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THIS FORM IS SUBJECT TO CHANGE. CONTACT THE RPF FOR LATEST VERSION. (JUNE 1997)

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SUBJECT: FINAL ER REPORT TO SUPPORT LAND CONVEYANCE AND TRANSFER UNDER PUBLIC LAW 105-119

Dear Mr. Rael and Mr. Longo:

The Environmental Restoration (ER) Project has incorporated all concurrence - related revisions to the Final ER Report – concurrence copy (July 14, 1999), into the Final ER Report to Support Land Conveyance and Transfer under Public Law 105-119. A copy of the Final ER Report is being submitted as an enclosure to this letter.

Sincerely,

Julie A. Canepa, Program Manager
LANL/ER

Sincerely,

for Joseph A. Moe

Theodore J. Taylor, Program Manager
DOE/LAAO

JC/TT/ev

Enclosure: Final Report entitled *Environmental Restoration Report to Support Land Conveyance and Transfer under Public Law 105-119 (August 1999)*

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ENVIRONMENTAL RESTORATION REPORT

To Support

LAND CONVEYANCE AND TRANSFER

Under Public Law 105-119

LA-UR-99-4187

LOS ALAMOS NATIONAL LABORATORY

Final

August 1999

Executive Summary

On November 26, 1997, Congress enacted legislation that required the Secretary of Energy to identify land at Los Alamos National Laboratory (LANL) to be considered for conveyance and transfer to Los Alamos County or to the Secretary of the Interior, in trust for the Pueblo of San Ildefonso (Public Law 105-119, the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998). The Department of Energy (DOE) tentatively identified nine, later reconfigured to ten[1] land parcels for such transfer in the "Land Transfer Report to Congress under Public Law 105-119, A Preliminary Identification of Parcels of Land in Los Alamos, New Mexico for Conveyance or Transfer" (April, 1998). Public Law 105-119 also directed the DOE to identify any environmental restoration or remediation that would be necessary within any of these tracts prior to conveyance and transfer.

This report fulfills the requirement to provide Congress with the information it needs to make decisions on supporting the level of environmental restoration that DOE believes is required to convey or transfer each parcel. It address both the "remedial action" and "decontamination and decommissioning" (D&D), which are both the responsibility of the LANL Environmental Restoration (ER) Project. For the purposes of this report, the term "remedial action" is used to describe the full suite of characterization and remediation activities that may be conducted by the ER Project at potential release sites (PRSs) and canyons systems. Remedial actions are most often concerned with potential contamination of soils, sediments, and groundwater. This report uses the term "D&D" as it is defined by DOE to address environmental restoration activities associated with structures.

Public Law 105-119 states that the conveyed lands "*...shall be used for historic, cultural, or environmental preservation purposes, economic diversification purposes, or community self-sufficiency purposes.*" Both Los Alamos County and San Ildefonso Pueblo submitted preliminary statements of interest in some or all of the ten parcels to DOE in June 1998, and these submittals included preliminary proposed land uses for each parcel.[2] In general, both San Ildefonso Pueblo and Los Alamos County propose to use some of the parcels for commercial and industrial development to meet the goal of economic diversification; residential development to meet the goal of self-sufficiency; and cultural or environmental preservation to meet the goal of preservation. The uses proposed by the potential recipients of each parcel are not always the same.

There are 200 potential release sites (PRSs)[3] and 152 LANL numbered structures[4] located within the ten parcels tentatively identified by DOE for conveyance and transfer.

---

[1] DOE tentatively identified nine parcels as candidates for land transfer in the April 1998 report referenced above. Today's report presents information on ten parcels. This apparent discrepancy is explained by the fact that Site 22 and the Manhattan Monument were originally combined and addressed as one parcel. In this report they are presented and addressed as individual parcels, to be consistent with DOE's draft Conveyance & Transfer Environmental Impact Statement (DOE DEIS 293). Please note, however, that the C&T EIS and this report are not necessarily consistent in all assumptions, although each document clearly states the set of assumptions it is using to estimate costs and other impacts.

[2] Submittal to DOE by Governor Harvey A. Martinez, Pueblo of San Ildefonso, June 8, 1998; and letter to Dennis Martinez, DOE, from Joseph C. King, Administrator, Los Alamos County, June 30, 1998.

[3] There are an additional six canyon systems, which appear in the Appendix A database reports, but are considered separately from PRSs in the text of this report.

[4] There are more than 2000 numerically – identified structures within the 43 square mile area of LANL. Most are used for offices, storage or support functions and include transportables, trailers, guardhouses, passageways, and buildings.

Two of the parcels – Site 22 and the Manhattan Monument – have neither PRSs nor structures associated with them and, consequently, the environmental restoration issues associated with them are minimal. At the other end of the spectrum, the TA 21 parcel contains 154 of the 200 PRSs and 125 of the 152 structures. The environmental restoration issues associated with this parcel are the most complex, and will be the most costly, of all of the tentatively proposed land transfer parcels. Some of the other parcels, including the White Rock Y, the White Rock parcel, and the TA 74 parcel, are situated within one or more canyons drainage systems and could, potentially, be the recipients of contaminant migration from mesa top or up-canyon locations.

Several of the environmental restoration projects for some parcels will be difficult and costly to conduct, for both characterization and for actual remediation. Such work, much of it without precedent, might be difficult to complete successfully at any cost. For example, characterization of the canyons systems for six of the parcels, especially for those whose slopes are greater than about 20 degrees, such as Los Alamos Canyon that bounds TA-21, will take up to 3 years to complete at a cost of several millions of dollars. The material disposal areas also will be technically challenging both to characterize and remediate, if necessary, due in part to lack of historical records for some of these release sites and to their highly heterogeneous nature. Future regulatory discussions could alter current estimates of the scope and costs required to complete remediation of a given parcel. If current budget levels remain stable, it would be difficult to complete restoration at all parcels by 2007, even assuming that the regulatory authorities do not require significantly more characterization and remediation than assumed herein.

The estimated costs, waste volumes, and duration of environmental restoration among the ten parcels vary considerably, depending on the types and complexity of the PRSs and structures present onsite, and on the proposed future land use of each parcel. The DOE has estimated a range of waste volume estimates, cleanup costs, and cleanup duration for each parcel, based on land use scenarios that represent the contemplated uses to which each parcel might be put.

DOE's recommendations on proposed remedies, and estimates of projected waste volumes, cleanup costs and cleanup duration are based on site characterization data as it exists today. They are also based on the DOE's understanding of the types of cleanup strategies and the cleanup levels that are generally acceptable under the RCRA corrective action regulations. The DOE believes that the remedies proposed for each parcel are appropriate based on the specific land use assumptions for that parcel. Such assumptions reflect the contemplated uses for each parcel. If a parcel is ultimately proposed for a use that is different from those presented in this report, then the proposed remedies and their associated costs could change.

The information presented in the following tables presents an estimate of the range of projected costs and waste volumes for the entire land transfer project. These estimates are based on the preliminary proposed land uses by San Ildefonso Pueblo and Los Alamos County. Tables ES-1 and ES-2 present the DOE's estimates of the lowest and highest estimated waste volumes that could be generated to prepare each parcel for transfer. Tables ES-3 and ES-4 present estimates of the lowest and highest remedial action costs, per parcel, that could reasonably be expected to prepare each parcel for transfer, based on currently available information. Table ES-5 presents the estimated ranges in costs for remedial action at parcel in preparation for land transfer under each land use scenario for which it has been proposed.

Table ES-1
Projected Waste Volumes by Parcel
Lowest-Volume Estimate[5]

Parcel	Projected Waste Volumes (cubic yards)[6]							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
TA-21	47,038	387	15,091	1,108	196	40	54	1,929
DP Road	1,893	744	0	0	0	0	0	330
DOE LAAO	350	0	0	0	0	0	0	46
Airport	24,056	0	400	0	0	0	0	0
White Rock	0	0	0	0	0	0	0	0
Rendija Canyon	0	7,500	0	0	0	0	0	0
White Rock Y	0	0	0	0	0	0	0	0
Site 22	10	0	0	0	0	0	0	0
Manhattan Monument	0	0	0	0	0	0	0	0
TA-74	2	2	1	2	0	0	0	0
Total	73,349	8,633	15,492	1,110	196	40	54	2,305

Table ES-2
Projected Waste Volumes by Parcel
Highest-Volume Estimate[7]

Parcel	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
TA-21	47,038	387	15,091	1,108	196	40	54	1,929
DP Road	1,893	754	0	0	0	0	0	380
DOE LAAO	2,931	0	0	0	0	0	0	486
Airport	24,056	0	400	0	0	0	0	0
White Rock	0	0	942	0	0	0	0	0
Rendija Canyon	1	7,500	0	0	0	0	0	0
White Rock Y	0	0	3,767	0	0	0	0	0
Site 22	10	0	0	0	0	0	0	0
Manhattan Monument	0	0	0	0	0	0	0	0
TA-74	2	2	96,882	2	0	0	0	0
Total	75,931	8,643	119,082	1,110	196	40	54	2,795

[5] Parcels for which two land use scenarios are proposed may have two different sets of proposed remedies. Each different remedy set could have different estimated waste volumes associated with it. This table identifies, per parcel, the lower of those estimates, regardless of the land use with which it is associated. For parcels where only one land use scenario – and one remedy set – has been identified, there is only one waste volume estimate, and it appears in this table and in Table ES-2.

[6] Liquid waste is estimated to comprise less than one percent of total waste volume. Because the contribution of liquid waste to the total waste stream is minimal, it is not included in this table.

[7] Parcels for which two land use scenarios are proposed may have two different sets of proposed remedies. Each different remedy set could have different waste volumes associated with it. This table identifies, per parcel, the higher of those estimates, regardless of the land use with which it is associated. For parcels where only one land use – and one remedy set – has been identified, there is only one waste volume estimate, and it appears in this table and in Table ES-1.

Table ES-3
Projected Cost Estimates for Remedial Action and D&D by Parcel
Lowest-Cost Estimate[8]

Parcel	Estimated Costs for Completion ($K)[9]	Range in Estimated Durations for Individual PRSs and Structures (months)[10]
TA-21	400,184[11]	1-84
DP Road	26,986	2-70
DOE LAAO	4,253	11-18
Airport	28,217	1-75
White Rock	954	16
Rendija Canyon	19,053	14-30
White Rock Y	1,880	16
Site 22	91	9
Manhattan Monument	0	0
TA-74	3683	11-18
Total	485,301	-

[8] Parcels for which two land use scenarios are proposed may have two different sets of proposed remedies. This table identifies the lower of those estimates, regardless of the land use with which it is associated. In other words, this information in this table does not correlate to one particular land use. For parcels where only one land use – and one remedy set – has been identified, there is only one cost estimate, and it appears in this table and in Table ES-4.

[9] Costs of canyons characterization are included for TA-21, Airport and the DP Road parcels, but remediation may not be required under the proposed land uses of commercial and residential development because these canyons are not developable. Costs are included for canyons characterization and remediation in the White Rock, White Rock Y, and TA-74 parcels, because in these cases the canyon bottoms are the predominant usable parts of the parcels.

[10] This column presents the estimated shortest- and longest-duration remediation or D&D projects within each parcel. Actual project duration may vary, based on funding levels and the sequencing of activities, and the time frame required to accomplish all remediation projects within a parcel may exceed the longest-duration project listed in the table.

[11] The costs presented in this table differ from those presented for "Case 2", the current baseline case, in the TA-21 Project Plan (February 1999 report to Congress) because the costs of D&D at DP East and canyons system costs are included in this report but not in the TA-21 Project Plan. The five other cases in the Project Plan are possible remedial technology scenarios for the Material Disposal Areas, several of which might allow for unrestricted use and involve deployment of innovative technologies, but are not considered very likely at this time. The range in costs for the full suite of scenarios was reported in the TA-21 Project Plan as $258M-3,775M(rounded).

Table ES-4
Projected Cost Estimates for Remedial Action and D&D by Parcel
Highest-Cost Estimate[12]

Parcel	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs and Structures (months)
TA-21	400,184	1-84
DP Road	29,070	2-84
DOE LAAO	9,680	9-18
Airport	28,217	1-75
White Rock	3,374	16
Rendija Canyon	20,462	14-30
White Rock Y	10,424	24
Site 22	91	9
Manhattan Monument	0	0
TA-74	215,666	11-22
Total	717,168	-

[12] Parcels for which two land use scenarios are proposed may have two different sets of proposed remedies. This table identifies the higher of the remedial cost estimates, regardless of the land use with which it is associated. In other words, the information in this table does not correlate to one particular land use. For parcels where only one land use – and one remedy set – has been identified there is only one remedial cost estimate, and it appears in this table and in Table ES-3.

