess the current status of the historical environmental releases.
- The assessors visually surveyed the adjacent properties from publicly accessible areas. The surveys were conducted to look for evidence of environmental concerns, assess whether the subject property has become degraded, and determine whether any sensitive ecological areas (e.g., wetlands) exist near the subject property.
- The assessors reviewed ES&H-related files, correspondence, and other documents supplied by LANL.
- The assessors 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 and worked with LANL's historical building use SMEs.
- Previously collected information was checked and updated to include relevant changes in the conditions of the property, if any, and specialized knowledge of the assessors.
- The assessors searched environmental databases to determine whether hazardous sites or serious local environmental problems exist on or immediately adjacent to the subject property. Details are given in Section 5.0 below.
- The assessors attempted to obtain and review historical Sanborn Fire Insurance land use maps as another means to verify past land uses of the subject property and the surrounding area. This is consistent with the requirements of ASTM Practice E 1527-05 and the AAI rule. Sanborn Fire Insurance land use maps were not available for the subject property or the surrounding area.
- The assessors reviewed historical aerial photographs available from public agency sources as another means to verify past land uses of the subject property and the surrounding area. This is consistent with the requirements of ASTM Practice E 1527-05 and the AAI rule. In general, publicly available photographic coverage of the Laboratory and surrounding areas is limited and difficult to obtain. The assessors searched a number of public and private

archives and contacted potential information sources including the New Mexico State Archives, the Natural Resources Conservation Service, the State of New Mexico Forestry Division, New Mexico Aerial Surveys, Inc., and Pacific Western Technologies. Aerial photographs dated 1935, 1958, 1974, and 1991 from LANL photographic archives, the University of New Mexico Archives, and Los Alamos County photographic archives were reviewed.

- The assessors reviewed past uses of the subject property and the surrounding areas using abstracts of available historical city directories, consistent with the requirements of ASTM Practice E 1527-05 and the AAI rule. 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 providing addresses.
- The assessors evaluated operations, both past and present, with respect to possible current or future environmental liability in the following areas: 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; underground storage tanks (USTs); materials, products, and pesticide storage and handling practices (including records developed for Superfund Amendments and Reauthorization Act [SARA] Title III compliance); polychlorinated biphenyls (PCBs) inventory management; past on-site or off-site waste disposal practices; and occupational safety and health (including hazards communication).
- The assessors evaluated the subject property's liabilities under the Superfund statute and related state statutes pertaining to potential on-site contamination and any off-site disposal of wastes.
- The assessors performed no soil, groundwater, surface water, air, building material, or other environmental sampling and analysis as part of this environmental assessment. The assessors did, however, review LANL and DOE environmental surveillance, monitoring, and sampling data relevant to the tract that have been collected over time.

## 5.0 DATABASE SEARCHES CONDUCTED FOR THIS ASSESSMENT

As stated above, the assessors searched available environmental databases to determine whether hazardous sites or serious local environmental problems exist on or immediately adjacent to the subject property. There were three database searches by Environmental Data Resources, Inc. (EDR), a commercial search vendor, in August 2004, July- August 2006<sup>1</sup>. The following databases were searched:

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<sup>1</sup>The environmental database searches were completed for LANL by Environmental Data Resources, Inc. The database-specific radii specified for these searches satisfied both the ASTM E 1527-05 requirements and the requirements of EPA's AAI rule.

**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; 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**

- 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);
- Hazardous Materials Incident Reporting System (subject site only);
- De-listed 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 (FTTS) (*subject site only*);
- U.S. Brownfields database (*subject site and 0.5-mile radius*);
- EPA [Enviromapper](#) tool; *subject site and surrounding properties*);
- Department of Defense sites (*subject site and 1-mile radius*);
- Formerly-used defense sites (subject site and 1-mile radius);
- Indian reservations (subject site and 1-mile radius); and
- Section 7 Tracking System (*subject site only*).

### **State ASTM Records**

- 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);
- New Mexico State registered USTs (subject site and 0.25-mile radius);
- LUSTs on Indian lands database (subject site and 0.5-mile radius);
- USTs on Indian lands database (subject site and 0.25-mile radius); and
- Voluntary Remediation Program (VCP) database (subject site and *0.5-mile radius*).

### **Additional State Records**

- New Mexico State Aboveground Storage Tanks (subject site only); and
- New Mexico Spills database (*subject site only*).

### **Environmental Cleanup Liens**

A search for recorded environmental cleanup liens was performed, for purposes of consistency with 40 CFR 312.25. No such liens were identified against the subject property.

## **6.0 RESULTS AND DISCUSSION**

### **6.1 Summary of Results**

The table on the following pages briefly summarizes the results of the Environmental Site Assessment.

**Table 6-1**

**Summary of ESA Results: Potential Environmental Issues with A-10 (DP Canyon)**

AREA	POTENTIAL ISSUES	COMMENTS/ SUPPORTING FINDINGS
Air Pollution Control	There appear to be no environmental liability issues associated with air pollution control on this parcel.	LANL's quarterly air monitoring data, taken from the stations nearest to A-10 (as reported to the public in LANL's annual Environmental Surveillance Reports) has not identified any criteria pollutants or radionuclides at concentrations of concern in the vicinity of the subject property.
Asbestos Management	There appear to be no environmental liability issues associated with asbestos on this parcel.	There are no structures on the A-10 tract, and no evidence of the presence of ACM on the subject property.
Water Supply and Pollution Control, Including Stormwater Management	There appear to be no environmental liability issues concerning water supply, the wastewater discharges from to or from this tract.	There are no water supply or monitoring wells located on the subject property.
Nonhazardous Solid Waste Management	There appear to be no environmental liability issues associated with nonhazardous waste within the parcel.	There is no record of nonhazardous wastes having been managed by LANL on this tract.
Hazardous Solid Waste Management	There appear to be no environmental liability issues associated with hazardous waste within this parcel.	There is no record of hazardous wastes having been managed by LANL on this tract.

**Table 6-1**

**Summary of ESA Results: Potential Environmental Issues with A-10 (DP Canyon)**

AREA	POTENTIAL ISSUES	COMMENTS/ SUPPORTING FINDINGS
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 present on the subject property (although diesel fuel tanks were located adjacent to the property on the southern mesa-top. They were designated as SWMU 21-029 and remediated; see Section 4.4 of the EBS).
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 on the subject property.	There is no record of materials, products or pesticides having been managed by LANL on this tract.
PCB Inventory Management	There appear to be no environmental liability issues associated with PCB inventory management on the subject property.	LANL's PCB database shows that no PCB-containing equipment was used, stored or disposed on the subject property.
Potential On-Site Contamination and Waste Disposal	<p>Other than the PRSs on and near the site that were the subject of LANL investigations and remedial actions, there appear to be no issues related to on-site contamination or waste disposal on the subject property.</p> <p>Polyaromatic hydrocarbons (PAHs) have been identified in sediments and water within A-10 at levels that exceed the 10E-5 risk criterion for the trail user and extended backyard scenarios. These PAHs derive from stormwater runoff from paved areas within the Los Alamos townsite and represent a potential health risk because this canyon area may be</p>	<p>The County should be aware of the potential environmental impacts of stormwater-borne contaminants into the canyon.</p> <p>Site walk-throughs and visual inspections yielded no unusual or suspect site conditions.</p>

**Table 6-1**

**Summary of ESA Results: Potential Environmental Issues with A-10 (DP Canyon)**

AREA	POTENTIAL ISSUES	COMMENTS/ SUPPORTING FINDINGS
	<p>used by nearby residents for recreation. However, the risk scenarios used were conservative in assuming frequent exposure (1 hour per day and 200 days per year) and contact only with canyon-bottom sediments and not with adjacent hillside soils; risk levels would be less if recreational use included contact with the canyon's hillside soils.</p>	
<p>Past Off-Site Waste Disposal</p>	<p>No indications that waste has been generated on A-10 have been found; this rules out issues or concerns regarding this facility's past off-site waste disposal practices.</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. The 2004 database search to assess whether environmental conditions on the subject property have been affected by any off-site source or sources (see report in Appendix E) identified three mappable sites (leaking underground storage tanks). The three sites -- located at the Hilltop House, the airport, and Los Alamos Public Schools on Trinity Drive, respectively -- were all reported in the early 1990s, and require no further action.</p>	<p>Based on the database search results, interviews, record reviews, and visual inspections of the surrounding properties, no neighboring operations are believed to pose a significant concern for affecting environmental conditions on the subject property.</p>

**Table 6-1**

<b>Summary of ESA Results: Potential Environmental Issues with A-10 (DP Canyon)</b>		
<b>AREA</b>	<b>POTENTIAL ISSUES</b>	<b>COMMENTS/ SUPPORTING FINDINGS</b>
	<ul style="list-style-type: none"> <li>The 2006 database search identified 2 mappable sites within the designated search radii. The term mappable means that the address information provided was insufficient for the database searcher or vendor to pinpoint the site's location on a street map with a high degree of confidence. This data is presented in EBS Section 5.2, Local Properties.</li> </ul> <p>None of the identified mappable or orphan sites pose an adverse risk to the subject property.</p>	

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**6.2 Commonly Known or Reasonably Ascertainable Information about the Property**

Throughout the inquiries, the investigators took into account commonly known or reasonably ascertainable information within the local community about the subject property and considered such information when seeking to identify conditions indicative of releases or threatened releases at the subject property. These included all types of information sources identified in 40 CFR 312.30, and others, as discussed above.

**6.3 Thoroughness and Reliability of Information**

LANL quality assurance protocols require constant reviews and evaluations of the thoroughness and reliability of the information being gathered in environmental reviews and assessments of this nature. Throughout this investigation, the investigators sought to ensure the principles inherent in these quality assurance protocols were being followed.

#### **6.4 Degree of Obviousness of the Presence/Likely Presence of Contamination**

The subject property has not been and is not occupied in and includes no structures. There is no visible, observable presence of residual contamination. The presence of relatively continuous, healthy vegetative cover and its current use by small animals support the finding that there are likewise no obvious nonvisual indicators of residual contamination.

Likewise, there are no conditions present that have impaired LANL's ability to detect contamination on Tract A-10 by appropriate investigation (40 CFR 312.31). Numerous campaigns to investigate and remediate the residual contamination on and near Tract A-10 have been conducted from the early 1990s to the present, as discussed in the EBS and Appendix C.