Table ES-5
Estimated Ranges in Cost for Remedial Action under each Proposed Land Use Scenario[13]

Parcel	Estimated Lowest Costs for Land Transfer ($K)	Estimated Highest Costs for Land Transfer ($K)
TA-21	400,184	400,184
DP Road	26,986	29,070
DOE LAAO	4,253	9,680
Airport	28,217	28,217
White Rock	954	3,374
Rendija Canyon	19,053	20,462
White Rock Y	1,880	10,424
Site 22	91	91
Manhattan Monument	0	0
TA-74	3,683	215,668
Total	485,301	717,168

[13] The assumption made under any land transfer scenario is that all PRSs and structures will have to be characterized and, if necessary, remediated, with a moderate to high degree of rigor to gain expedient regulatory acceptance (which is a prerequisite to actual land transfer) and to be acceptable to the potential recipients. The DOE acknowledges that more cleanup could be required for land that is transferred than for land that will remain under its institutional control.

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Appendix B: **One-Page Summaries of PRSs within Land Transfer Parcels and 50-Foot Buffer Zones B-1**

Appendix C: **Information Sources & Estimation Methodologies C-1**

LIST OF ACRONYMS

AA	Administrative Authority
AOC	Area of Concern
C&T	Conveyance and Transfer
D&D	Decontamination & Decommissioning
DOE	U.S. Department of Energy
DP	Defense Programs
EM	Office of Environmental Management, Department of Energy
EPA	U.S. Environmental Protection Agency
ER	Environmental Restoration
HSWA	Hazardous and Solid Waste Amendments of 1984
LAAO	Los Alamos Area Office, Department of Energy
LANL	Los Alamos National Laboratory
MDA	Material Disposal Area
NFA	No Further Action
NMED	New Mexico Environment Department
PCB	Polychlorinated Biphenyls
PRG	Preliminary Remediation Goal
PRS	Potential Release Site
RCRA	Resource Conservation and Recovery Act of 1976
TA	Technical Area
TRU	Transuranic
TSFF	Tritium Science and Fabrication Facility
TSTA	Tritium Systems Test Assembly

1.0 Introduction

1.1 Background of Conveyance and Transfer & Purpose of the ER Report

On November 26, 1997, Congress enacted legislation that required the Secretary of Energy to identify land at Los Alamos National Laboratory to be considered for conveyance or transfer to the incorporated County of Los Alamos or to the Secretary of the Interior, in trust for the Pueblo of San Ildefonso (Public Law 105-119, the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1998). One purpose of such conveyance and transfers, which are being contemplated by DOE at its installations across the nation, is to further the self-sufficiency of one of the Atomic Energy Communities, namely Los Alamos. The ability of Los Alamos County to become self-sufficient is especially important in light of the elimination of funding for continued annual assistance payments by DOE to the County. Another purpose, specific to conveyance and transfer of lands at Los Alamos National Laboratory (LANL), is to offer to transfer lands to the Pueblo of San Ildefonso.

The Department of Energy (DOE) tentatively identified nine land parcels[14] for such transfer in the "Land Transfer Report to Congress under Public Law 105-119, A Preliminary Identification of Parcels of Land in Los Alamos, New Mexico for Conveyance or Transfer" (April, 1998). Public Law 105-119 also directed the DOE to identify for Congress any environmental restoration or remediations that would be necessary within any of these tracts prior to transfer.

This report fulfills the requirements to provide Congress with the information it needs to make decisions on supporting the level of environmental restoration that DOE believes is required to convey or transfer each parcel. It address both the "remedial action" and "decontamination and decommissioning" (D&D), which are both the responsibility of the LANL Environmental Restoration (ER) Project. For the purposes of this report, the term "remedial action" is used to describe the full suite of characterization and remediation activities that may be conducted by the ER Project at potential release sites (PRSs) and canyons systems. Remedial actions are most often concerned with potential contamination of soils, sediments, and groundwater. This report uses the term "D&D" as it is defined by DOE to address environmental restoration activities associated with structures.

1.2 Environmental Restoration at Los Alamos National Laboratory

The ER Project at LANL was established by DOE in 1989 to characterize and remediate sites that were known or suspected to be contaminated because of

[14] DOE tentatively identified nine parcels as candidates for land transfer in the April 1998 report referenced above. Today's report presents information on ten parcels. This apparent discrepancy is explained by the fact that Site 22 and the Manhattan Monument were originally combined and addressed as one parcel. In this report they are presented and addressed as individual parcels, to be consistent with DOE's draft Conveyance & Transfer Environmental Impact Statement (C&T EIS).

historical operations, and that either were or still are under DOE control. The project is regulated under the Resource Conservation and Recovery Act (RCRA) and operates in compliance with a permit issued under the Hazardous and Solid Waste Amendments of 1984 (HSWA). The United States Environmental Protection Agency (EPA) was the initial Administrative Authority (AA) for the ER Project's compliance with RCRA. On January 1, 1996, the New Mexico Environmental Department (NMED) assumed this RCRA regulatory responsibility. The DOE has regulatory authority for radionuclides.

By 1992, the ER Project had reviewed existing historical records and interviewed long-time employees, which resulted in the identification of approximately 2120 of such sites, called "potential release sites" (PRSs). Characterization and, if necessary, remediation of all PRSs is mandated under HSWA, and must be completed on a schedule determined by the AA, notwithstanding the requirements of Public Law 105-119.

LANL's PRSs are diverse and include historically-used material disposal areas (MDAs), canyons, outfalls, drain lines, firing sites, industrial sites, and other miscellaneous sites, such as locations of historic spills. By 1994, detailed work plans were being implemented to characterize LANL's PRSs, in accordance with the requirements of EPA's RCRA and HSWA regulations governing the cleanup of hazardous wastes.

In 1996, the DOE Office of Environmental Management (EM) initiated a complex-wide strategy to accelerate site cleanup and enhance performance of the cleanup program. In particular, the strategy focuses on completing work at as many sites as possible by the end of fiscal year 2006. Known as "Accelerating Cleanup: Paths to Closure", the plan includes input from all major field sites, including LANL, to support EM's program planning process.

As of September 1998, the LANL ER Project was in some phase of characterization for more than 1100 PRSs, and had reported results on 774 of these PRSs. In addition, the Project had remediated 120 sites, and had recommended 822 sites for "no further action" (NFA) to DOE and an additional 586 such sites to NMED. The DOE has concurred with 425 such recommendations at the sites over which it has oversight authority. The NMED has removed 102 sites from Module VIII of LANL's RCRA permit. DOE currently estimates that based on current funding projections, all environmental restoration activities at LANL will be completed after the 2007 date set out in Public Law 105-119.

In addition to remediating LANL's PRSs, the environmental restoration program encompasses another important component: the execution of DOE's decontamination and decommissioning (D&D, or decommissioning) program. This program applies to all DOE-owned, contractor-owned, or privately-owned facilities that are inactive or surplus, and have been contaminated with radioactive, hazardous, or mixed wastes or substances because of DOE nuclear program activities. The DOE's Office of Environmental Restoration (EM-40) is responsible not only for environmental restoration, but also for D&D of all surplus facilities. D&D activities are scheduled on a priority basis that is incorporated into the EM-40 Environmental Restoration Five-Year Plan.

Since 1990, more than 40 structures have been decommissioned at LANL. Approximately 100 additional structures have been slated for D&D in the future, on a schedule determined annually on the basis of budget allocations. Unlike the component of the environmental restoration program related to PRSs, which has a projected year of completion, D&D activities are expected to be ongoing over the life of the LANL operations.

1.3 Environmental Restoration Activities Associated with the Subject Parcels

There are 200 PRSs[15] and 152 structures located within the ten parcels tentatively identified by DOE for conveyance and transfer[16]. Two of the parcels – Site 22 and the Manhattan Monument – have neither PRSs nor LANL structures associated with them and, consequently, the environmental restoration issues associated with them are expected to be minimal. At the other end of the spectrum, the TA-21 parcel contains 154 of the 200 PRSs and 125 of the 152 structures. The environmental restoration issues associated with this parcel are the most complex, and will be the most costly of all of the tentatively proposed land transfer parcels. Some of the other parcels, including the White Rock Y, the White Rock parcel, and the TA-74 parcel, are situated within one or more canyons drainage systems and could, potentially, be the recipients of contaminant migration from mesa top or up-canyon locations.

Table1.3.1 summarizes the number of PRSs and structures located in each parcel, and identifies other important issues related to environmental restoration activities.

Table 1.3.1
Summary of Environmental Restoration Sites and Concerns
Tentatively-Identified Land Transfer Parcels

Parcel	Number of PRSs	Number of Structures	Other Concerns[17]
TA-21	154	125	Canyon contamination
DP Road	10	10	Canyon contamination
DOE LAAO	3	3	None
Airport	25	4	Canyon contamination
White Rock	0	1	Canyon contamination
Rendija	4	0	None
White Rock Y	0	6	Canyon contamination
Manhattan Monument	0	0	None
TA-74	4	3	Canyon contamination
Site 22	0	0	Construction debris
Total	200	152	

[15] And an additional six canyon systems.

[16] These numbers are based on the parcel boundaries as they were defined as of November 25, 1998.

[17] "Other concerns" include environmental contamination issues or potential issues resulting from historical operations, that are not captured under a PRS number. These issues are limited only to environmental restoration or decommissioning.

The issues associated with each of the ten parcels are presented in detail in the following chapters, as are the DOE's estimates of total remediation and decommissioning costs and duration.

1.4 Limitations and Uncertainties in the ER Report

The characterization of LANL's PRSs is an ongoing and often, by nature, an iterative process. The challenge of the ER Project is to balance resources optimally between site characterization and remediation. Characterization projects are planned and conducted with the objective of gathering sufficient information to make decisions about whether cleanup is required and, if it is, what cleanup strategies are likely to be successful. However, as the ER Project learns more about a site through the process of characterization, it often becomes clear that additional information is needed in order to make a well-founded decision about the next step.

The PRSs and structures discussed in this report are currently at different stages in the characterization and cleanup process. At some sites, characterization may be only at the early stages (i.e., historical file information has been gathered and, in some cases, limited sampling has been performed). In other cases, site characterization has been thorough and is believed to be complete, and the site may be proposed for cleanup or no further action (NFA). In still other cases, cleanup has been completed, and the site has been proposed (and, in some cases, approved) for NFA. The level of certainty of DOE's knowledge about each PRS at the date of this report varies, therefore, according to what stage has been reached in the overall characterization and cleanup process.

The ER Project makes its decision about whether or not a site requires remediation on the basis of the risk that contamination at the site poses to human health, the ecosystem (i.e., plant and animal life), and the environment. This risk-based decision-making process has been adopted from EPA methodology, and is being refined by the ER Project in conjunction with the NMED. In principle, the decision-making process is based on the premise that the risk posed by contamination at a site will vary depending on how the site is going to be used in the future. Consequently, the level of cleanup required at a site will also vary as a function of proposed land use. In general, contaminants on land to be used for residential purposes must be cleaned up to lower levels (i.e., must contain less contamination) than the same contaminants on land to be used for commercial or industrial development, because the potential for exposure to the contaminants is greater under the residential land use scenario.

The proposed remedies associated with each parcel were developed based on land use scenarios proposed by the potential land recipients.[18] In general, both potential recipients propose to use some (and not always the same) parcels for commercial and industrial development to meet the goal of economic diversification; residential development to meet the goal of self-sufficiency; and

[18] The land use scenario(s) assumed for each parcel in this report are based on the parcel-specific land uses proposed to DOE by the Pueblo of San Ildefonso and Los Alamos County in June 1998.

cultural or environmental preservation to meet the goal of preservation. These proposed land uses -- commercial and industrial development, residential development, and cultural or environmental preservation -- correspond to the ER Project's risk-based land use scenarios and cleanup levels based on industrial use, residential use, and industrial use, respectively. The rationale for using industrial use cleanup levels for the cultural and environmental preservation land use scenario is that the potential for exposure to contaminants is similar under both scenarios (e.g., time spent on site under the industrial and preservation scenarios is intermittent, in contrast to residential use, where time spent on site is fairly continuous and long-term). In addition, a scenario will be developed to appropriately assess risk associated with traditional and unique Native American uses of parcels designated for cultural preservation; wastes generated as a result of remediation under this scenario are not expected to exceed the high-volume estimates presented in Table ES-2.