### **7.0 CONCLUSIONS**

#### **7.1 Recognized Environmental Conditions**

It is the opinion of the assessors that this inquiry has identified conditions indicative of releases or threatened releases of hazardous substances on, at, in, or near to the subject property. These conditions and how they have been addressed are discussed in detail in Appendix C. DOE/NNSA and LANL believe that because of the numerous campaigns to investigate the residual contamination, remedial actions are not necessary prior to conveyance. Upon receipt of final concurrences by NMED under the Consent Order (as discussed in Appendix C, Section 1.3), this tract will meet CERCLA Section 120(h) and PL 105-119 requirements for conveyance.

It should be noted that sediments in this tract contain polyaromatic hydrocarbons (PAHs) at levels that exceed the 10E-5 risk criterion for the trail user and extended backyard scenarios. See Appendix C, Section 1.1.2.

Based on the information in this ESA and the EBS of which it is a part, LANL and NNSA conclude that there are no outstanding environmental issues on the A-10 tract itself that would prevent conveying it to Los Alamos County.

#### **7.2 Data Gaps**

No data gaps (as defined in 40 CFR 312.10) were identified that affected the ability of the investigators to identify conditions indicative of releases or threatened releases in each area of inquiry assessed.

#### **7.3 Relationship of the Purchase Price to the Value of the Property, if the Property Was Not Contaminated**

This provision (40 CFR 312.29) of the AAI Rule is not applicable to any property conveyance to be conducted pursuant to PL 105-119.

## 8.0 HISTORICAL RECORDS AND OTHER PERTINENT DOCUMENTS

1. Code of Federal Regulations, Title 40, Part 312, *Innocent Landowners, Standards for Conducting All Appropriate Inquiries*.
2. [Compliance Order on Consent](#) (Consent Order) issued pursuant to the *New Mexico Hazardous Waste Act (HWA), NMSA 1978, § 74-4-10, and the New Mexico Solid Waste Act (SWA), NMSA 1978, § 74-9-36(D)*. Entered into by the New Mexico Environment Department, the United States Department of Energy, and the Regents of the University of California, Santa Fe, NM, March 1, 2005.
3. DOE, 1999a. *Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory*, U.S. Department of Energy, DOE/EIS-0238, January 1999.
4. DOE, 1999b. *Final Environmental Impact Statement for the Conveyance and Transfer of Certain Tracts Administered by the U.S. DOE and Located at Los Alamos National Laboratory*, U.S. Department of Energy, DOE/EIS-0293, October 1999.
5. DOE, 2000a. *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. DOE, 2000b. *Combined Data Report to Congress to Support Land Conveyance and Transfer under Public Law 105-119*, U.S. Department of Energy, Unnumbered Report, January 2000.
7. DOE, 2005. *Cross-Cut Guidance on Environmental Requirements for DOE Real Property Transfers*, U.S. Department of Energy, DOE/EH-413/9712, revised March 2005.
8. DOE, 2008. *Final site-wide environmental impact statement for continued operation of Los Alamos National Laboratory, Los Alamos, New Mexico*, U.S. Department of Energy, May 2008.
9. Endangered Species Act. United States Code, Title 16, *Conservation*; Chapter 35, Washington, D.C., December 1973.
10. Fish and Wildlife Service, *Final Biological Opinion on the Effects to the Mexican Spotted Owl from the Conveyance and Transfer of Ten Land Tracts at Los Alamos National Laboratory to the County of Los Alamos and the Secretary of the Interior in Trust for the Pueblo of San Ildefonso*, January 15, 2002.
11. LANL, 1998a. *Threatened and Endangered Species Habitat Management Plan*, Los Alamos National Laboratory, August 1998.
12. LANL, 1998b. *A Status Report on Threatened and Endangered Species, Wetlands, and Floodplains for the Proposed Conveyance and Transfer*

- Tracts at Los Alamos National Laboratory, Los Alamos, New Mexico, Los Alamos National Laboratory, July 1998.*
13. LANL, 1999a. Evaluation of Sediment and Alluvial Groundwater in DP Canyon Reaches DP-1, DP-2, DP-3, AND DP-4, Los Alamos National Laboratory, LA-UR-99-4238, August 1999.
  14. LANL, 1999b. *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.
  15. LANL, 2002a. *Watershed Management Sampling Plan*, Los Alamos National Laboratory, October 4, 2002.
  16. LANL, 2002b. *Environmental Surveillance at Los Alamos During 2001*, Los Alamos National Laboratory, LA-13979-ENV, September 2002.
  17. LANL, 2004. *Environmental Surveillance at Los Alamos During 2002*, Los Alamos National Laboratory, LA-14085-ENV, January 2004.
  18. LANL, 2005a. *Investigation Work Plan for Material Disposal Area B, Solid Waste Management [Unit] 21-015, at Technical Area 21*, Los Alamos National Laboratory, LA-UR-04-3713, May 2005.
  19. LANL, 2005b. *Environmental Surveillance at Los Alamos During 2004*, Los Alamos National Laboratory, LA-14239-ENV, September 2005.
  20. NMED, 1989. LANL Hazardous Waste Facility Permit, NM 0890010515-1, New Mexico Environment Department (NMED), November 8, 1989.
  21. NMED/LANL, 2005. Compliance Order on Consent.
  22. U.S.EPA, 1994. *Military Base Closures: Guidance on EPA Concurrence in the Identification of Uncontaminated Parcels under CERCLA Section 120(h)(4)*. Memorandum from Elliot P. Laws, Assistant Administrator, OSWER, to Waste Management Division Directors, Regions I-X, Regional Counsels, Regions I-X, and Federal Facilities Leadership Council. OSWER Directive 9345. 0-09, EPA 540/F-94/32, Washington, DC. April 19, 1994.
  23. U.S. Army Corps of Engineers, 2003. *Land Survey Plat, Los Alamos National Laboratory, Tract A-8, Being a Part of DP Road Site, Los Alamos, New Mexico*, recorded by the Los Alamos County Clerk on March 18, 2003.

**APPENDIX C**  
**CERCLA 120(h) Supporting Documentation for**  
**Tract A-10, DP Road-3 East (DP Canyon)**

## 1.0 Introduction

One potential contamination source on the A-10 DP Road-3 East tract is subject to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 120(h) requirements: area of concern (AOC) C-00-021.

Solid waste management units (SWMUs) and AOCs are types of potential release sites (PRSs) as defined by the New Mexico Environment Department (NMED). Cleanup of PRSs at LANL is conducted pursuant to the March 2005 *Compliance Order on Consent* (Consent Order) signed by DOE/NNSA, the Regents of the University of California, and NMED, and is conducted by the Department of Energy and LANL's Environmental Programs Waste and Environmental Services/Remedy Services (formerly called the Environmental Restoration [ER] Project).

Potential Release Sites within Tract A-10		
PRS	Description	Status
C-00-021	Sediment contamination in the DP Canyon drainage	Pending

## 1.1 AOC C-00-021

### 1.1.1 Historical Investigations

AOC C-00-021 is the designation for the sediment contamination in the stream channel and flood plain of DP Canyon throughout its entire length, from the western end of the subject property eastward to its confluence with Los Alamos Canyon. DP Canyon originates in the Los Alamos townsite near the intersection of DP Road and Trinity Drive at an elevation of approximately 7,240 ft. The canyon extends east-southeast and after a short distance, enters LANL property and continues until it joins Los Alamos Canyon (designated in the Consent Order as AOC C-00-006) along the boundary between TA-21 and TA-73 at an elevation of approximately 6620 ft. DP Canyon has a watershed area of approximately 0.6 square miles and a channel length of approximately 1.5 miles. Only the western-most 2000 feet of the channel is included in Tract A-10. The section of DP canyon designated for conveyance as Tract A-10 is a part of the sampling block designated in the late 1990s as DP-1.

Streamflow in upper DP Canyon is intermittent, resulting primarily from storm water and snowmelt runoff from nearby townsite areas. A small spring, DP Spring, is located near the bottom of DP Canyon, which is east (and downgradient) of the subject property. Regular environmental monitoring has been conducted in DP Canyon since the 1970s as part of the LANL Environmental Surveillance Program. Elevated levels of cesium-137, plutonium-238, plutonium-239, strontium-90, thorium-230, thorium-232, and uranium-238 have been detected in DP Canyon sediments, sometimes at levels

exceeding screening action limits (SALs), as published in LANL's annual *Environmental Surveillance Reports*.

Potential LANL sources for canyon system contaminants are generally the SWMUs and AOCs associated with TAs in or adjacent to the canyons. DP Canyon passes through TA-73 and is adjacent to TA-21, the most significant potential contamination source for lower DP Canyon.

The ER Project has conducted numerous investigations in and around DP Canyon in association with PRSs at TA-21 and along DP Road. The ER Project also investigated DP Canyon pursuant to the 1995 and 1997 work plans for Los Alamos and Pueblo Canyons, and their many subsequent modifications and addenda. *Canyons Work Plan*-related investigations included evaluations of sediments, persistent surface water, and alluvial groundwater. For these investigations, the canyon was divided into reaches from west to east. The westernmost reaches are included in Tract A-10.

From 1997 through 1999, geomorphic sediment surveys and field radiological surveys were conducted and sediment samples were collected and analyzed. During four sampling events in 1997 and 1998, 110 samples were collected from 47 locations throughout DP Canyon. An interim report indicated ten inorganic chemicals were detected above background values (BVs), seven radionuclides were detected above fallout values (FVs), and 33 organic chemicals were detected. The data indicated Reaches DP-1W, DP-1C, and DP-1E (LA-UR-99-4238) contained the most contaminants likely to be derived from Los Alamos townsite runoff; these reaches are not included in Tract A-10.

Although four radionuclides were found to exceed SALs in DP Canyon, none were detected above SALs in Tract A-10 (see Section 1.1.2).

During the Phase II investigations of the DP Tank Farm (SWMU 21 -029) in 2000-2001, 27 sediment samples were collected from the reach of DP Canyon that constitute Tract A-10 to determine the extent of contamination from SWMU 21-029. Organic and inorganic chemicals were found in stream channel sediments, but the most likely source was again concluded to be stormwater runoff from the Los Alamos townsite.

### **1.1.2 Risk Assessment**

The DP Canyon studies in the *Canyons Work Plan* included biota characterization in order to assess ecological risk. Biota characterization in the canyon consisted of soil characterization, nest box studies, breeding bird studies, earthworm toxicity tests, seedling germination tests, plant surveys, aquatic toxicity tests, rapid bioassessment characterizations, and ecological risk modeling. Both the *Phase II RFI report for DP Tank Farm (SWMU 21-029)* and the *2004 Los Alamos and Pueblo Canyons Investigation Report* reported that no adverse ecological effects were observed within terrestrial and aquatic systems in the western-most portion of DP Canyon.

These studies assessed human health risks from potential exposures to contaminated media. Both the *Phase II RFI Report for DP Tank Farm (SWMU 21-029)* and the *2004 Los Alamos and Pueblo Canyons Investigation Report* concluded that human health risks for contaminants released from Laboratory PRSs in the area of the western-most portion of DP Canyon are within acceptable risk ranges for the trail user and extended

backyard scenarios. In December 2005, LANL submitted a supplemental report to NMED that updated the risk assessment in the *Los Alamos and Pueblo Canyons Investigation Report*. In this revised human-health risk assessment, Reach DP-1W, at the head of DP Canyon, was identified as exceeding a risk criterion of  $10^{-5}$  for the trail user and extended backyard scenarios<sup>2</sup> due to the levels of polycyclic aromatic hydrocarbons (PAHs) in sediment and surface water. The spatial distribution of the PAHs at locations throughout the Los Alamos and Pueblo Canyon watersheds supports the conclusion that runoff from the Los Alamos townsite is the primary source. These findings were consistent with recent nationwide studies showing that PAHs are common contaminants in urban runoff.

### 1.1.3 Radiological Contaminants in Lower DP Canyon

Four radionuclides were found to exceed SALs in lower DP Canyon: Americium 241, Cesium 137, Plutonium 239, and Strontium 90. These contaminants were shown to be spatially related to PRSs downstream of A-10. Within the proposed conveyance tract itself; however, none of these contaminants have been detected above SALs (LANL 1999a).

## 1.2 Current Regulatory Status of Area of Concern C-00-021

The A-10 Tract is co-located with the western-most portion of AOC C-00-021 (see Figure D-2). In the *Los Alamos and Pueblo Canyons Investigation Report* and the *Los Alamos and Pueblo Canyons Supplemental Investigation Report*, LANL concluded that for this portion of AOC C-00-021, human health and ecological risks associated with contaminants from LANL sources (i.e., released from nearby LANL PRSs within this portion of DP Canyon) are within acceptable risk ranges for the extended backyard and trail user scenario.

NMED approved the Los Alamos and Pueblo Canyons Investigation Report (May 11, 2005) with modifications, one of which required revision of the risk assessment. NMED accepted the conclusions and recommendations of the investigation report but indicated these could change based on the result of the revised risk assessment.

## 1.3 Conclusions/ Future Actions Required

DOE/NNSA and LANL believe that this tract meets the CERCLA Section 120(h) requirements for conveyance because all necessary remedial actions have been taken prior to conveyance. This conclusion is based on the findings reported above for contaminants from LANL sources.

DP Canyon PRS C-00-021 is subject to RCRA corrective action requirements specified in the Consent Order. DOE/NNSA and LANL have not yet submitted a formal request for a no further action determination to NMED for the portion of PRS C-00-021 located within the A-10 land transfer tract. Once this submittal has been made and NMED

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<sup>1</sup> An increased occurrence of 1 cancer for every 100,000 persons exposed.

<sup>2</sup> The trail user scenario assumes typical use by hikers, where the extended backyard scenario assumes a child playing in an undeveloped area near a residence for an extended period of time.

concurrence has been obtained, there will be no outstanding PRS issues to prevent conveyance of the A-10 tract to Los Alamos County.

#### **1.4 References for Appendix C**

*Evaluation of Risk Posed by Solid Waste Management Units and Areas of Concern to Trail Users*, Environmental Restoration Project, March 2006, LA- U R-05-9 102.

*Evaluation of Sediment and Alluvial Groundwater in DP Canyon Reaches DP-1, DP-2, DP-3, AND DP-4*, Los Alamos National Laboratory, LA-UR-99-4238, August 1999.

*Los Alamos and Pueblo Canyons Supplemental Investigation Report*, Environmental Restoration Project, December 2005, LA-U R-05 -9230.

*Remediation Services (RS) Project Portion of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 120(h) Report Supporting the Conveyance and Transfer of the DP Road-3 East Tract (Map Designation A-10)*, Environmental Restoration Project, August 2004.

*Floodplains/Wetlands Assessment for LANL Conveyance and Transfer Project: Rendija and DP Canyons*, New Mexico Environment Department, June 2004.

*Los Alamos Canyon and Pueblo Canyon Intermediate and Regional Aquifer Groundwater Work Plan*, Environmental Restoration Project, December 2003, LA-UR-03-9191.

*Los Alamos and Pueblo Canyons Investigation Report*, Environmental Restoration Project, April 2004, LA-UR-04-2714.

*Los Alamos Canyon and Pueblo Canyon Intermediate and Regional Aquifer Groundwater Work Plan*, Environmental Restoration Project, December 2003, LA-UR-03-9191.

*Addendum to the Los Alamos and Pueblo Canyons Work Plan, Surface Water and Alluvial Groundwater Sampling and Analysis Plan*, Environmental Restoration Project, February 2002, LA-UR-02-0759.

*Phase II RFI Report for Potential Release Site 2 1-029, DP Tank Farm*, Environmental Restoration Project, September 2001, LA-UR-01-5424.

*Response to Request for Supplemental Information for the Phase II RFI Report for Potential Release Site (PRS) 2 1-029, DP Tank Farm*, Environmental Restoration Project, December 2001, LA-UR-01-6737.

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

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

*Evaluation of Sediment and Alluvial Groundwater in DP Canyon: Reaches DP-1, DP-2, DP-3 and DP-4*, Environmental Restoration Project, August 1999, LA-UR-99-4238.

*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.

*Sampling Plan for DP Canyon, Potential Release Site C-00-021 [Former FU 1, OU 1106]*, Environmental Restoration Project, April 1998, LA-UR-97-3071.

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

*[RFI Work Plan] Core Document for Canyons Investigation [former Operable Unit 1049]*, Environmental Restoration Project, April 1997, LA- U R-96-2083.