A parcel might be proposed to be used by the potential recipients for both commercial development and cultural preservation. The remedies presented in this report would be expected to meet the cleanup goals associated with such uses. If, prior to conveyance and transfer, a recipient notifies DOE of its intent to change a contemplated land use, DOE will determine whether additional cleanup is required for the new contemplated land use, and DOE will conduct the cleanup if appropriate and feasible pursuant to the provisions of Public Law 105-119. In the event the contemplated land use changes after cleanup has been completed to the satisfaction of the NMED, discussions would occur between DOE and the recipient as to what level of additional cleanup is required to meet the new land use, based on the agreement signed between the parties to transfer the property. Any contamination caused by the recipient on the property is the responsibility of the recipient, and not DOE. In general, land used for residential development must meet the most stringent cleanup goals of any land use scenario.

It is also important to keep in mind that an AA must approve the remedy proposed to be undertaken at each PRS, and must approve all requests for NFA at a given PRS. In addition, remediation goals must meet all other applicable regulations and standards. For all PRSs listed in HSWA Module of LANL's RCRA permit, the AA is the NMED. For all other PRSs, the AA is the DOE. The tables in Appendix A specify which PRSs in each parcel are included in LANL's RCRA permit.

The cost and waste volume estimates presented in this document are based on the estimated costs of all site activities, from drafting the initial sampling and analysis plan for a PRS (or characterization plan for a D&D structure) through submittal of a final report to the AA. The cost estimates for characterization and remediation of PRSs were developed using an environmental cost estimating model, called the Remedial Action Cost Engineering and Requirements (RACER) system, which was developed by the U.S. Air Force. The parametric, or "per-unit", costs used to develop D&D cost estimates were derived from a combination of actual cost data for D&D of previously-decommissioned TA-21 structures; engineering cost estimates prepared by LANL D&D subcontractors; and asbestos survey data. All cost estimates for projects that are scheduled in government fiscal year (FY) 2000 and beyond are escalated by 2.7 percent per

year, compounded annually, to capture the costs of inflation.[19] All cost estimates are also based on the currently available information for each PRS or structure, and are subject to change if significantly different information is discovered during the course of investigation or remediation. Finally, it should be noted that all PRSs, including those at which no remediation is ultimately required, must be characterized and the results must be reported to the AA. As a consequence, there are almost always costs and wastes associated with PRSs identified as requiring "no action".

The estimated duration for remedial actions and D&D are from the time at which characterization plans or sampling and analysis plans are begun, through the time that a final report is submitted to the AA. It does not include estimates of time for activities beyond the DOE's control, such as the review of documents by the AA. All estimates are based on the currently available information for each PRS or structure, and are subject to change if significantly different information is discovered during the course of investigation or remediation.

As stated above, DOE's recommendations on proposed remedies, and estimates of projected waste volumes, cleanup costs and cleanup duration presented in this report are based on site characterization data as it exists today. As additional information is obtained, for example, from groundwater monitoring or site sampling, remediation cost estimates will be revised as appropriate. These recommendations are also based on the DOE's understanding of the types of cleanup strategies and the cleanup levels that are generally acceptable under the RCRA corrective action regulations. The DOE believes that the remedies proposed for each parcel are appropriate based on the specific land use assumptions for that parcel. Such assumptions reflect the contemplated uses to which each parcel might be put. If a parcel is ultimately proposed for a use that is different from those presented in this report, then the proposed remedies and their associated costs could change.

Finally, it should be emphasized that several of the environmental restoration projects for some parcels will be difficult and costly to conduct, for both characterization and for actual remediation. Such work, much of it without precedent, might be difficult to complete successfully at any cost. For example, characterization of the canyons systems for six of the parcels, especially for those whose slopes are greater than about 20 degrees, such as Los Alamos Canyon that bounds TA-21, will take up to 3 years to complete at a cost of several millions of dollars. The material disposal areas also will be technically challenging both to characterize and remediate, if necessary, due in part to lack of historical records for some of these release sites and to their highly heterogeneous nature. Future regulatory discussions could alter current estimates of the scope and costs required to complete remediation of a given parcel. If current budget levels remain stable, it would be difficult to complete restoration at all parcels by 2007, even assuming that the regulatory authorities do not require significantly more characterization and remediation than assumed herein.

[19] Based on the annual inflation rate for the past three years.

1.5 Road Map to the ER Report

The remainder of this report presents a parcel-by-parcel description of the status of environmental restoration activities (including the decommissioning of structures), and the estimated costs and duration of activities yet to be undertaken prior to conveyance and transfer. The report is supplemented by several appendices. Appendix A is derived from the ER Project's PRS and Structure database, and presents PRS- and structure-specific information on environmental restoration activities undertaken to date, and planned in the future. Appendix B supplements the information provided in Appendix A with a compilation of one-page summaries for each PRS associated with the ten parcels. Appendix C describes the sources of objective information used to compile the ER Report, and it describes the methodologies used when information – such as remedy selection and volumes of waste – had to be estimated subjectively, sometimes in the absence of adequate objective information.

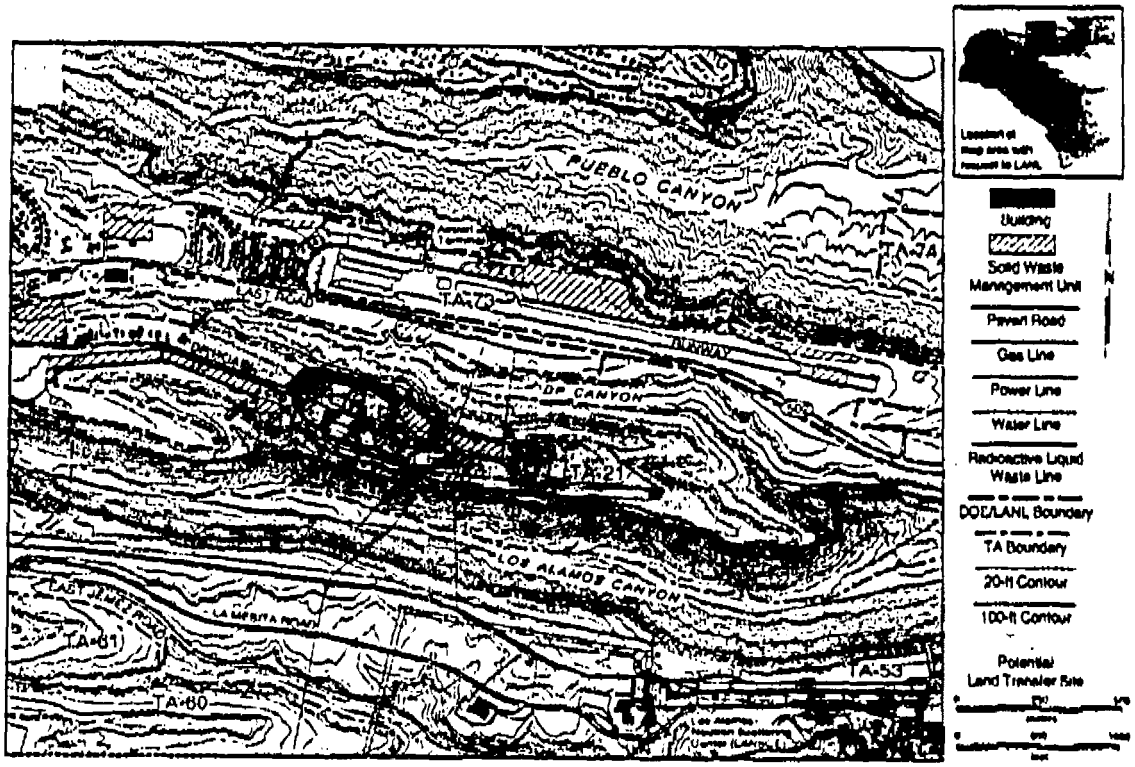


Figure 2.1 **Potential Land Transfer—TA-21 Site**

2.0 TA-21 Parcel

2.1 Introduction

The TA-21 Parcel is approximately a 260 acre site, located at the eastern end of the same mesa on which the central business district of the Los Alamos town site is located. Of the parcel's 260 acres, only 105 acres are located on the mesa top and are topographically suitable for development. Figure 2.1 illustrates the location of the parcel as it relates to the eastern portion of the Los Alamos town site. Los Alamos Canyon and Pueblo Canyon are to the south and north respectively. Access is by way of DP Road. The Los Alamos Airport is located immediately to the north of the parcel but is separated from it by a smaller, secondary canyon (DP Canyon). Some of the buildings within the western portion of the parcel, known as DP West, are currently being used as office space by various LANL groups.

Some of the buildings within the eastern portion of the tract (DP East) have historically been used and are currently being used to house LANL's Tritium Systems Test Assembly (TSTA) and Tritium Science and Fabrication Facility (TSFF). These tritium research activities are critical to the national security and research mission of LANL. There is currently no plan to relocate the tritium-related work conducted at DP East to another location at LANL.

The land use proposed by both potential land recipients is commercial and industrial development, for the purpose of economic diversification.

2.2 Description of PRSs and Structures within the TA-21 Parcel

TA-21 is among the oldest technical areas at LANL. Operations commenced in 1945 with the transfer of plutonium purification activities from the original Manhattan Engineering District facilities to TA-21. The plutonium processing and purification activities were moved from TA-21 in the late 1970s. Past operations at TA-21 resulted in environmental contamination of the site. There are a total of 154 PRSs within the TA-21 parcel and a 50-foot buffer area surrounding the parcel. These PRSs require investigation and, potentially, remediation by the LANL ER Project. The PRSs fall within five general categories: two PRSs are classified as incinerators; 88 are surface units; 21 are outfalls; nine are material disposal areas (MDAs); and 34 are subsurface units. Figures 2.2 and 2.3 show the locations of the PRSs at TA-21.

The PRSs that are classified as "incinerators" include inactive incinerators and filter houses, as well as the assessment of the entire 244 acres of TA-21 for elevated levels of contamination resulting from airborne emissions and the cleanup of those locations, if any, where levels of contamination exceed regulatory limits. The surface unit PRSs are defined as areas having known or potential releases that are confined primarily to surface soil. These include aboveground storage areas, a former tank farm, surface disposal units, and a sewage treatment plant. The PRSs in the outfall category include septic systems, waste and drain lines, and surface outfalls. The subsurface unit PRSs include underground seepage pits, dry wells, and an acid pit. The MDA category includes not only the five main MDAs (MDAs A, B, T, U, and V) that, combined, cover a surface area of approximately 16 acres, but also four associated PRSs.

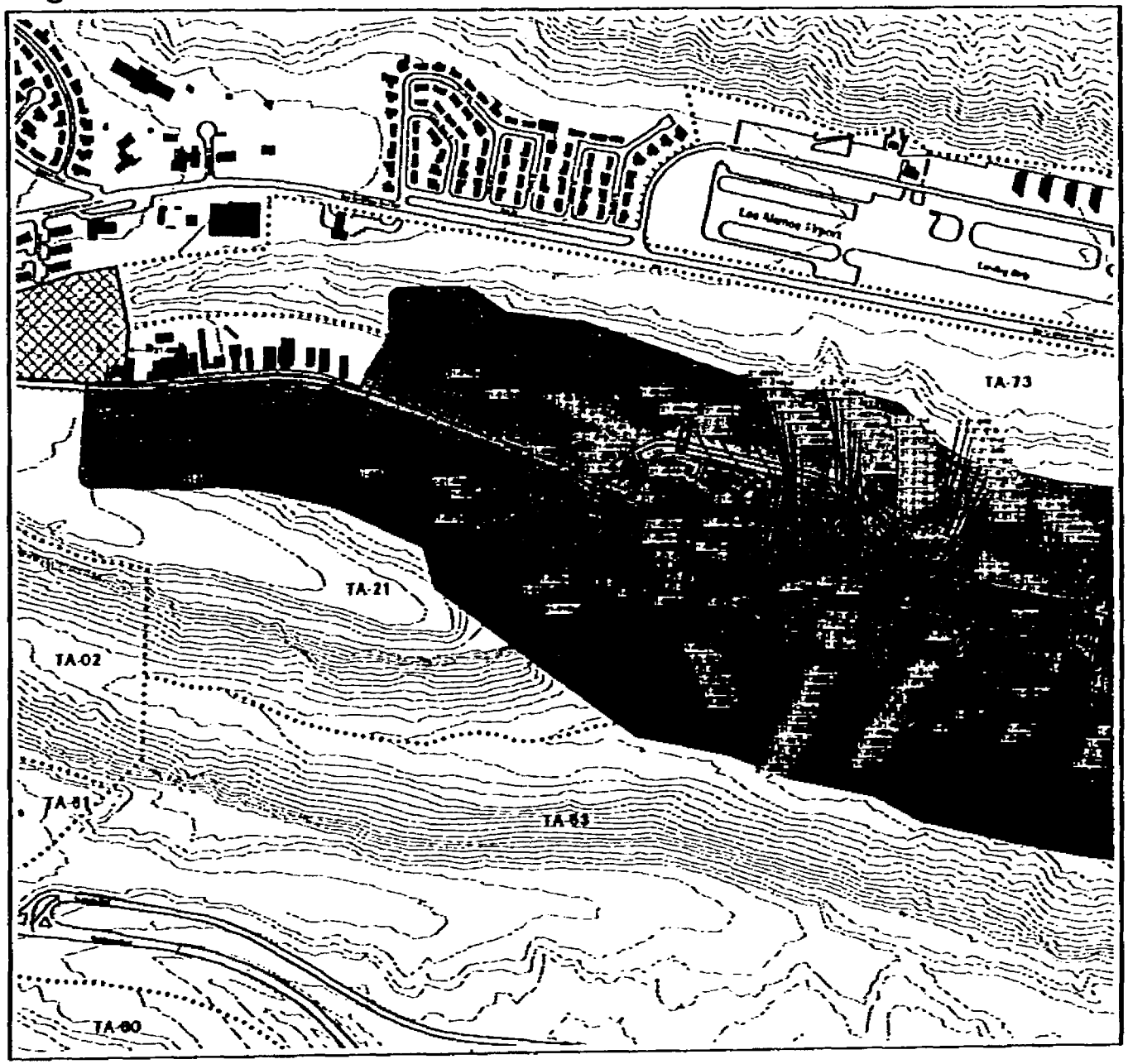
There are 125 LANL numbered structures within TA-21 that would require D&D prior to transferring the parcel. These structures range from electrical substation sheds to wastewater systems to research and process facilities. The structures and systems fall within six categories (Types II-VI and utilities), based on the anticipated cost per unit measure anticipated for their decommissioning. Figures 2.4 and 2.5 show the locations of the structures at TA-21.