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

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

**Appendix D - Figures for:  
Tract A-10, DP Road 3 East (DP Canyon)**

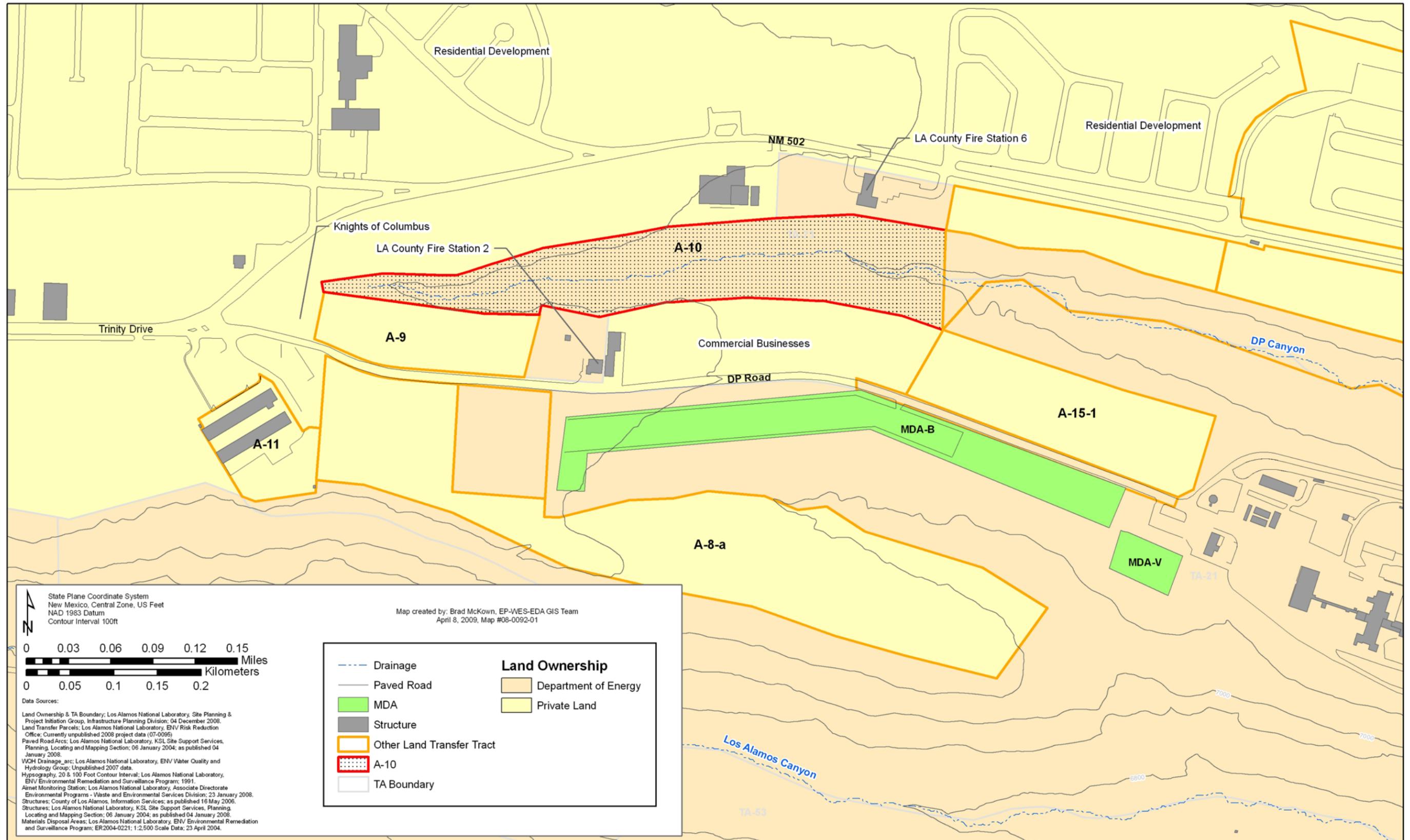


Figure D-1. Location of Land Transfer Tract A-10 and Surrounding Properties

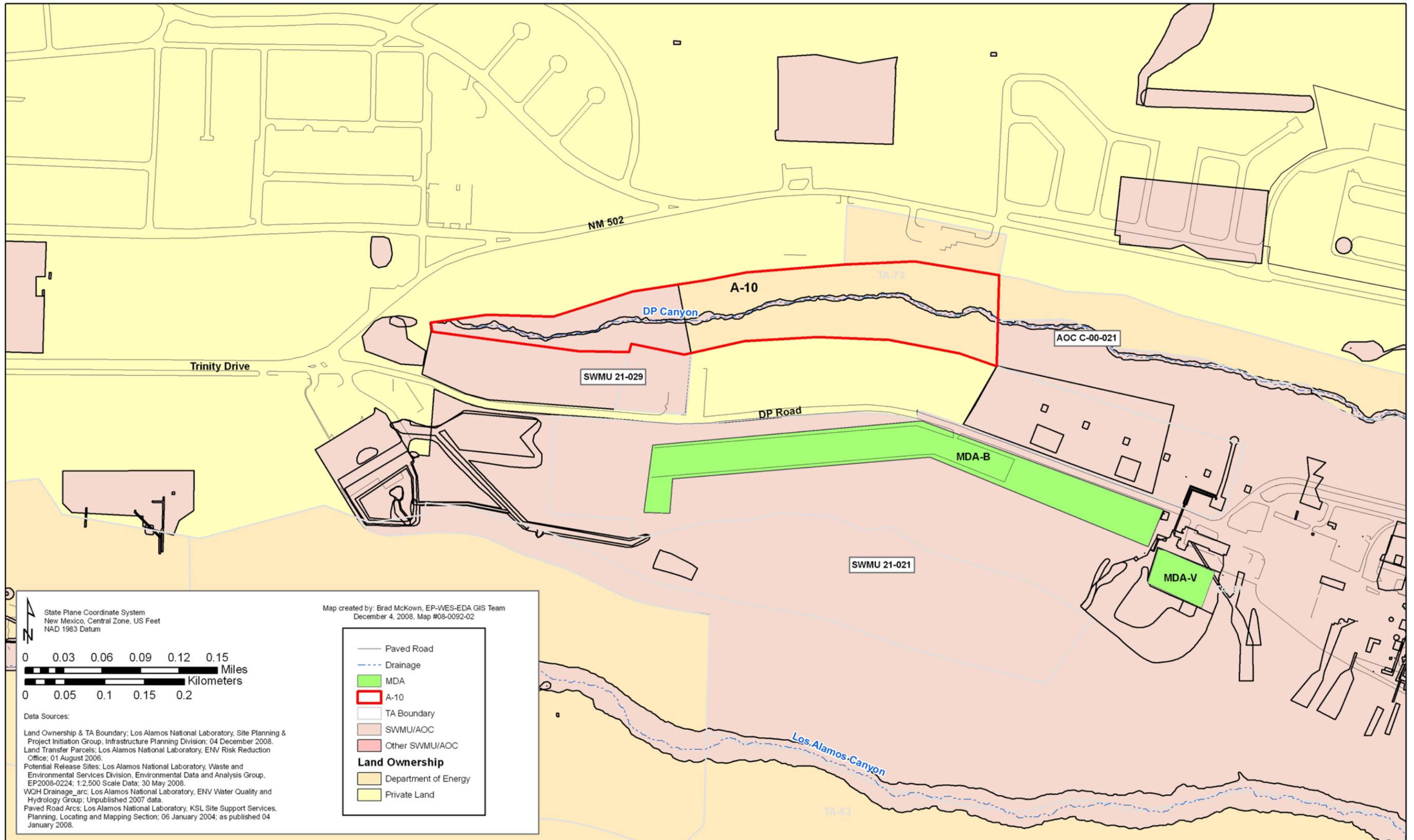


Figure D-2. Potential Release Sites in and Around Land Transfer Tract A-10

**Appendix E – Environmental Data Resources Report for  
Tract A-10, DP Road 3 East (DP Canyon)**



**EDR**® Environmental  
Data Resources Inc

## **The EDR Radius Map with GeoCheck®**

**LANL A-10 Land Transfer  
SR 502 and DP Road  
Los Alamos, NM 87544**

**Inquiry Number: 1730193.8s**

**August 07, 2006**

## **The Standard in Environmental Risk Management Information**

440 Wheelers Farms Road  
Milford, Connecticut 06461

### **Nationwide Customer Service**

Telephone: 1-800-352-0050  
Fax: 1-800-231-6802  
Internet: [www.edrnet.com](http://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 was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

SR 502 AND DP ROAD  
LOS ALAMOS, NM 87544

#### COORDINATES

Latitude (North): 35.880600 - 35° 52' 50.2"  
Longitude (West): 106.286800 - 106° 17' 12.5"  
Universal Transverse Mercator: Zone 13  
UTM X (Meters): 383843.4  
UTM Y (Meters): 3971269.8  
Elevation: 7188 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 35106-H3 GUAJE MOUNTAIN, NM  
Most Recent Revision: 1993  
  
South Map: 35106-G3 FRIJOLES, NM  
Most Recent Revision: 1993

### 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 search radius around the target property for the following databases:

#### FEDERAL RECORDS

**NPL**..... National Priority List  
**Proposed NPL**..... Proposed National Priority List Sites  
**Delisted NPL**..... National Priority List Deletions  
**NPL RECOVERY**..... Federal Superfund Liens  
**CERCLIS**..... Comprehensive Environmental Response, Compensation, and Liability Information System  
**CERC-NFRAP**..... CERCLIS No Further Remedial Action Planned

## EXECUTIVE SUMMARY

<b>CORRACTS</b>	Corrective Action Report
<b>RCRA-TSDF</b>	Resource Conservation and Recovery Act Information
<b>RCRA-LQG</b>	Resource Conservation and Recovery Act Information
<b>RCRA-SQG</b>	Resource Conservation and Recovery Act Information
<b>ERNS</b>	Emergency Response Notification System
<b>HMIRS</b>	Hazardous Materials Information Reporting System
<b>US ENG CONTROLS</b>	Engineering Controls Sites List
<b>US INST CONTROL</b>	Sites with Institutional Controls
<b>DOD</b>	Department of Defense Sites
<b>FUDS</b>	Formerly Used Defense Sites
<b>US BROWNFIELDS</b>	A Listing of Brownfields Sites
<b>CONSENT</b>	Superfund (CERCLA) Consent Decrees
<b>ROD</b>	Records Of Decision
<b>UMTRA</b>	Uranium Mill Tailings Sites
<b>ODI</b>	Open Dump Inventory
<b>TRIS</b>	Toxic Chemical Release Inventory System
<b>TSCA</b>	Toxic Substances Control Act
<b>FTTS</b>	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
<b>SSTS</b>	Section 7 Tracking Systems
<b>ICIS</b>	Integrated Compliance Information System
<b>PADS</b>	PCB Activity Database System
<b>MLTS</b>	Material Licensing Tracking System
<b>MINES</b>	Mines Master Index File
<b>FINDS</b>	Facility Index System/Facility Registry System
<b>RAATS</b>	RCRA Administrative Action Tracking System

### STATE AND LOCAL RECORDS

<b>SHWS</b>	This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.
<b>SWF/LF</b>	Solid Waste Facilities
<b>SWRCY</b>	Recycling Facility Listing
<b>LAST</b>	Leaking Aboveground Storage Tank Sites
<b>AST</b>	Aboveground Storage Tanks List
<b>SPILLS</b>	Spill Data
<b>INST CONTROL</b>	Sites with Institutional Controls
<b>VCP</b>	Voluntary Remediation Program Sites
<b>NPDES</b>	List of Discharge Permits

### TRIBAL RECORDS

<b>INDIAN RESERV</b>	Indian Reservations
<b>INDIAN LUST</b>	Leaking Underground Storage Tanks on Indian Land
<b>INDIAN UST</b>	USTs on Indian Land

### EDR PROPRIETARY RECORDS

**Manufactured Gas Plants**... EDR Proprietary Manufactured Gas Plants

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

## EXECUTIVE SUMMARY

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 AND LOCAL RECORDS**

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

A review of the LUST list, as provided by EDR, and dated 05/01/2006 has revealed that there are 2 LUST sites 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>
<b><i>WATERCHRIS DBA HILLTOP HOUSE C</i></b>	<b><i>TRINITY AND CENTRAL AVE</i></b>	<b><i>1/8 - 1/4 WNW 1</i></b>		<b><i>6</i></b>
LOS ALAMOS PUBLIC SCHOOLS	751 TRINITY DR	1/4 - 1/2W	2	7

**UST:** The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the New Mexico Environmental Department's Listing of Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 05/01/2006 has revealed that there is 1 UST site within approximately 0.25 miles of the target property.

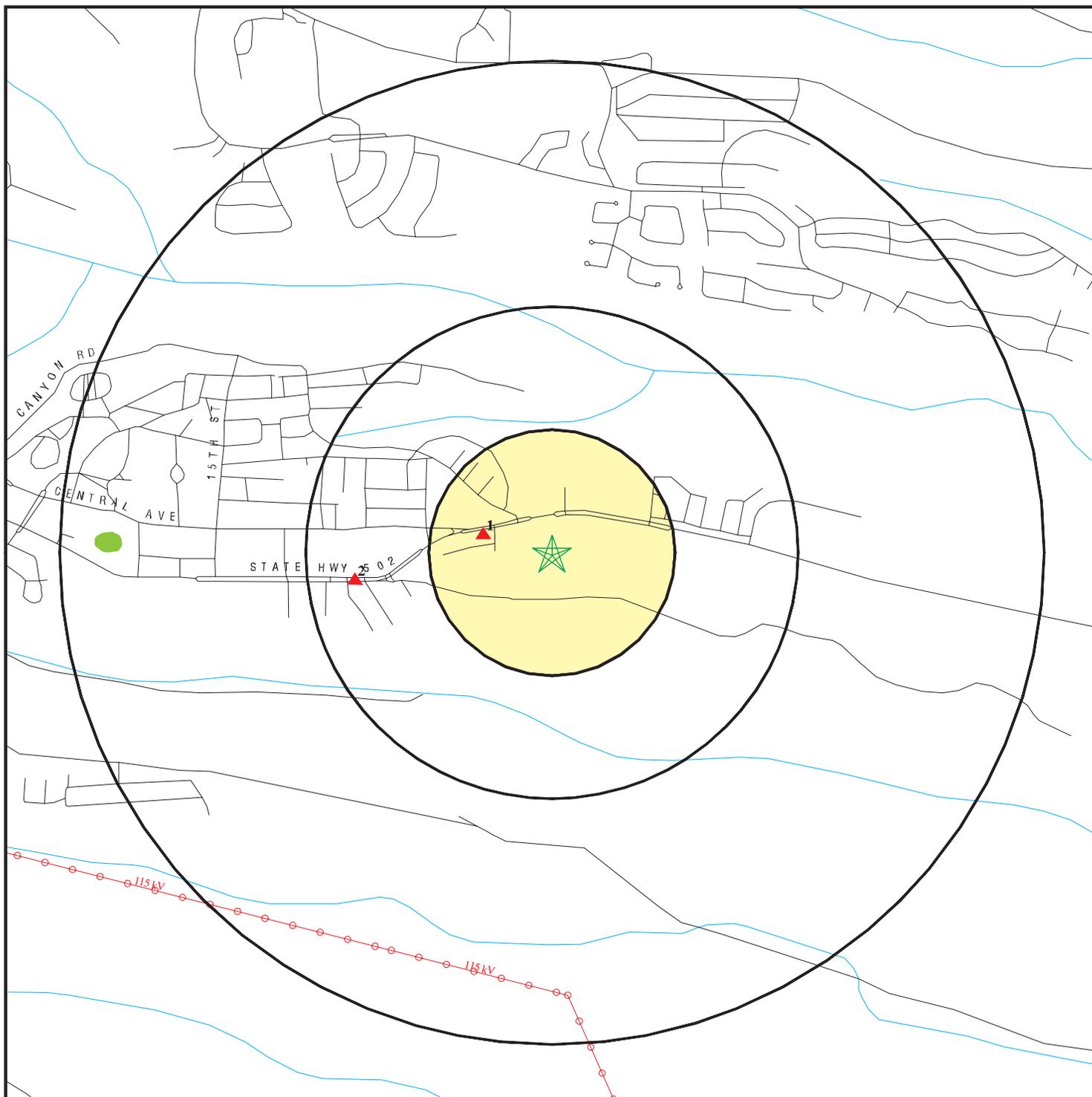
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<b><i>WATERCHRIS DBA HILLTOP HOUSE C</i></b>	<b><i>TRINITY AND CENTRAL AVE</i></b>	<b><i>1/8 - 1/4 WNW 1</i></b>		<b><i>6</i></b>

## EXECUTIVE SUMMARY

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

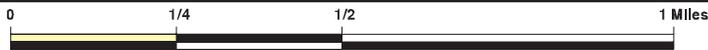
<u>Site Name</u>	<u>Database(s)</u>
HOUSEHOLD HAZARDOUS WASTE COLLECTION FAC	SWF/LF
LOS ALAMOS COUNTY LANDFILL	RCRA-SQG, FINDS, SWF/LF
LA AV GAS	LUST
LANL/TA-60	LUST
LANL TA64-RC73	LUST
LANL TA3-36-3	LUST
LANL TA-55/17	LUST
LANL TA-55/15	LUST
LANL TA-35	LUST
LANL TA-3-191	LUST
LANL TA-18	LUST
LANL TA-16/207	LUST
LANL TA-15	LUST
LANL TA-16/197	LUST
NMSHTD VACANT	LUST
LANL TA-21/2	LUST
TOTAVI PHILLIPS 66	UST
NMDOT LOS ALAMOS PATROL YARD SEASONAL	AST
PORTAGE ENVIRONMENTAL INC.	RCRA-SQG

# OVERVIEW MAP - 1730193.8s



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

- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines
- National Wetland Inventory

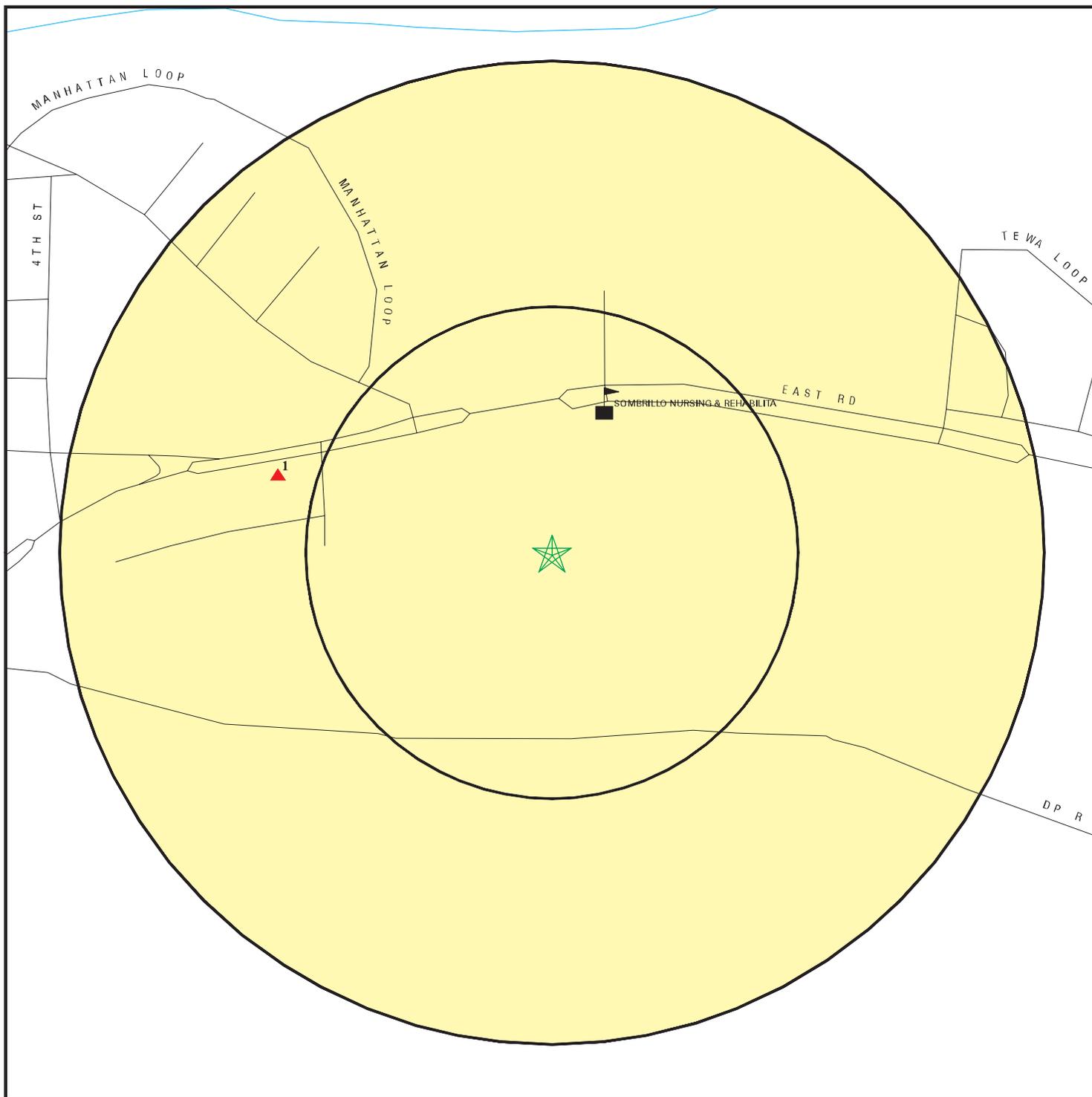


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

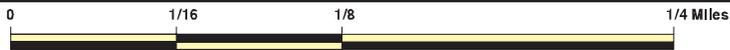
SITE NAME: LANL A-10 Land Transfer  
 ADDRESS: SR 502 and DP Road  
 Los Alamos NM 87544  
 LAT/LONG: 35.8806 / 106.2868

CLIENT: Los Alamos National Laboratory  
 CONTACT: Bruce Swanton  
 INQUIRY #: 1730193.8s  
 DATE: August 07, 2006

# DETAIL MAP - 1730193.8s



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Landfill Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Oil & Gas pipelines



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: LANL A-10 Land Transfer  
 ADDRESS: SR 502 and DP Road  
 Los Alamos NM 87544  
 LAT/LONG: 35.8806 / 106.2868

CLIENT: Los Alamos National Laboratory  
 CONTACT: Bruce Swanton  
 INQUIRY #: 1730193.8s  
 DATE: August 07, 2006

## 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
<b><u>FEDERAL RECORDS</u></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
NPL RECOVERY	TP		NR	NR	NR	NR	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP		0.500	0	0	0	NR	NR	0
CORRACTS		1.000	0	0	0	0	NR	0
RCRA TSD		0.500	0	0	0	NR	NR	0
RCRA Lg. Quan. Gen.		0.250	0	0	NR	NR	NR	0
RCRA Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS	TP		NR	NR	NR	NR	NR	0
HMIRS	TP		NR	NR	NR	NR	NR	0
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
<b><u>STATE AND LOCAL RECORDS</u></b>								
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
SWRCY		0.500	0	0	0	NR	NR	0
LUST		0.500	0	1	1	NR	NR	2
UST		0.250	0	1	NR	NR	NR	1
LAST		0.500	0	0	0	NR	NR	0
AST		0.250	0	0	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
<b><u>TRIBAL RECORDS</u></b>								
INDIAN RESERV		1.000	0	0	0	0	NR	0

## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
INDIAN LUST		0.500	0	0	0	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
<b><u>EDR PROPRIETARY RECORDS</u></b>								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

**NOTES:**

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 Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**1** WATERCHRIS DBA HILLTOP HOUSE CONOCO  
 WNW TRINITY AND CENTRAL AVE  
 1/8-1/4 LOS ALAMOS, NM 87544  
 764 ft.