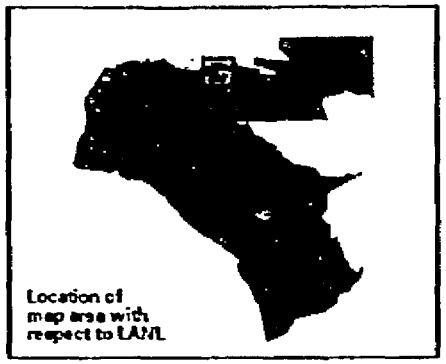
Of the 154 PRSs at TA-21, 95 have been sampled to begin to characterize the nature and extent of contamination that has resulted from historical activities. The results of these sampling efforts are presented in Section 2.3, Extent of Contamination. Some remedial activity has been performed at six TA-21 PRSs. The regulatory status of the TA-21 PRSs is summarized in Section 2.4.

2.3 Extent of Contamination

The specific types and levels of contamination present at each PRS and D&D structure vary. In general, hazardous, chemical, and radioactive contamination is most prevalent. Polychlorinated biphenyls (PCBs) contaminate some locations.

Figure 2.2: TA-21 Site PRSs, West





Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site

N

0 700 1400
FEET

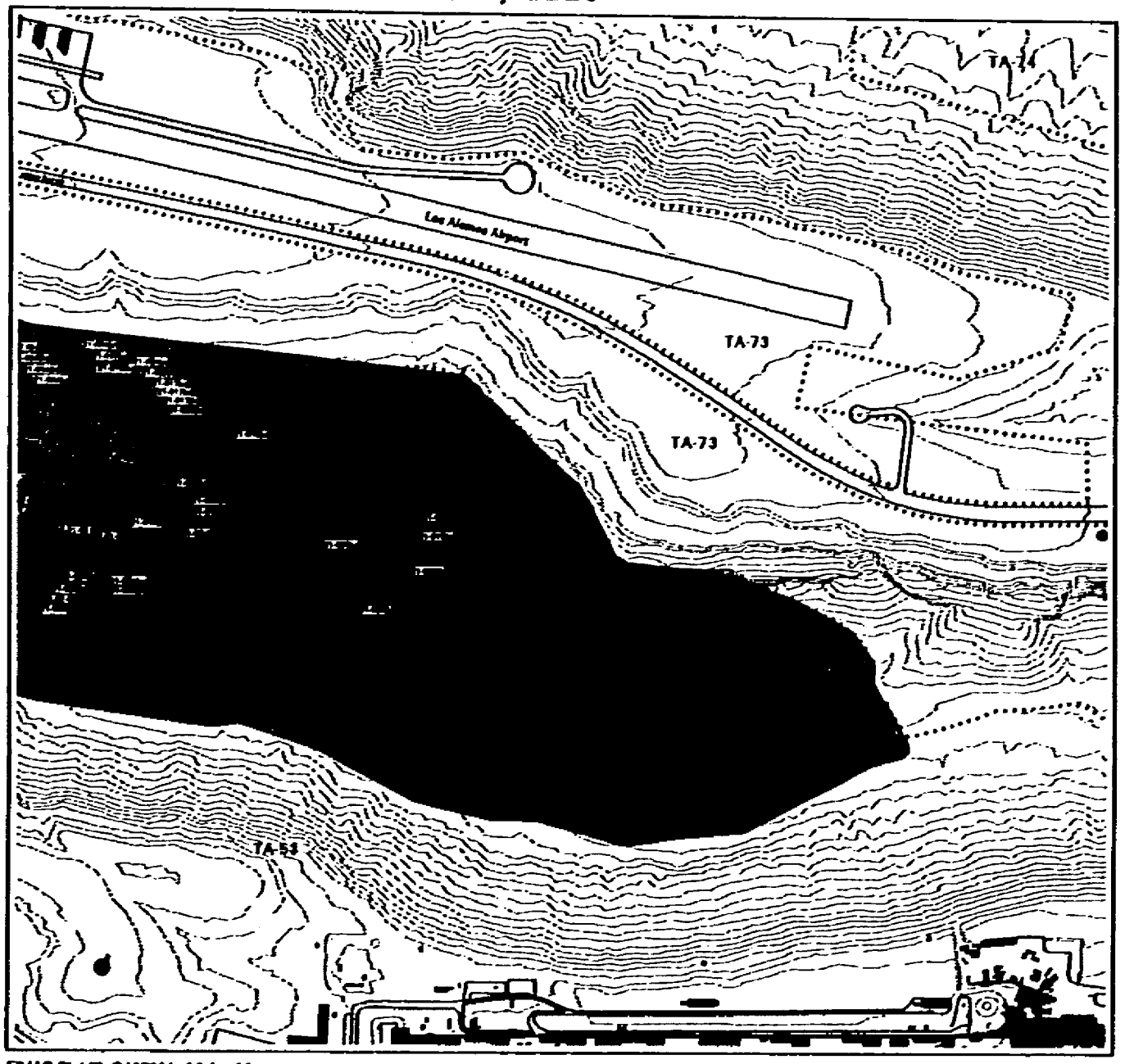
0 213 426
METERS

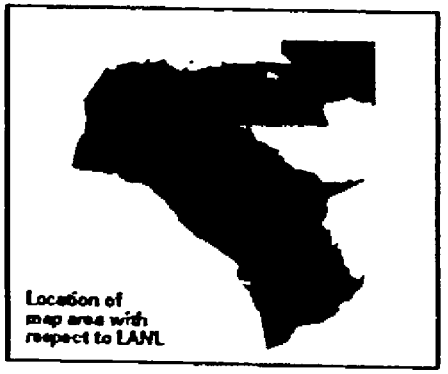
State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and data accuracy may not have been confirmed. Data are from various sources and are part of the RMAD repository.

RMAD Plot ID: G107300 06 Jan 99

Figure 2.3: TA-21 Site PRSs, East





Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site

0 700 1400
FEET

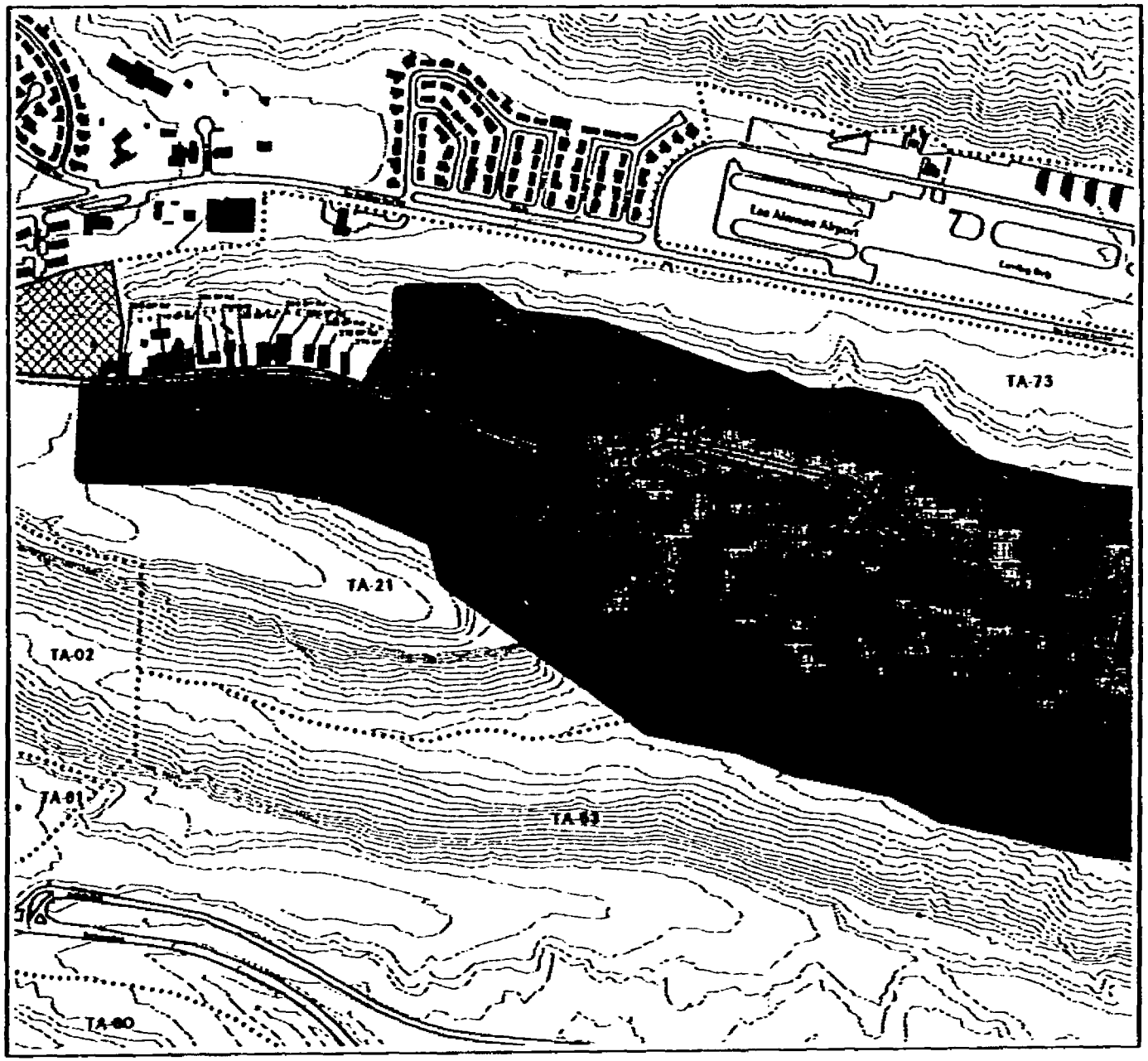
0 213 426
METERS

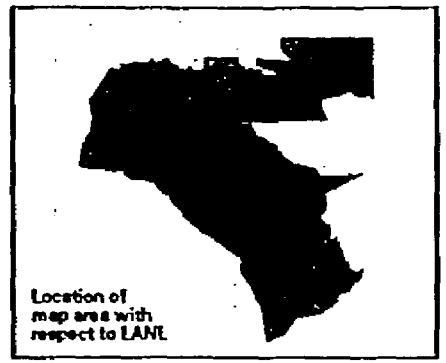
State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is generalized. Feature locations are dependent on scale and symbology and data accuracy may not have been confirmed. Data are from various sources and are part of the FIMAD repository.