**LUST** U003543692  
**UST** N/A

**Relative:**  
**Higher**

**LUST:**

**Actual:**  
**7236 ft.**

Priority Rank: Not reported  
 Mitigating Factor Score: Not reported  
 Total Score To Assign Relative Rank: Not reported  
 Release ID: 1609  
 Facility ID: 31554  
 Date Release Reported: 1992-11-13 00:00:00  
**Status: No Further Action Required**  
 Status Date: 1993-05-04  
 Project Manager: Patrick De Gruyter  
 Land and Water use Attributes: Not reported  
 Soil Contamination Attributes: Not reported  
 Ground Water Plume Attributes: Not reported  
 Score For Priority 3 Criteria: Not reported  
 Contaminant Saturated Soil Attrib: Not reported  
 Non-aqueous Phase Liquid Attrib: Not reported  
 Score For Priority 2 Criteria: Not reported  
 Actual/ Imminent Contam Water Supply Attrib: Not reported  
 Actual/ Imminent Toxic Vapor Impct Attrib: Not reported  
 Actual/ Imminent Explosive Vapor Impct Attrib: Not reported  
 Property Damage Impacts: Not reported  
 Ecological: Not reported  
 Score For Priority 1 Criteria: Not reported

**UST:**

Owner ID: 14199  
 Owner Name: WATERMAN ROBERT E  
 Owner Address: PO BOX 250  
 Owner Address 2: Not reported  
 Owner City,St,Zip: LOS ALAMOS, NM 87544  
 Facility ID: 31554  
 Secondary Address: Not reported  
**Tank Status: CURRENTLY IN USE**  
 Tank ID: 32605  
 Total Tanks: Not reported

Owner ID: 14199  
 Owner Name: WATERMAN ROBERT E  
 Owner Address: PO BOX 250  
 Owner Address 2: Not reported  
 Owner City,St,Zip: LOS ALAMOS, NM 87544  
 Facility ID: 31554  
 Secondary Address: Not reported  
**Tank Status: REMOVED**  
 Tank ID: 32608  
 Total Tanks: Not reported

Owner ID: 14199  
 Owner Name: WATERMAN ROBERT E  
 Owner Address: PO BOX 250  
 Owner Address 2: Not reported  
 Owner City,St,Zip: LOS ALAMOS, NM 87544  
 Facility ID: 31554  
 Secondary Address: Not reported

Map ID  
 Direction  
 Distance  
 Distance (ft.)  
 Elevation Site

MAP FINDINGS

Database(s) EDR ID Number  
 EPA ID Number

**WATERCHRIS DBA HILLTOP HOUSE CONOCO (Continued)**

**U003543692**

**Tank Status: CURRENTLY IN USE**  
 Tank ID: 32606  
 Total Tanks: Not reported

Owner ID: 14199  
 Owner Name: WATERMAN ROBERT E  
 Owner Address: PO BOX 250  
 Owner Address 2: Not reported  
 Owner City,St,Zip: LOS ALAMOS, NM 87544  
 Facility ID: 31554  
 Secondary Address: Not reported

**Tank Status: CURRENTLY IN USE**  
 Tank ID: 32604  
 Total Tanks: Not reported

Owner ID: 14199  
 Owner Name: WATERMAN ROBERT E  
 Owner Address: PO BOX 250  
 Owner Address 2: Not reported  
 Owner City,St,Zip: LOS ALAMOS, NM 87544  
 Facility ID: 31554  
 Secondary Address: Not reported

**Tank Status: REMOVED**  
 Tank ID: 32607  
 Total Tanks: Not reported

**2**  
**West**  
**1/4-1/2**  
**2130 ft.**

**LOS ALAMOS PUBLIC SCHOOLS**  
**751 TRINITY DR**  
**LOS ALAMOS, NM 87544**

**LUST 1002980307**  
**N/A**

**Relative:**  
**Higher**

**LUST:**

**Actual:**  
**7272 ft.**

Priority Rank: Not reported  
 Mitigating Factor Score: Not reported  
 Total Score To Assign Relative Rank: Not reported  
 Release ID: 3580  
 Facility ID: 29151  
 Date Release Reported: 1999-06-15 00:00:00  
**Status: No Further Action Required**  
 Status Date: 2001-05-03  
 Project Manager: Lorena Goerger  
 Land and Water use Attributes: Not reported  
 Soil Contamination Attributes: Not reported  
 Ground Water Plume Attributes: Not reported  
 Score For Priority 3 Criteria: Not reported  
 Contaminant Saturated Soil Attrib: Not reported  
 Non-aqueous Phase Liquid Attrib: Not reported  
 Score For Priority 2 Criteria: Not reported  
 Actual/ Imminent Contam Water Supply Attrib: Not reported  
 Actual/ Imminent Toxic Vapor Impct Attrib: Not reported  
 Actual/ Imminent Explosive Vapor Impct Attrib: Not reported  
 Property Damage Impacts: Not reported  
 Ecological: Not reported  
 Score For Priority 1 Criteria: Not reported

## ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
LOS ALAMOS	U003913254	TOTAVI PHILLIPS 66	HWY 502	87544	UST
LOS ALAMOS	S106860957	LA AV GAS	1040 AIRPORT RD NO2	87544	LUST
LOS ALAMOS	S105427000	LANL/TA-60	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426999	LANL TA64-RC73	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426997	LANL TA3-36-3	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426995	LANL TA-55/17	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426994	LANL TA-55/15	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426993	LANL TA-35	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426992	LANL TA-3-191	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426990	LANL TA-18	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426989	LANL TA-16/207	PO BOX 1663	87544	LUST
LOS ALAMOS	S105426987	LANL TA-15	PO BOX 1663	87544	LUST
LOS ALAMOS	S107600385	HOUSEHOLD HAZARDOUS WASTE COLLECTION FAC	P.O. BOX 30	87544	SWF/LF
LOS ALAMOS	1009312333	PORTAGE ENVIRONMENTAL INC.	146 B EAST GATE DRIVE	87544	RCRA-SQG
LOS ALAMOS	1004754572	LOS ALAMOS COUNTY LANDFILL	EAST JEMEZ RD	87544	RCRA-SQG, FINDS, SWF/LF
LOS ALAMOS	S105510952	LANL TA-16/197	MAIL STOP K 498, PO BOX 1663	87544	LUST
LOS ALAMOS	S105427054	NMSHTD VACANT	STATE RD 502	87544	LUST
LOS ALAMOS	A100268413	NMDOT LOS ALAMOS PATROL YARD SEASONAL	STATE RD 502	87544	AST
LOS ALAMOS	S105510920	LANL TA-21/2	UNKNOWN	87544	LUST

# 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.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

## **FEDERAL RECORDS**

### **NPL: National Priority List**

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: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 08/02/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 10/30/2006
	Data Release Frequency: Quarterly

### **NPL Site Boundaries**

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

### **Proposed NPL: Proposed National Priority List Sites**

Date of Government Version: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 08/02/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 10/30/2006
	Data Release Frequency: Quarterly

### **DELISTED NPL: National Priority List Deletions**

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: 04/19/2006	Source: EPA
Date Data Arrived at EDR: 05/05/2006	Telephone: N/A
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 08/02/2006
Number of Days to Update: 17	Next Scheduled EDR Contact: 10/30/2006
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **NPL RECOVERY:** Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by 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 received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 05/23/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: No Update Planned

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

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: 02/01/2006	Source: EPA
Date Data Arrived at EDR: 03/21/2006	Telephone: 703-413-0223
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 06/22/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

## **CERCLIS-NFRAP:** CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/01/2006	Source: EPA
Date Data Arrived at EDR: 03/21/2006	Telephone: 703-413-0223
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 06/23/2006
Number of Days to Update: 23	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

## **CORRACTS:** Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/15/2006	Source: EPA
Date Data Arrived at EDR: 03/17/2006	Telephone: 800-424-9346
Date Made Active in Reports: 04/13/2006	Last EDR Contact: 08/03/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: Quarterly

## **RCRA:** Resource Conservation and Recovery Act Information

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS). The database 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: 03/09/2006	Source: EPA
Date Data Arrived at EDR: 04/27/2006	Telephone: 800-424-9346
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Quarterly

### **ERNS:** Emergency Response Notification System

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

Date of Government Version: 12/31/2005	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 01/12/2006	Telephone: 202-260-2342
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 07/25/2006
Number of Days to Update: 40	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: Annually

### **HMIRS:** Hazardous Materials Information Reporting System

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

Date of Government Version: 12/31/2005	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-366-4555
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/19/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Annually

### **US ENG CONTROLS:** Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

### **US INST CONTROL:** Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/21/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/27/2006	Telephone: 703-603-8905
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 56	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **DOD:** Department of Defense Sites

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: 12/31/2004	Source: USGS
Date Data Arrived at EDR: 02/08/2005	Telephone: 703-692-8801
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 05/12/2006
Number of Days to Update: 177	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Semi-Annually

## **FUDS:** Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/05/2005	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 01/19/2006	Telephone: 202-528-4285
Date Made Active in Reports: 02/21/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Varies

## **US BROWNFIELDS:** A Listing of Brownfields Sites

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 Brownfields Cleanup Revolving Loan Fund (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: 04/26/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/27/2006	Telephone: 202-566-2777
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/12/2006
Number of Days to Update: 33	Next Scheduled EDR Contact: 09/11/2006
	Data Release Frequency: Semi-Annually

## **CONSENT:** Superfund (CERCLA) Consent Decrees

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: 12/14/2004	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 02/15/2005	Telephone: Varies
Date Made Active in Reports: 04/25/2005	Last EDR Contact: 07/24/2006
Number of Days to Update: 69	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: Varies

## **ROD:** Records Of Decision

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: 04/13/2006	Source: EPA
Date Data Arrived at EDR: 04/28/2006	Telephone: 703-416-0223
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/06/2006
Number of Days to Update: 32	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **UMTRA:** Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 11/04/2005	Source: Department of Energy
Date Data Arrived at EDR: 11/28/2005	Telephone: 505-845-0011
Date Made Active in Reports: 01/30/2006	Last EDR Contact: 06/21/2006
Number of Days to Update: 63	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Varies

## **ODI:** Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **PRP:** Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 03/09/2006	Source: EPA
Date Data Arrived at EDR: 04/13/2006	Telephone: 202-564-6064
Date Made Active in Reports: 05/19/2006	Last EDR Contact: 07/06/2006
Number of Days to Update: 36	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Quarterly