FIMAD Plot ID: G107301 06 Jan 99

Figure 2.4: TA-21 Site Buildings, West





Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site

N

0 700 1400
FEET

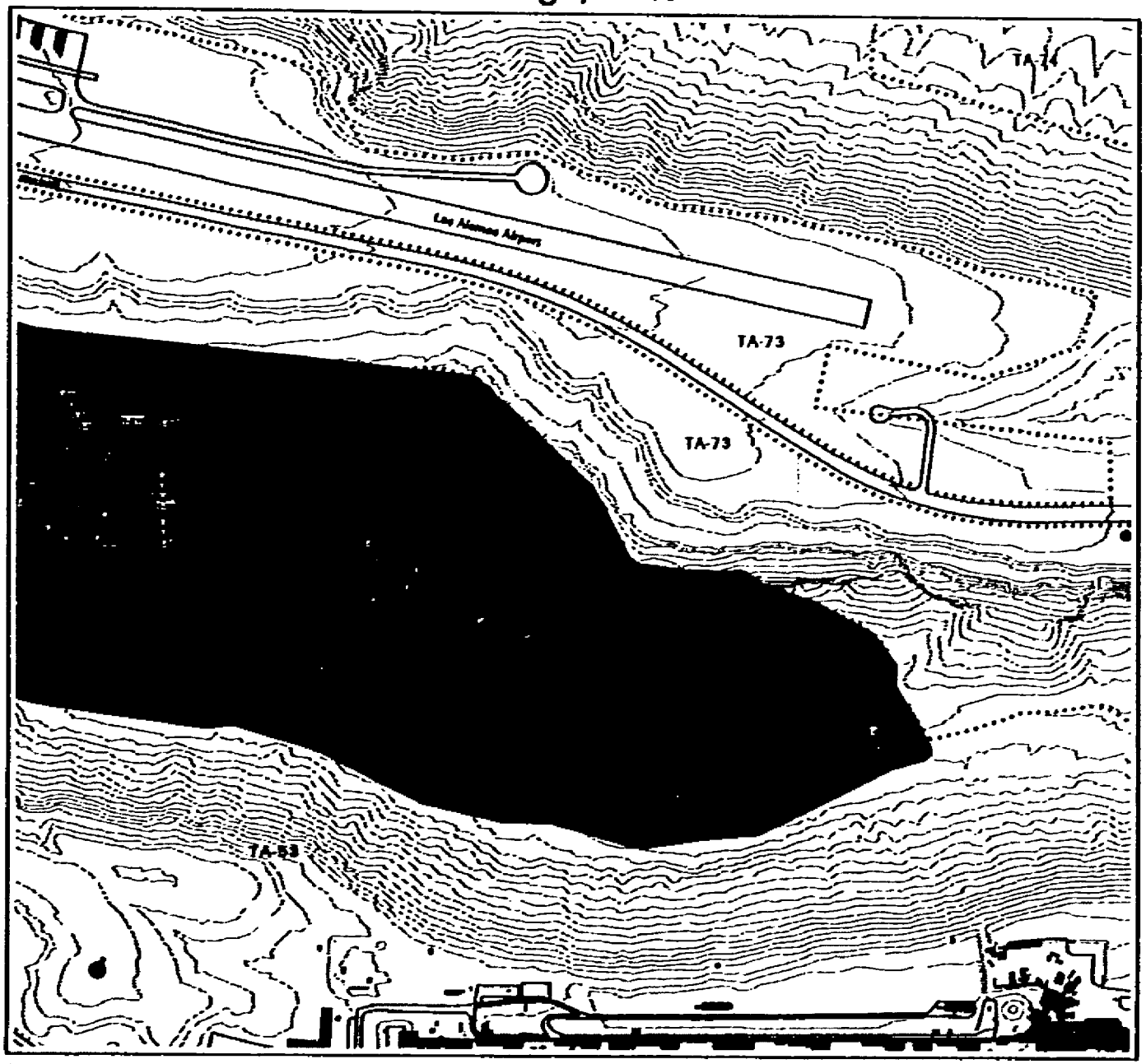
0 213 426
METERS

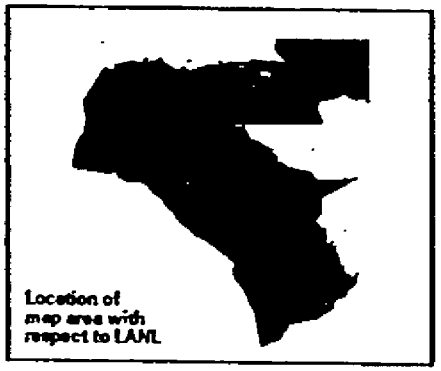
State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and data accuracy may not have been considered. Data are from various sources and are part of the RMAD repository.

RMAD Plot ID: G107302 06 Jan 99

Figure 2.5; TA-21 Site Buildings, East





Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site

N

0 700 1400
FEET

0 213 426
METERS

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is generalized. Feature locations are dependent on scale and symbology and data accuracy may not have been considered. Data are from various sources and are part of the RMAD repository.

RMAD Plot ID: G107303 06 Jan 98

This parcel has been extensively investigated since 1992, both for surface and subsurface contamination. Results are summarized and compared to cleanup goals for industrial use in Table 2.3.1. Because of its historical uses, this parcel is the most contaminated of the candidate parcels for land transfer. Six metals (including total uranium), ten organic compounds, and eleven radionuclides exceeded preliminary remediation goals (PRGs)[20] in one or more samples. Bis(2-chloroethoxy)methane has no PRG because there is no toxicological data from which to calculate one for this compound. Arsenic and radionuclides were most commonly found above cleanup goals, particularly radioisotopes of americium, plutonium, cesium, and strontium. Natural levels of arsenic frequently exceed calculated PRGs. This parcel is currently under continuing investigation to determine what remedies are appropriate for the PRSs located here.

[20] PRGs represent the cleanup goals that must be achieved to prepare a site for a specified land use. The term "cleanup goal", as used in the body of this report, is synonymous with the term PRG. Residential PRGs are lower, and allow for the least amount of residual contamination to remain on site. Industrial PRGs are higher, and are appropriate to use when a site is being proposed for commercial and industrial development.

Table 2.3.1
Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Commercial and Industrial Development

Contaminant	Industrial PRG (mg/kg)	# Samples Collected	# Samples > PRG	Mean Conc. of Detects[21] (mg/kg)
Arsenic	3	1117	157	2.6
Chromium, Total	450	1128	3	15
Nickel	37,000	1107	1	146
Lead	1000	1117	2	27
Mercury	560	535	1	29
Uranium	230	574	1	7.7
Arochlor-1260	1.0	30	7	1.6
Benzene	1.4	614	1	1
Benzidene	0.013	350	1	1.8
Benzo(a)anthracene	3.6	889	1	0.92
Benzo(a)pyrene	0.36	888	12	0.75
Benzo(b)fluoranthene	3.6	890	1	0.87
Bis(2-chloroethoxy)methane	NA[22]	888	NA	0.35
Dichloroethene[1,1-]	0.12	613	1	2.9
Nitroso-di-n-propylamine[N-]	0.43	887	1	0.93
Nitrosodimethylamine[N-]	0.059	836	1	0.35
Americium-241	66[23]	1127	62	731
Actinium-227	10	114	5	50
Cesium-137	15.3	623	37	61
Plutonium-238	81	1233	15	32
Plutonium-239	72	1185	54	829
Strontium-90	13.2	1111	44	43
Thorium-228	5.1	238	2	1.4
Tritium	780	496	4	21
Uranium-234	39	322	6	32
Uranium-235	30	711	3	2.8
Uranium-238	201	347	2	16

[21] Mean concentrations are calculated using only samples in which the contaminant was detected. "Non-detects" are not included in the calculation.
[22] Not available.
[23] Units are in picocuries per gram (pCi/g) for all radionuclides.

2.4 Regulatory Status

Of the 154 PRSs contained in this parcel, 82 are listed in the HSWA Module of LANL's RCRA permit. The NMED is the AA for this permit, and must concur that no further action is required at a PRS before the PRS can be removed from the permit. The remaining 72 PRSs are not listed on the permit, and DOE is the AA that must concur on "no further action" recommendations for ER action for these sites to be considered complete.

Presented below is a summary of the regulatory status of the PRSs within the bounds of this parcel.

Table 2.4.1
Summary of Regulatory Status[24]

PRS/Structure Type	Under Investigation	Recommended for Human Health NFA	NFA Concurrence by DOE	NFA Concurrence by NMED	Under Reconsideration	Recommended for Integrated NFA
Incinerators	-	2	-	-	-	-
Surface Units	40	11	37	-	-	-
Outfalls	7	9	-	2	3	-
Subsurface Units	26	2	4	1	1	-
MDAs	9	-	-	-	-	-

2.5 Other Concerns

The parcel, as it is currently defined, extends to the bottom of one canyon to the south, and another canyon to the north. Because of their extreme steepness and unusual form, the canyon sides and canyon bottoms are not topographically suited for industrial or commercial development. The canyon bottoms will have to be characterized and, if necessary, remediated, prior to conveyance and transfer. The characterization of any canyons system can be very complex, and the complexity will depend on the drainage basin area; the number of subdrainages; the number, size and distribution of the source terms located

[24] Presented here are definitions of the regulatory categories presented in Table 2.4.1. "Under investigation" means that additional data must be collected in order to recommend an action (e.g., remediation, no further action) for a PRS. "Recommended for human health NFA" means that the LANL ER Project's evaluation of data for a given PRS indicates that residual contamination poses no unacceptable threat to human health, and so the Project has recommended no further action to the AA for the PRS. "NFA concurrence by DOE" means that the DOE is the AA for the PRS, and has concurred with the LANL ER Project's recommendation. "NFA concurrence by NMED" means that the NMED is the AA for the PRS, and it has concurred with the LANL ER Project's recommendation. "Under reconsideration" indicates that the AA has stated that specific additional information is needed to evaluate the LANL ER Project's recommendation, and the ER Project is collecting such information. "Recommended for integrated NFA" means that the LANL ER Project has evaluated the data for a given PRS, and the data indicate that the PRS does not unacceptably impact human health, the ecosystem, or the environment.

upstream; the depth to alluvial groundwater; and the presence of ephemeral or perennial surface waters. The steep slopes of both of the canyons associated with the TA-21 parcel will make their characterization complex, and it will be further complicated because of the number of varied historical source terms located upstream. Remediation, if it is required, will be complicated by the steep slopes of both of the canyons, which will make access difficult in many areas. As a consequence, the DOE anticipates any remediation that might be required in these canyons could be extremely difficult and costly and, in some areas, perhaps infeasible.

2.6 Proposed Remedies by Type

The contemplated land use for TA-21 is commercial and industrial development. The remedies described for the PRSs in the TA-21 parcel were identified on the basis of this land use scenario, and reflect the estimated costs of the remedial actions necessary for conveyance and transfer of this parcel. The following table summarizes the remedies proposed to be undertaken, given the land use scenario of commercial and industrial development.

Table 2.6.1
Proposed Remedies by Type[25]
Land Use Scenario: Commercial and Industrial Development

PRS/Structure Type/Other	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action[26]
Incinerators	-	-	-	2
Surface Units	33	2	19	34
Outfalls	16	-	1	4
Subsurface Units	22	-	2	10
MDAs	4	-	5	-
Type II Structures	65	-	-	-
Type III Structures	7	-	-	-
Type IV Structures	20	-	-	-
Type V Structures	25	-	-	-
Type VI Structures	1	-	-	-
Utilities	7	-	-	-
Canyon Systems (no action)	-	-	-	2

[25] "Type" refers to the PRS, structure, or other ER or D&D project. There are five possible categories, or "types", into which all PRSs fit: incinerators (e.g., incinerators, surface deposition from stack emissions); surface units (e.g., surface disposal units, aboveground storage); outfalls (e.g., septic systems, drain lines, and surface outfalls); material disposal areas; and subsurface units (e.g., seepage pits, dry wells). All structures subject to decommissioning fall under six possible categories (Type I – Type VI), each of which reflects a different decommissioning cost per unit measure. The appropriate category for a structure is determined by 1) the materials from which the structure is constructed, 2) access issues, and 3) health and safety issues related to decommissioning (for additional information, see Appendix C-5). "Other" ER or D&D projects have no PRSs or structures associated with them; examples include "canyons systems" and "non-LANL construction debris".

[26] The "no action" alternative simply means that no engineered remediation is recommended. However, site characterization and reporting is almost always required to support the "no action" recommendation.

2.7 Estimated Costs and Schedule

The following table summarizes the estimated costs and duration for the remedial activities and D&D within theTA-21 parcel. The terms "estimated costs for completion" and "estimated duration" are discussed in Section 1.4 of this report. PRS- and structure-specific information is included in Appendix A.

It must be emphasized that there are almost always costs associated with a "no action" remedial alternative. These reflect the costs of site characterization and reporting, which must be conducted to support the no action recommendation.

Table 2.7.1
Estimated Remedial Action and D&D Costs[27] and Estimated Durations
Land Use Scenario: Commercial and Industrial Development[28]

PRS/Structure Type	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs and Structures (months)
Incinerators	2	326	10-12
Surface Units	88	40,805	1-84
Outfalls	21	29,451	10-71
Subsurface Units	34	20,134	12-75
MDAs	9	121,799	70-84
Type II Structures	65	6,554	1-12
Type III Structures	7	15,032	6-12
Type IV Structures	20	13,335	1-12
Type V Structures	25	109,975	6-12
Type VI Structures	1	321	2
Utilities	7	18,220	2
Sitewide ER Costs[29]	-	18,846	-
Sitewide D&D Costs[30]	-	3,091	-
Canyon Systems (no action)	2	2,295	11-12
Total	-	400,184[31]	-

[27] In many cases, PRSs are proposed to be aggregated for remediation to achieve economies of scale. For example, the ER Project might propose to remediate a surface unit located adjacent to a MDA during the MDA remediation project, and the costs for such a project would be captured under the MDA costs. As a consequence, Table 2.7.1 (and the equivalent tables in subsequent chapters) is not a completely accurate representation of costs per type of PRS. Detailed information about the aggregation of PRSs within each parcel is available in Appendix A.

[28] The costs presented in this table differ from those presented in the TA-21 Project Plan (2/99) because the costs of D&D at DP East and canyons system costs are included in this report but not in the TA-21 Project Plan.

[29] Includes sitewide excavation costs to remediate contaminant deposition from stack emissions; health and safety support, NEPA, pre-closure monitoring, stormwater BMPs, and sitewide management costs.

[30] Includes project planning and management costs.

[31] The costs presented in this table differ from those presented for "Case 2", the current baseline case, in the TA-21 Project Plan (February 1999 report to Congress) because the costs of D&D at DP East and canyons system costs are included in this report but not in the TA-21 Project Plan. The five other cases in the Project Plan are possible remedial technology scenarios for the Material Disposal Areas, several of which might allow for unrestricted use and involve deployment of innovative technologies, but are not considered very likely at this time. The range in costs for the full suite of scenarios was reported in the TA-21 Project Plan as $258M-3,775M(rounded).

For purposes of clarification, the following paragraph explains the relationship between the TA-21 cost estimate in this report, and the cost estimates presented in the TA-21 Project Plan (February 1999).

DOE recently published pursuant to requirements of Public Law 105-245 a "Project Plan for the Remediation of Technical Area 21" (February 1999). The project plan presented six remedial technology alternative cases for cleanup of the five large material disposal areas at TA-21, owing to uncertainty about what ultimately may have to be done with these complex sites. The cases ranged from a low cost of about $258M wherein all five MDAs are assumed to receive relatively simply engineered caps, to a high cost of about $3,775M wherein all wastes in the MDAs would be exhumed. Intermediate cases involving the application of innovative technologies, such as in situ vitrification (ISV), were also costed out in the project plan, along with mixed options involving combinations of capping, exhumation, or ISV. The more expensive remedial technologies could make more land usable for a broader range of future uses, if they proved feasible. One of the intermediate cases, called "Case 2", is the current baseline planning case and it involves the capping of the three largest MDAs and exhumation of the two smaller MDAs at TA-21. This Case 2 was reported to cost about $336M in the Project Plan, but this figure excluded the costs of D&D at DP East and remediation of the canyons systems. When the costs for this additional scope is added with the $336M, the total is the figure reported in Table 2.7.1, about $400M. This single cost figure is presented in this report rather than as a range of costs since only a single future land use has thus far been indicated for TA-21 (commercial and industrial). This cost estimate is consistent with the current baseline, but subject to regulatory review and approval. Alternative land uses or future regulatory requirements could result in costs represented in the cost range in the TA-21 Project Plan required by Public Law 105-245.

2.8 Estimated Waste Volumes

The following table summarizes the estimated waste volumes to be generated as a result of remedial activities and D&D within the TA-21 parcel.

Table 2.8.1
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Commercial and Industrial Development

	Projected Waste Volumes (cubic yards)							
PRS/Structure Type/Other	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Incinerators	0	0	0	0	0	0	0	0
Surface Units	12	121	4,408	332	121	0	0	0
Outfalls	144	0	2,267	42	48	40	0	0
Subsurface Units	292	0	888	91	0	0	41	0
MDAs	150	0	263	14	0	0	13	0
Type II Structures	3,806	61	31	70	7	0	0	99
Type III Structures	10,018	64	0	2	0	0	0	373
Type IV Structures	4,219	26	324	57	20	0	0	39
Type V Structures	26,748	115	6,629	500	0	0	0	1,376
Type VI Structures	56	0	37	0	0	0	0	0
Utilities	1,593	0	244	0	0	0	0	42
Canyon Systems	0	0	0	0	0	0	0	0
Total	47,038	387	15,091	1,108	196	40	54	1,929

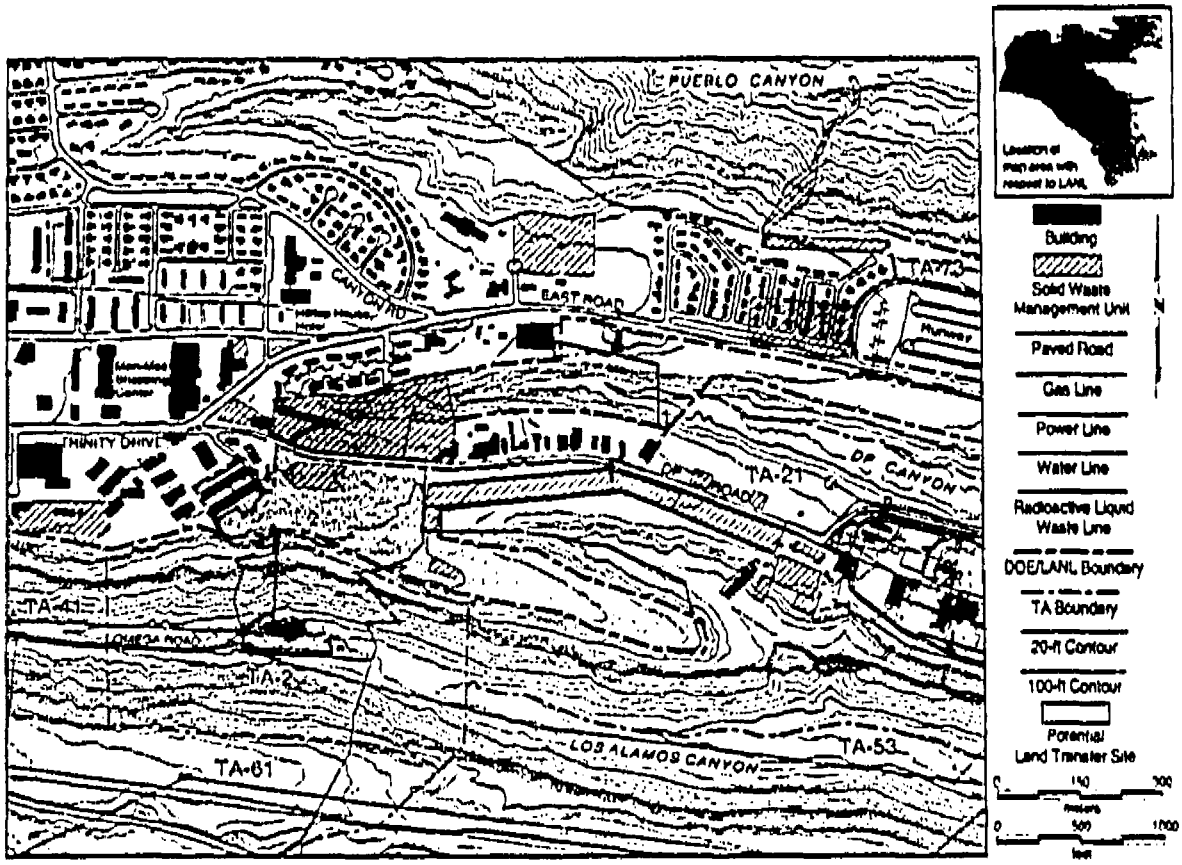


Figure 3.1 DP Road (North, South, and West)

3.0 DP Road Parcel

3.1 Introduction

The DP Road parcel is approximately 50 acres located between the western boundary of TA-21 and the major commercial districts of the Los Alamos town site. It is located primarily in TA-73, although it also includes the westernmost portion of TA-21. Figure 3.1 illustrates the location of this parcel with respect to the eastern portion of the Los Alamos Town site. The site is bisected by DP Road, and commercial/light industrial areas are located along the north side of DP Road adjacent to the parcel. This development and the road delineate the north and south sections of the site. The western section is a small, generally rectangular site adjacent to the town site's commercial district. The major portion of LANL's archives are housed in two large structures in the western section. Approximately 28 acres of the DP Road parcel were previously proposed for transfer under the auspices of the Atomic Energy Community Act, and not under Public Law 105-119. The contemplated uses of the parcel by the potential recipients include commercial development and residential development.

3.2 Description of PRSs and Structures within the DP Road Parcel

There are 10 PRSs and 10 LANL-numbered structures within the parcel and a 50-foot buffer surrounding it. Figure 3.2 shows the locations of the PRSs and structures within the parcel and the buffer area. The PRSs are all associated with Laboratory operations that began in the late 1940s, which included warehousing, utility shop operations, and a materials testing laboratory. Of the 10 PRSs within the parcel, two were tentatively identified as subsurface units on the basis of historical photographs that showed open, but empty, trenches. It has now been demonstrated by the LANL ER Project that no disposal occurred in these trenches. The remaining eight PRSs are categorized as surface units and include a container storage area, potential soil contamination areas (some from sanitary septic systems) the former DP Road storage area, and the former DP tank farm.

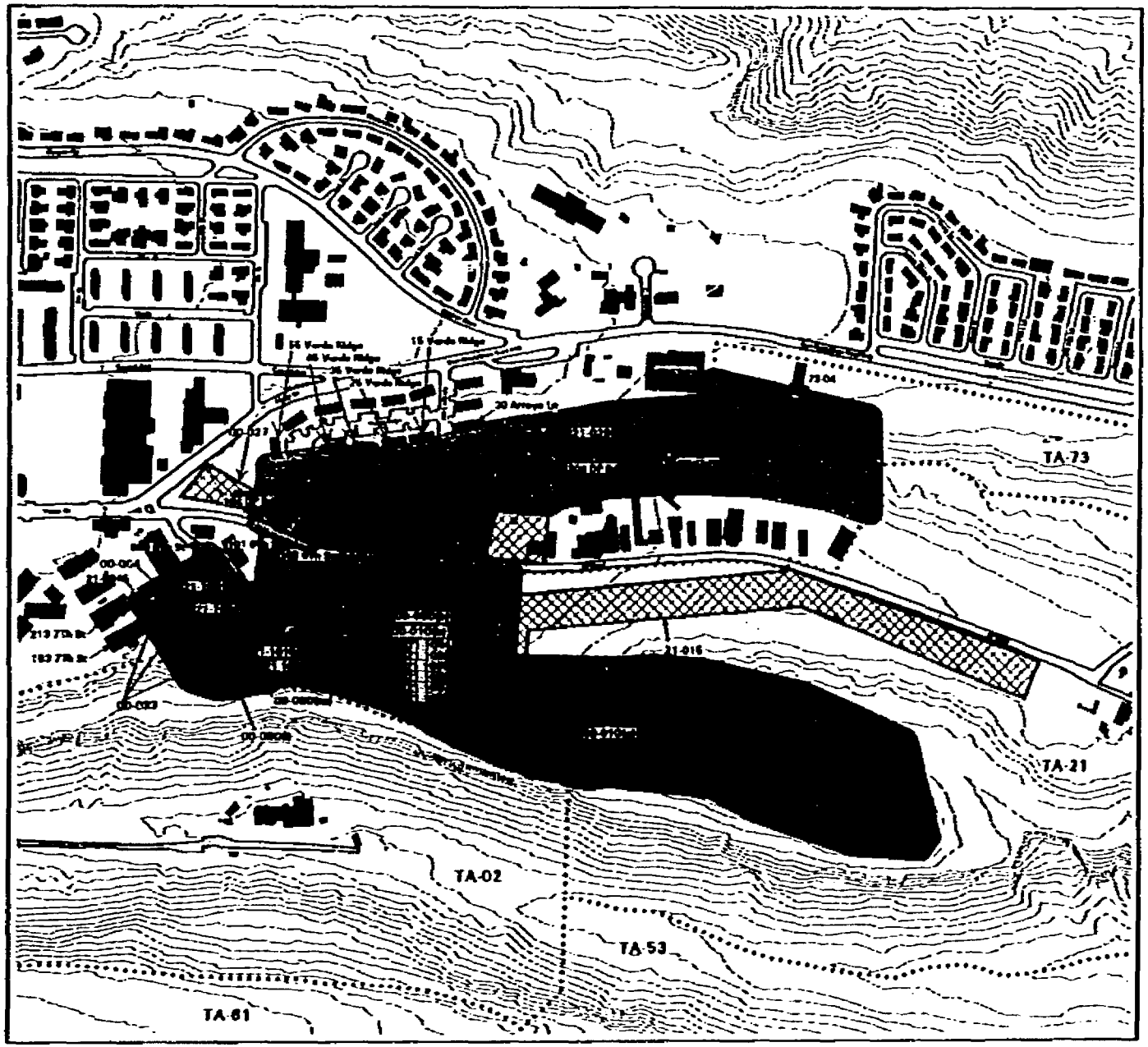
There are 10 LANL numbered structures situated on the DP Road parcel. Six of these structures are storage sheds, and one is a transportainer. Two structures are currently being used by LANL as records storage facilities. Another structure is a backflow preventer, which is part of the County water supply system. It is assumed that the backflow preventer (Structure No. 21-1003) is essential to Los Alamos County infrastructure and, therefore, that it will be maintained for beneficial use upon transfer of the parcel. Consequently, D&D costs for this structure are not included in Tables 3.7.1 and 3.7.2, "Estimated Remedial Action and D&D Costs", which summarize the ER-related costs of preparing the DP Road parcel for transfer. D&D costs for this structure have been estimated only for information purposes, and can be found in Appendix A of this report.