## **TRIS:** Toxic Chemical Release Inventory System

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: 12/31/2003	Source: EPA
Date Data Arrived at EDR: 07/13/2005	Telephone: 202-566-0250
Date Made Active in Reports: 08/17/2005	Last EDR Contact: 06/22/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Annually

## **TSCA:** Toxic Substances Control Act

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: 12/31/2002	Source: EPA
Date Data Arrived at EDR: 04/14/2006	Telephone: 202-260-5521
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Every 4 Years

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

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: 03/29/2006	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/26/2006	Telephone: 202-566-1667
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/19/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

Date of Government Version: 03/31/2006	Source: EPA
Date Data Arrived at EDR: 04/26/2006	Telephone: 202-566-1667
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/19/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 09/18/2006
	Data Release Frequency: Quarterly

## **SSTS:** Section 7 Tracking Systems

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: 12/31/2004	Source: EPA
Date Data Arrived at EDR: 05/11/2006	Telephone: 202-564-4203
Date Made Active in Reports: 05/22/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 11	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Annually

## **ICIS:** Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 02/13/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/21/2006	Telephone: 202-564-5088
Date Made Active in Reports: 05/11/2006	Last EDR Contact: 07/17/2006
Number of Days to Update: 20	Next Scheduled EDR Contact: 10/16/2006
	Data Release Frequency: Quarterly

## **PADS:** PCB Activity Database System

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: 12/27/2005	Source: EPA
Date Data Arrived at EDR: 02/08/2006	Telephone: 202-566-0500
Date Made Active in Reports: 02/27/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 19	Next Scheduled EDR Contact: 08/07/2006
	Data Release Frequency: Annually

## **MLTS:** Material Licensing Tracking System

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: 04/12/2006	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 04/26/2006	Telephone: 301-415-7169
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 07/03/2006
Number of Days to Update: 34	Next Scheduled EDR Contact: 10/02/2006
	Data Release Frequency: Quarterly

## **MINES:** Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2006	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 03/29/2006	Telephone: 303-231-5959
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 06/28/2006
Number of Days to Update: 62	Next Scheduled EDR Contact: 09/25/2006
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **FINDS:** Facility Index System/Facility Registry System

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: 04/27/2006	Source: EPA
Date Data Arrived at EDR: 05/02/2006	Telephone: N/A
Date Made Active in Reports: 05/30/2006	Last EDR Contact: 04/03/2006
Number of Days to Update: 28	Next Scheduled EDR Contact: 07/03/2006
	Data Release Frequency: Quarterly

## **RAATS:** RCRA Administrative Action Tracking System

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: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/05/2006
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: No Update Planned

## **BRS:** Biennial Reporting System

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: 12/31/2003	Source: EPA/NTIS
Date Data Arrived at EDR: 06/17/2005	Telephone: 800-424-9346
Date Made Active in Reports: 08/04/2005	Last EDR Contact: 07/21/2006
Number of Days to Update: 48	Next Scheduled EDR Contact: 09/11/2006
	Data Release Frequency: Biennially

## **STATE AND LOCAL RECORDS**

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

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	Source: Department of the Environment
Date Data Arrived at EDR: N/A	Telephone: 505-827-2918
Date Made Active in Reports: N/A	Last EDR Contact: 07/24/2006
Number of Days to Update: N/A	Next Scheduled EDR Contact: 10/23/2006
	Data Release Frequency: N/A

### **SWF/LF:** Solid Waste Facilities

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.

Date of Government Version: 03/29/2006	Source: New Mexico Environment Department
Date Data Arrived at EDR: 03/30/2006	Telephone: 505-827-0347
Date Made Active in Reports: 04/21/2006	Last EDR Contact: 07/31/2006
Number of Days to Update: 22	Next Scheduled EDR Contact: 09/04/2006
	Data Release Frequency: Semi-Annually

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**SWRCY:** Recycling Facility Listing

A listing of recycling facility locations.

Date of Government Version: 03/23/2006  
Date Data Arrived at EDR: 03/30/2006  
Date Made Active in Reports: 04/21/2006  
Number of Days to Update: 22

Source: Environment Department  
Telephone: 505-827-0197  
Last EDR Contact: 07/31/2006  
Next Scheduled EDR Contact: 09/04/2006  
Data Release Frequency: Varies

**LUST:** Leaking Underground Storage Tank Priorization Database

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: 05/01/2006  
Date Data Arrived at EDR: 05/01/2006  
Date Made Active in Reports: 06/05/2006  
Number of Days to Update: 35

Source: New Mexico Environment Department  
Telephone: 505-984-1741  
Last EDR Contact: 08/04/2006  
Next Scheduled EDR Contact: 10/30/2006  
Data Release Frequency: Varies

**UST:** Listing of Underground Storage Tanks

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: 05/01/2006  
Date Data Arrived at EDR: 05/01/2006  
Date Made Active in Reports: 06/05/2006  
Number of Days to Update: 35

Source: New Mexico Environment Department  
Telephone: 505-984-1741  
Last EDR Contact: 08/04/2006  
Next Scheduled EDR Contact: 10/30/2006  
Data Release Frequency: Varies

**LAST:** Leaking Aboveground Storage Tank Sites

A listing of leaking aboveground storage tank sites.

Date of Government Version: 05/01/2006  
Date Data Arrived at EDR: 05/01/2006  
Date Made Active in Reports: 06/05/2006  
Number of Days to Update: 35

Source: Environment Department  
Telephone: 505-984-1926  
Last EDR Contact: 08/04/2006  
Next Scheduled EDR Contact: 10/30/2006  
Data Release Frequency: Quarterly

**AST:** Aboveground Storage Tanks List

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

Date of Government Version: 03/27/2006  
Date Data Arrived at EDR: 03/28/2006  
Date Made Active in Reports: 04/24/2006  
Number of Days to Update: 27

Source: Environment Department  
Telephone: 505-984-1926  
Last EDR Contact: 06/26/2006  
Next Scheduled EDR Contact: 09/25/2006  
Data Release Frequency: Varies

**SPILLS:** Spill Data

Hazardous materials spills data.

Date of Government Version: 01/12/2006  
Date Data Arrived at EDR: 01/23/2006  
Date Made Active in Reports: 02/27/2006  
Number of Days to Update: 35

Source: Environment Department  
Telephone: 505-827-0166  
Last EDR Contact: 07/24/2006  
Next Scheduled EDR Contact: 10/23/2006  
Data Release Frequency: Varies

**INST CONTROL:** Sites with Institutional Controls

Sites included in the Voluntary Cleanup listing that have Institutional Controls in place.

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/31/2006  
Date Data Arrived at EDR: 06/09/2006  
Date Made Active in Reports: 07/17/2006  
Number of Days to Update: 38

Source: Environment Department  
Telephone: 505-827-2754  
Last EDR Contact: 07/28/2006  
Next Scheduled EDR Contact: 10/23/2006  
Data Release Frequency: Varies

**VCP:** Voluntary Remediation Program Sites  
Sites involved in the Voluntary Remediation Program.

Date of Government Version: 03/31/2006  
Date Data Arrived at EDR: 06/09/2006  
Date Made Active in Reports: 07/17/2006  
Number of Days to Update: 38

Source: Environment Department  
Telephone: 505-827-2754  
Last EDR Contact: 07/28/2006  
Next Scheduled EDR Contact: 10/23/2006  
Data Release Frequency: Varies

**NPDES:** List of Discharge Permits  
General information regarding NPDES (National Pollutant Discharge Elimination System) permits.

Date of Government Version: 05/23/2006  
Date Data Arrived at EDR: 06/02/2006  
Date Made Active in Reports: 07/17/2006  
Number of Days to Update: 45

Source: Environment Department  
Telephone: 505-827-2918  
Last EDR Contact: 06/02/2006  
Next Scheduled EDR Contact: 08/14/2006  
Data Release Frequency: Semi-Annually

## **TRIBAL RECORDS**

**INDIAN RESERV:** Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2004  
Date Data Arrived at EDR: 02/08/2005  
Date Made Active in Reports: 08/04/2005  
Number of Days to Update: 177

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 05/12/2006  
Next Scheduled EDR Contact: 08/07/2006  
Data Release Frequency: Semi-Annually

**INDIAN LUST:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/04/2005  
Date Data Arrived at EDR: 01/21/2005  
Date Made Active in Reports: 02/28/2005  
Number of Days to Update: 38

Source: EPA Region 6  
Telephone: 214-665-6597  
Last EDR Contact: 05/23/2006  
Next Scheduled EDR Contact: 08/21/2006  
Data Release Frequency: Varies

**INDIAN LUST:** Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 06/01/2006  
Date Data Arrived at EDR: 06/23/2006  
Date Made Active in Reports: 07/17/2006  
Number of Days to Update: 24

Source: Environmental Protection Agency  
Telephone: 415-972-3372  
Last EDR Contact: 02/20/2006  
Next Scheduled EDR Contact: 05/22/2006  
Data Release Frequency: Varies

**INDIAN UST:** Underground Storage Tanks on Indian Land

Date of Government Version: 12/14/2005  
Date Data Arrived at EDR: 12/14/2005  
Date Made Active in Reports: 01/23/2006  
Number of Days to Update: 40

Source: Environmental Protection Agency, Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 05/23/2006  
Next Scheduled EDR Contact: 08/21/2006  
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## **INDIAN UST:** Underground Storage Tanks on Indian Land

Date of Government Version: 06/01/2006	Source: EPA Region 9
Date Data Arrived at EDR: 06/23/2006	Telephone: 415-972-3368
Date Made Active in Reports: 07/17/2006	Last EDR Contact: 05/23/2006
Number of Days to Update: 24	Next Scheduled EDR Contact: 08/21/2006
	Data Release Frequency: Varies

## **EDR PROPRIETARY RECORDS**

### **Manufactured Gas Plants:** EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

## **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.

### **NY MANIFEST:** Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/02/2006	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 05/31/2006	Telephone: 518-402-8651
Date Made Active in Reports: 06/27/2006	Last EDR Contact: 05/31/2006
Number of Days to Update: 27	Next Scheduled EDR Contact: 08/28/2006
	Data Release Frequency: Annually

### **WI MANIFEST:** Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2005	Source: Department of Natural Resources
Date Data Arrived at EDR: 03/17/2006	Telephone: N/A
Date Made Active in Reports: 05/02/2006	Last EDR Contact: 07/25/2006
Number of Days to Update: 46	Next Scheduled EDR Contact: 10/09/2006
	Data Release Frequency: Annually

**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

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# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**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.

**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 and 2005 from the U.S. Fish and Wildlife Service.

**STREET AND ADDRESS INFORMATION**

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

LANL A-10 LAND TRANSFER  
SR 502 AND DP ROAD  
LOS ALAMOS, NM 87544

### TARGET PROPERTY COORDINATES

Latitude (North):	35.88060 - 35° 52' 50.2"
Longitude (West):	106.2868 - 106° 17' 12.5"
Universal Tranverse Mercator:	Zone 13
UTM X (Meters):	383843.4
UTM Y (Meters):	3971269.8
Elevation:	7188 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	35106-H3 GUAJE MOUNTAIN, NM
Most Recent Revision:	1993
South Map:	35106-G3 FRIJOLES, NM
Most Recent Revision:	1993

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.

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.

# 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).

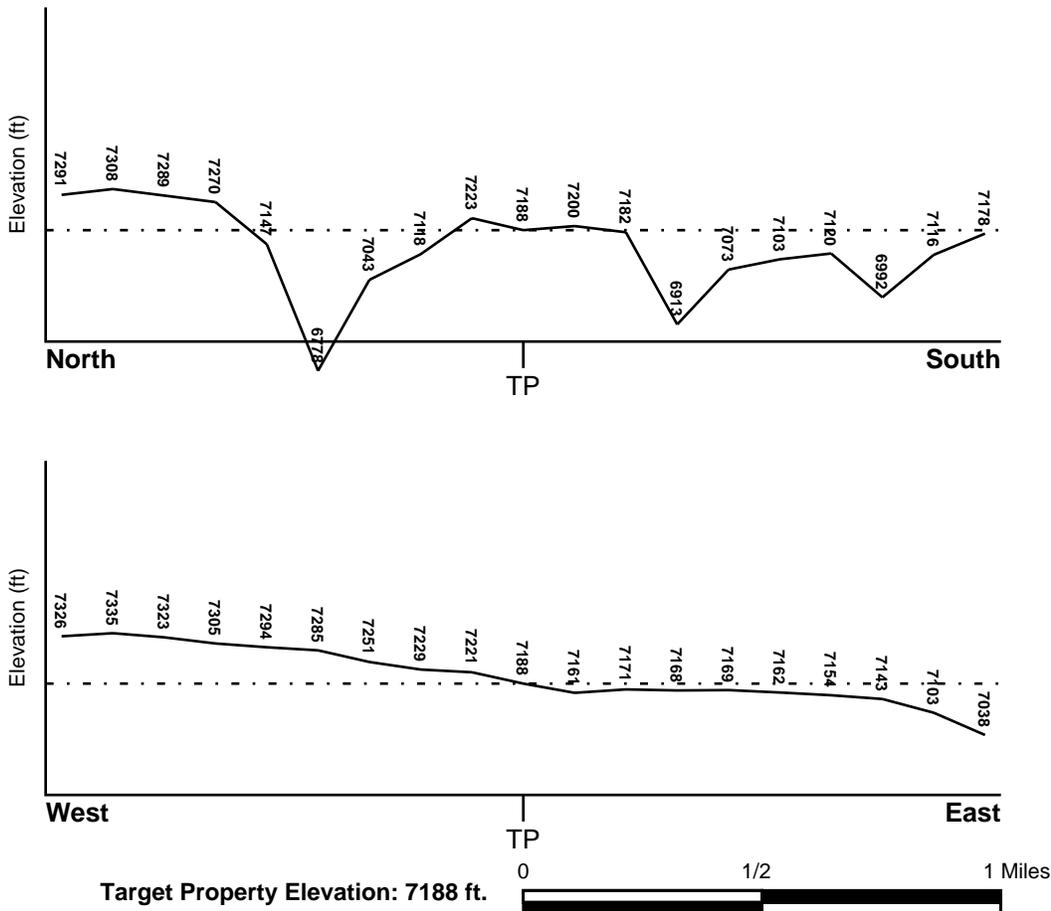
## TOPOGRAPHIC INFORMATION

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

General Topographic Gradient: General NE

## 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**

<u>Target Property County</u>	<u>FEMA Flood Electronic Data</u>
LOS ALAMOS, NM	Not Available

Flood Plain Panel at Target Property: Not Reported

Additional Panels in search area: Not Reported

## **NATIONAL WETLAND INVENTORY**

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
GUAJE MOUNTAIN	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		

\* ©1996 Site-specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# 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 Soils.	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 Soils.	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

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water 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
State Database	1.000

## **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**

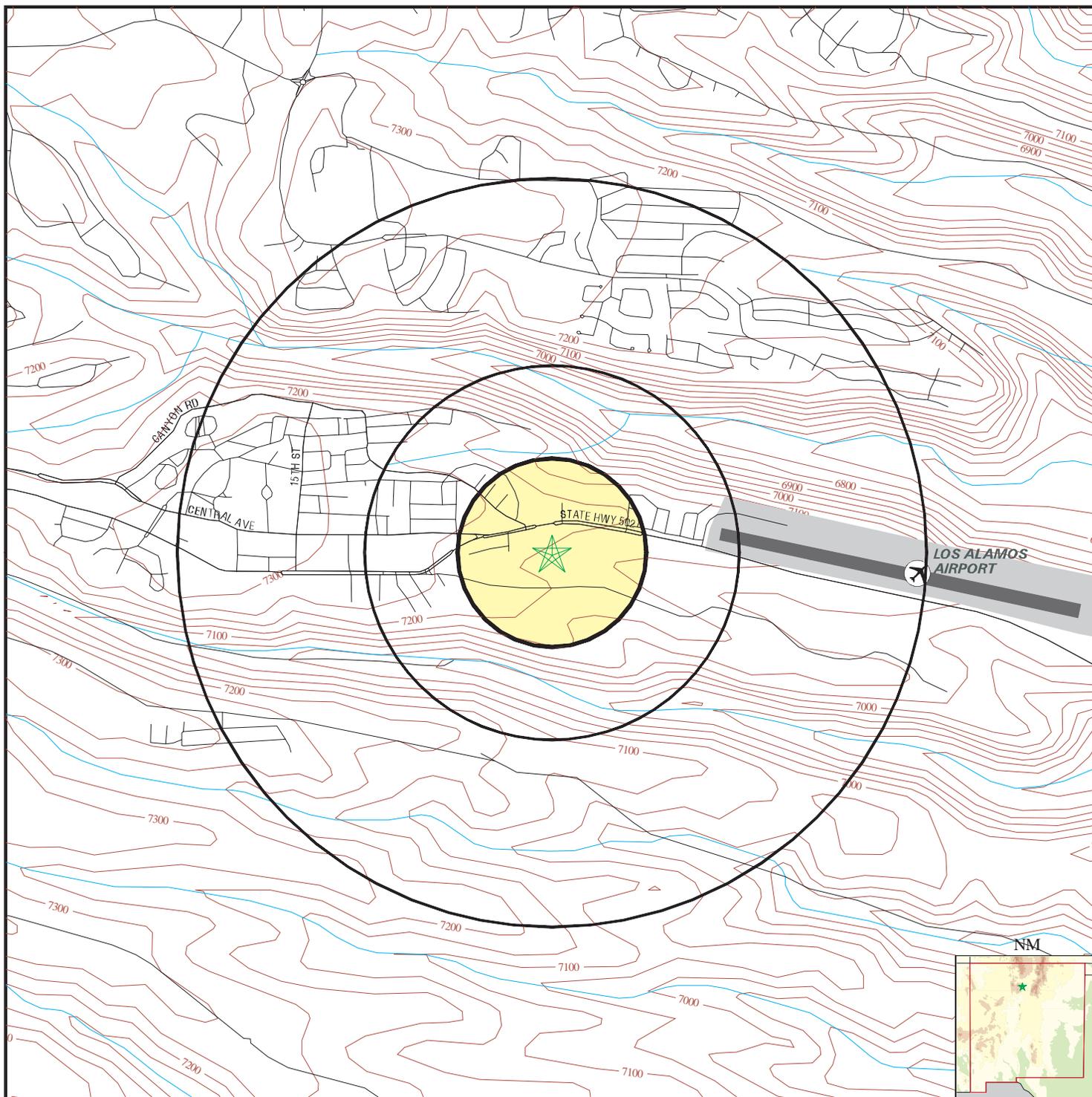
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

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

## **STATE DATABASE WELL INFORMATION**

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

# PHYSICAL SETTING SOURCE MAP - 1730193.8s



- 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



<p>SITE NAME: LANL A-10 Land Transfer                  ADDRESS: SR 502 and DP Road                  Los Alamos NM 87544                  LAT/LONG: 35.8806 / 106.2868</p>	<p>CLIENT: Los Alamos National Laboratory                  CONTACT: Bruce Swanton                  INQUIRY #: 1730193.8s                  DATE: August 07, 2006</p>
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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

## AREA RADON INFORMATION

State Database: NM Radon

### Radon Test Results

Zip	Total Sites	Pct. < 4 Pci/L	4 < 10 Pci/L	10 < 20 Pci/L	> 20 Pci/L
87544	38	76.3	21.1	2.6	0.0

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 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

## 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 and 2005 from the U.S. Fish and Wildlife Service.

## HYDROGEOLOGIC INFORMATION

### **AQUIFLOW<sup>R</sup> 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) Natural Resources Conservation Service (NRCS) leads the national Conservation 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.

### **SSURGO: Soil Survey Geographic Database**

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

## LOCAL / REGIONAL WATER AGENCY RECORDS

### **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.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## **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.

## **STATE RECORDS**

### **Water Well Database**

Source: Office of the State Engineer

Telephone: 505-827-6175

## **OTHER STATE DATABASE INFORMATION**

### **Oil and Gas Well Locations**

Source: New Mexico Institute of Mining and Technology

Telephone: 505-835-5142

## **RADON**

### **State Database: NM Radon**

Source: Environment Department

Telephone: 505-827-1093

Radon Test Results

### **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

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STREET AND ADDRESS INFORMATION

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