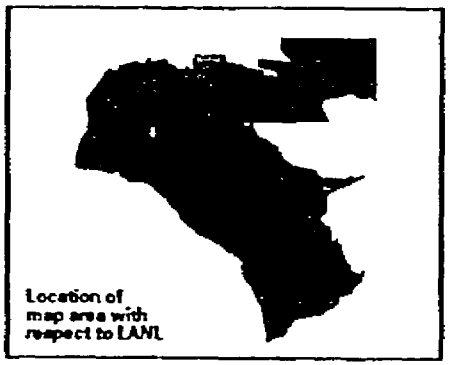
Of the 10 PRSs in the DP Road parcel, nine have been sampled for characterization purposes. The results of such sampling are presented in Section 3.3, Extent of Contamination. Two of the PRSs were demonstrated to require no further action, and the DOE concurred with this recommendation. The remaining eight PRSs are either under investigation, or have been recommended for no further action. The regulatory status of all 10 PRSs is discussed in detail in Section 3.4, Regulatory Status.

3.3 Extent of Contamination

Sampling has been conducted at all ten of the PRSs located in this parcel. A summary of the sampling results is presented in Tables 3.3.1 and 3.3.2 for comparison to residential and industrial cleanup goals respectively. Under the residential future use scenario, five non-radioactive metals,14 organic compounds, plutonium-239, and uranium-234 exceeded cleanup goals in one or more samples. Benzo(a)pyrene and arsenic exceeded goals the most often. However, natural levels of arsenic often exceed the calculated PRG. Under the industrial scenario, the analytes exceeding cleanup goals in one or more samples is limited to arsenic, lead, eight organic compounds, and uranium-234. These sampling locations are sporadically located around the parcel. One site, the DP tank farm on the northeast side of DP Road, remains under investigation.

Figure 3.2: DP Road (North, South, and West)





Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site

0 600 1200
FEET

0 183 366
METERS

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and their accuracy may not have been confirmed. Data are from various sources and are part of the FIMAD repository

FIMAD Plot ID: G107283 05 Jan 99

Table 3.3.1
Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Commercial Development

Contaminant	Industrial PRG	# Samples Collected	# Samples > PRG	Mean Conc. of Detects
Arsenic	3	84	10	2.1
Lead	1000	84	2	191
Arochlor-1260	1	97	1	0.41
Benzene	1.4	122	5	2.8
Benzo(a)pyrene	0.36	131	10	0.2
BHC[delta-]	NA[32]	67	NA	0.004
Ethylbenzene	230	122	2	62
Methylnaphthalene	55	131	6	35
Trimethylbenzene[1,2,4-]	170	122	14	88
Trimethylbenzene[1,2,5-]	70	122	11	26
Xylene (total)	210	108	10	194
Uranium-234	13	7	2	20

Table 3.3.2
Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Residential Development

Contaminant	Residential PRG	# Samples Collected	# Samples > PRG	Mean Conc. of Detects
Arsenic	0.38	84	58	2.1
Cadmium	37	85	1	13
Copper	2800	85	2	128
Mercury	22	91	2	2.5
Lead	400	84	2	191
Arochlor-1260	1.0	97	1	0.41
Benzene	0.62	122	5	2.8
Benzo(a)anthracene	0.56	131	10	0.26
Benzo(a)pyrene	0.056	131	11	0.2
BHC[delta-]	NA	97	NA	0.0037
Chlordane[alpha-]	1.6	97	1	0.18
Chlordane[gamma-]	1.6	97	1	0.32
DDD[4,4'-]	2.4	93	1	1.1
Dibenz(a,h)anthracene	0.056	131	1	0.1
Ethylbenzene	230	122	2	62
Methylnaphthalene[2-]	55	131	6	35
Nitroso-di-n-propylamine[N-]	0.063	131	1	0.07
Trimethylbenzene[1,2,4-]	51	122	14	88
Trimethylbenzene[1,3,5-]	21	122	11	26
Xylene (total)	210	108	10	194
Plutonium-239	24	45	1	2.7
Uranium-234	13	7	2	20

3.4 Regulatory Status

Four of the 10 PRSs contained in the DP Road parcel are listed in the HSWA Module of LANL's RCRA permit. One of these PRSs is currently under investigation, and three have been recommended for no further action because

[32] Not available.

they do not pose an unacceptable risk to human health. The NMED is the AA for this permit, and must concur that NFA is required at a PRS before it can be removed from the permit. The NMED has not yet concurred with the LANL ER Project's NFA recommendations for these three PRSs.

An additional six PRSs are not listed on the permit. One of these PRSs is currently under investigation. The remaining five PRSs have been proposed for NFA and DOE, which is the AA that must concur on a "NFA" recommendation for these PRSs, has concurred for two of the PRSs. No additional ER action at these two PRSs is necessary. Additional investigation might be required at the remaining four PRSs.

Presented below is a summary of the regulatory status of the PRSs within the bounds of this parcel.

Table 3.4.1
Summary of Regulatory Status

PRS/Structure Type	Under Investigation	Recommended for Human Health NFA	NFA Concurrence by DOE	NFA Concurrence by NMED	Under Reconsideratio	Recommended for Integrated NFA
Surface Units	2	6	-	-	-	-
Subsurface Units	-	-	1	-	1	-

3.5 Other Concerns

The parcel, as it is currently defined, extends to the bottom of one canyon to the south, and another canyon to the north. Because of their extreme steepness and unusual form, the canyon sides and canyon bottoms are not topographically suited for industrial or commercial development. The canyon bottoms will have to be characterized and, if necessary, remediated, prior to conveyance and transfer. The characterization of any canyons system can be very complex, and the complexity will depend on the drainage basin area; the number of subdrainages; the number, size and distribution of the source terms located upstream; the depth to alluvial groundwater; and the presence of ephemeral or perennial surface waters. The steep slopes of both of the canyons associated with the DP Road parcel will make their characterization complex, and it will be further complicated because of the number of varied historical source terms located upstream. Remediation, if it is required, will be complicated by the steep slopes of both of the canyons, which will make access difficult in many areas. As a consequence, the DOE anticipates any remediation that might be required in these canyons could be extremely difficult and costly and, in some areas, perhaps infeasible.

3.6 Proposed Remedies by Type

The proposed land uses for this parcel include commercial development and residential development. The remedies described for the 10 PRSs in this parcel were identified on the basis of these two land use scenarios, and reflect the estimated costs of the remedial actions necessary under each scenario for conveyance and transfer of this parcel. Table 3.6.1 summarizes the remedies proposed to be undertaken, given the land use scenario of commercial development. Table 3.6.2 summarizes the proposed remedies under a residential development land use scenario.

Table 3.6.1
Proposed Remedies by Type
Land Use Scenario: Commercial Development

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Surface Units	4	-	2	2
Subsurface Units	-	-	-	2
Type II Structures	7	-	-	-
Type IV Structures	3	-	-	-
Canyons systems	-	-	-	1

Table 3.6.2
Proposed Remedies by Type
Land Use Scenario: Residential Development

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Surface Units	4	-	2	2
Subsurface Units	-	-	-	2
Type II Structures	7	-	-	-
Type IV Structures	3	-	-	-
Canyons systems	-	-	-	1

3.7 Estimated Costs and Schedule

The following tables summarize the estimated costs and duration for the remedial activities within the DP Road parcel. The terms "estimated costs for completion" and "estimated duration" are defined in Section 1.4 of this report. Table 3.7.1 summarizes the costs and duration of remedial activities necessary to prepare the parcel for transfer under a land use scenario of commercial development. Table 3.7.2 summarizes the costs and duration of remedial activities necessary to prepare the parcel for transfer under a residential development land use scenario. PRS- and structure-specific information is included in Appendix A.

Note that there are almost always costs associated with the "no action" remedy. These reflect the costs of site characterization and reporting, which are necessary to justify a "no action" proposal.

Table 3.7.1
Estimated Remedial Action and D&D Costs and Estimated Duration
Land Use Scenario: Commercial Development

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs and Structures (months)
Surface Units	8	7,613	6-70
Subsurface Units	2	778	9
Type II Structures	7	223	2
Type IV Structures	3	17,586	12.5
Canyons system	1	786	8
Total	-	26,986	-

Table 3.7.2
Estimated Remedial Action and D&D Costs and Duration
Land Use Scenario: Residential Development

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs and Structures (months)
Surface Units	8	9,697	6-84
Subsurface Units	2	778	9
Type II Structures	7	223	2
Type IV Structures	6	17,586	12.5
Canyons system	1	786	8
Total	-	29,070	-

3.8 Estimated Waste Volumes

The following tables summarize the estimated volumes of waste to be generated during remedial activities within the DP Road parcel. Table 3.8.1 presents the estimated volume of waste to be generated to prepare the parcel for transfer under a land use scenario of commercial development. Table 3.8.2 presents the estimated volume of waste that will be generated to prepare the parcel for transfer under a residential development land use scenario.

Table 3.8.1
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Commercial Development

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Surface Units	10	750	0	0	0	0	0	50
Subsurface Units	0	0	0	0	0	0	0	0
Type II Structures	49	0	0	0	0	0	0	0
Type IV Structures	1,834	4	0	0	0	0	0	330
Canyon Systems	0	0	0	0	0	0	0	0
Total	1,893	754	0	0	0	0	0	380

Table 3.8.2
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Residential Development

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Surface Units	10	740	0	0	0	0	0	0
Subsurface Units	0	0	0	0	0	0	0	0
Type II Structures	49	0	0	0	0	0	0	0
Type IV Structures	1,834	4	0	0	0	0	0	330
Canyons Systems	0	0	0	0	0	0	0	0
Total	1,893	744	0	0	0	0	0	330

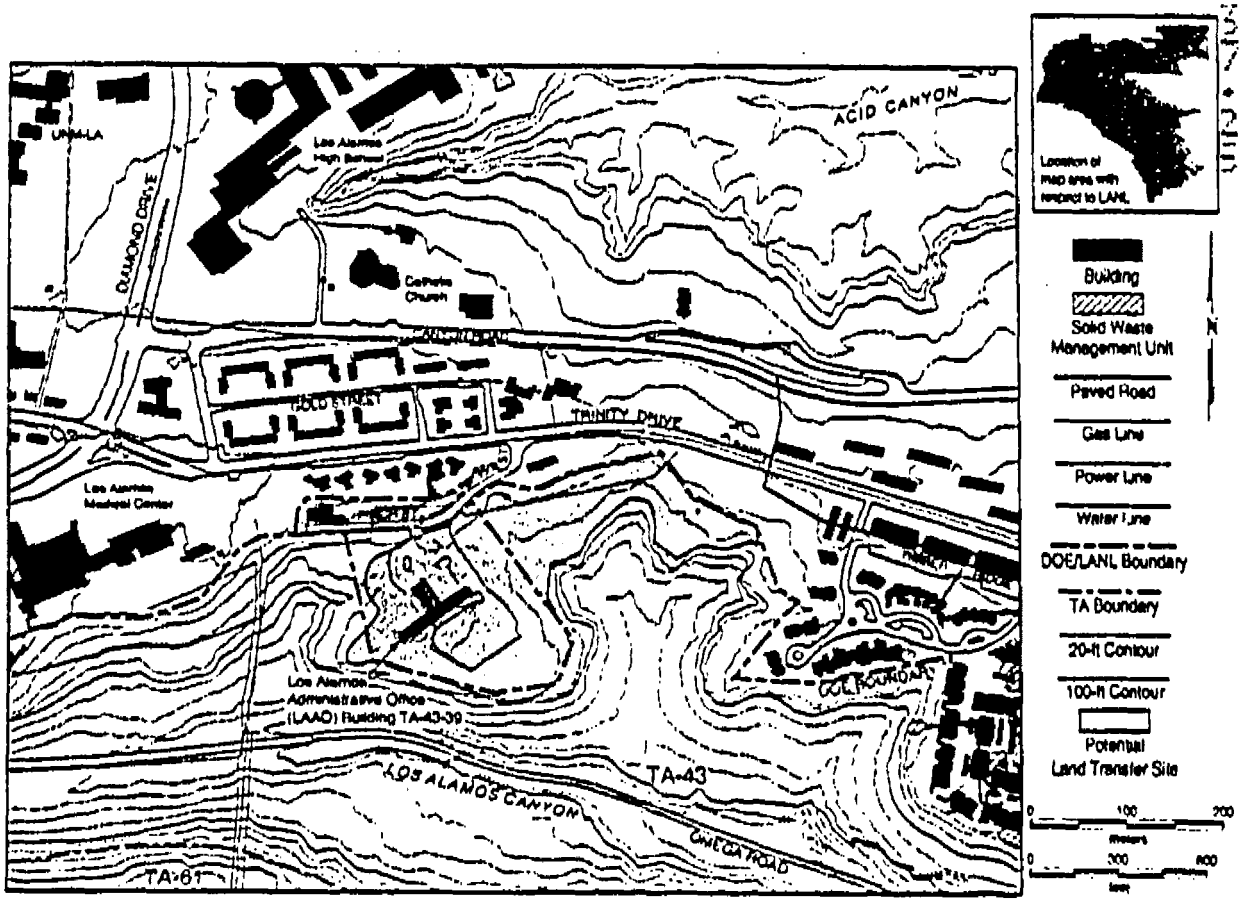


Figure 4.1 **LAAO Site**

4.0 DOE LAAO Parcel

4.1 Introduction

The DOE Los Alamos Area Office (LAAO) parcel is located in the Los Alamos town site between Los Alamos Canyon and Trinity Drive. Figure 4.1 illustrates the location of this parcel with respect to the western portion of the Los Alamos town site. The parcel is approximately 15 acres and is accessed from Trinity Drive. The site is separated from Trinity Drive by privately owned land that fronts onto Trinity Drive. The site is just east of the Los Alamos Medical Center.

The two land uses proposed by the potential recipients of this parcel include commercial development and residential development.

4.2 Description of PRSs and Structures within the DOE LAAO Parcel

This parcel contains three PRSs and three LANL-numbered structures. There are no additional PRSs in proximity (i.e., within 50 feet) to the parcel. Figure 4.2 shows the locations of the PRSs and structures within the parcel. Two of the three PRSs are associated with operations of LANL's steam plant; one was a product storage area and the other was an underground storage tank that received steam and condensed water from the steam plant's boilers. These PRSs are categorized as a surface unit and a subsurface unit, respectively. The third PRS is a sanitary septic system that is believed to have served a mess hall, dormitories, barracks, a military post office, and the Sundt apartments along Finch Street. It is classified as an outfall.

There are three LANL numbered structures situated on the DOE LAAO parcel. The largest structure (No. 43-39) currently serves as DOE's LAAO. A second structure (No. 43-40) is a Los Alamos County pump station, and the third structure (No. 43-41) is a non-operational steam plant. The costs of D&D have been estimated for the LAAO office building under the residential land use scenario. It is assumed that the steam plant will be demolished under both land use scenarios. The pump station is essential to the utility infrastructure and the assumption is that it will be retained under both land use scenarios.

The three PRSs within this parcel have been sampled for characterization purposes. Additional confirmation sampling was conducted at the septic tank after it was removed in 1996. The results of these sampling efforts are presented in Section 4.3, Extent of Contamination.

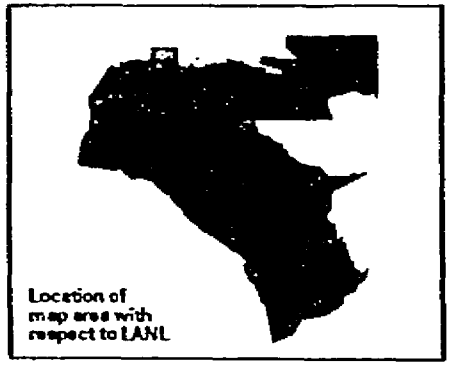
4.3 Extent of Contamination

The three PRSs in this parcel have been sampled, and the results are presented in Tables 4.3.1 and 4.3.2 for the commercial and residential future use scenarios respectively. Eight organic compounds exceeded residential cleanup goals and seven organic compounds exceeded industrial cleanup goals. Benzo(a)pyrene exceed cleanup goals in about 30% of the samples.

Table 4.3.1
Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Commercial Development

Contaminant	Industrial PRG (mg/kg)	# Samples Collected	# Samples > PRG	Mean Conc. of Detects (mg/kg)
Benzo(a)anthracene	3.6	27	3	9.4
Benzo(a)pyrene	0.36	27	8	9.3
Benzo(b)fluoranthene	3.6	27	5	13.2

Figure 4.2: LAAO Site



Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site

N

0 600 1200
FEET

0 152 304
METERS

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and their accuracy may not have been confirmed. Data are from various sources and are part of the FIMAD repository.

FIMAD Plot ID: G107294 06 Jan 99

Table 4.3.1 (continued)
Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Commercial Development

Contaminant	Industrial PRG (mg/kg)	# Samples Collected	# Samples > PRG	Mean Conc. of Detects (mg/kg)
Benzo(k)fluoranthene	36	27	1	15.2
Dibenz(a,h)anthracene	0.36	27	1	1.1
Dichlorobenzene[1,4-]	7.3	39	1	35.1
Indeno(1,2,3-cd)pyrene	3.6	27	3	5.9

Table 4.3.2
Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Residential Development

Contaminant	Residential PRG (mg/kg)	# Samples Collected	# Samples > PRG	Mean Conc. of Detects (mg/kg)
Benzo(a)anthracene	0.56	27	6	9.4
Benzo(a)pyrene	0.056	27	9	9.3
Benzo(b)fluoranthene	0.56	27	8	13.2
Benzo(k)fluoranthene	5.6	27	4	15.2
Chrysene	56	27	1	7.6
Dibenz(a,h,)anthracene	0.056	27	1	1.1
Dichlorobenzene[1,4-]	3	39	1	35.1
Indeno(1,2,3-cd)pyrene	0.56	27	5	5.9

4.4 Regulatory Status

Two of the PRSs contained in the DOE LAAO parcel are listed in the HSWA Module of LANL's RCRA permit. The NMED is the AA for this permit, and must concur that NFA is required at a PRS before the PRS can be removed from the permit. These two PRSs have been recommended for NFA because it is believed they do not pose an unacceptable risk to human health. The NMED has not yet concurred with the LANL ER Project's NFA recommendations for these two PRSs. The remaining PRS is not listed on the permit. It has also been recommended for NFA on the basis of human health risk. The DOE, which is the AA that must concur on a "NFA" recommendation for this site, has not yet concurred.

Presented below is a summary of the regulatory status of the PRSs within the bounds of this parcel.

Table 4.4.1
Summary of Regulatory Status

PRS/Structure Type	Under Investigation	Recommended for Human Health NFA	NFA Concurrence by DOE	NFA Concurrence by NMED	Under Reconsideration	Recommended for Integrated NFA
Surface Units	-	1	-	-	-	-
Subsurface Units	-	1	-	-	-	-
Outfall	-	1	-	-	-	-

4.5 Other Concerns

There are no other environmental restoration or D&D concerns related to this parcel.

4.6 Proposed Remedies by Type

The two proposed land uses for this parcel are commercial development and residential development. The remedies described for the three PRSs in this parcel were identified on the basis of these two land use scenarios, and reflect the estimated costs of the remedial actions necessary under each scenario for conveyance and transfer of this parcel. It is possible that, under the commercial development scenario, the DOE LAAO building could be put to beneficial use, and so D&D costs are not included for this structure in Table 4.7.1, "Estimated Remedial Action and D&D Costs and Durations – Commercial Land Use Scenario"[33]. It is assumed that this building will be demolished under the residential land use scenario. It is also assumed that the steam plant will be demolished under both land use scenarios, and that the pump station will be retained under both scenarios. Table 4.6.1 summarizes the remedies proposed to be undertaken, given the land use scenario of commercial development. Table 4.6.2 summarizes the proposed remedies under a residential development land use scenario.

[33] Because the DOE LAAO building is currently being used as office space, the DOE assumes that this structure can be transferred "as is", with no associated costs for modifying or upgrading the structure.

Table 4.6.1
Proposed Remedies by Type
Land Use Scenario: Commercial Development

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Surface Units	1	-	-	-
Subsurface Units	1	-	-	-
Outfalls	1	-	-	-
LAAO Building[34]	-	-	-	1
Type IV Structures	1	-	-	1

Table 4.6.2
Proposed Remedies by Type
Land Use Scenario: Residential Development

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Surface Units	1	-	-	-
Subsurface Units	1	-	-	-
Outfalls	1	-	-	-
LAAO Building	1	-	-	-
Type IV Structures	1	-	-	1

4.7 Estimated Costs and Schedule

The following tables summarize the estimated costs and duration for the remedial activities within the DOE LAAO parcel. The terms "estimated cost of completion" and "estimated duration" are defined in Section 1.4 of this report. Table 4.7.1 summarizes the costs and duration of remedial activities necessary to prepare the parcel for transfer under a land use scenario of commercial development. Table 4.7.2 summarizes the costs and duration of remedial activities necessary to prepare the parcel for transfer under a residential development land use scenario. PRS- and structure-specific information is included in Appendix A.

[34] The LANL D&D Project has characterized this structure sufficiently to develop an actual D&D cost estimate for it, that falls outside of the parametric cost estimates associated with the Type I-VI D&D categories.

Table 4.7.1
Estimated Remedial Action and D&D Costs and Duration
Land Use Scenario: Commercial Development

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs and Structures (months)
Surface Units	1	469	11
Subsurface Units	1	727	18
Outfalls	1	602	12
Type IV Structures	1	2,455	18
Total	-	4,253	-

Table 4.7.2
Estimated Remedial Action and D&D Costs and Duration
Land Use Scenario: Residential Development

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs and Structures (months)
Surface Units	1	616	11
Subsurface Units	1	837	18
Outfalls	1	602	12
LAAO Building	1	5,170	9
Type IV Structures	1	2,455	18
Total	-	9,680	-

4.8 Estimated Waste Volumes

The following tables summarize the estimated volumes of waste to be generated during remedial activities within the DOE LAAO parcel. Table 4.8.1 presents the estimated volume of waste to be generated to prepare the parcel for transfer under a land use scenario of commercial development. Table 4.8.2 presents the estimated volume of waste that will be generated to prepare the parcel for transfer under a residential development land use scenario.

Table 4.8.1
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Commercial Development

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Surface Units	1	0	0	0	0	0	0	0
Outfalls	10	0	0	0	0	0	0	0
Subsurface Units	83	0	0	0	0	0	0	0
Type IV Structures	256	0	0	0	0	0	0	46
Total	350	0	0	0	0	0	0	46

Table 4.8.2
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Residential Development

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Surface Units	100	0	0	0	0	0	0	0
Outfalls	10	0	0	0	0	0	0	0
Subsurface Units	121	0	0	0	0	0	0	0
LAAO Building	2,444	0	0	0	0	0	0	440
Type IV Structures	256	0	0	0	0	0	0	46
Total	2,931	0	0	0	0	0	0	486

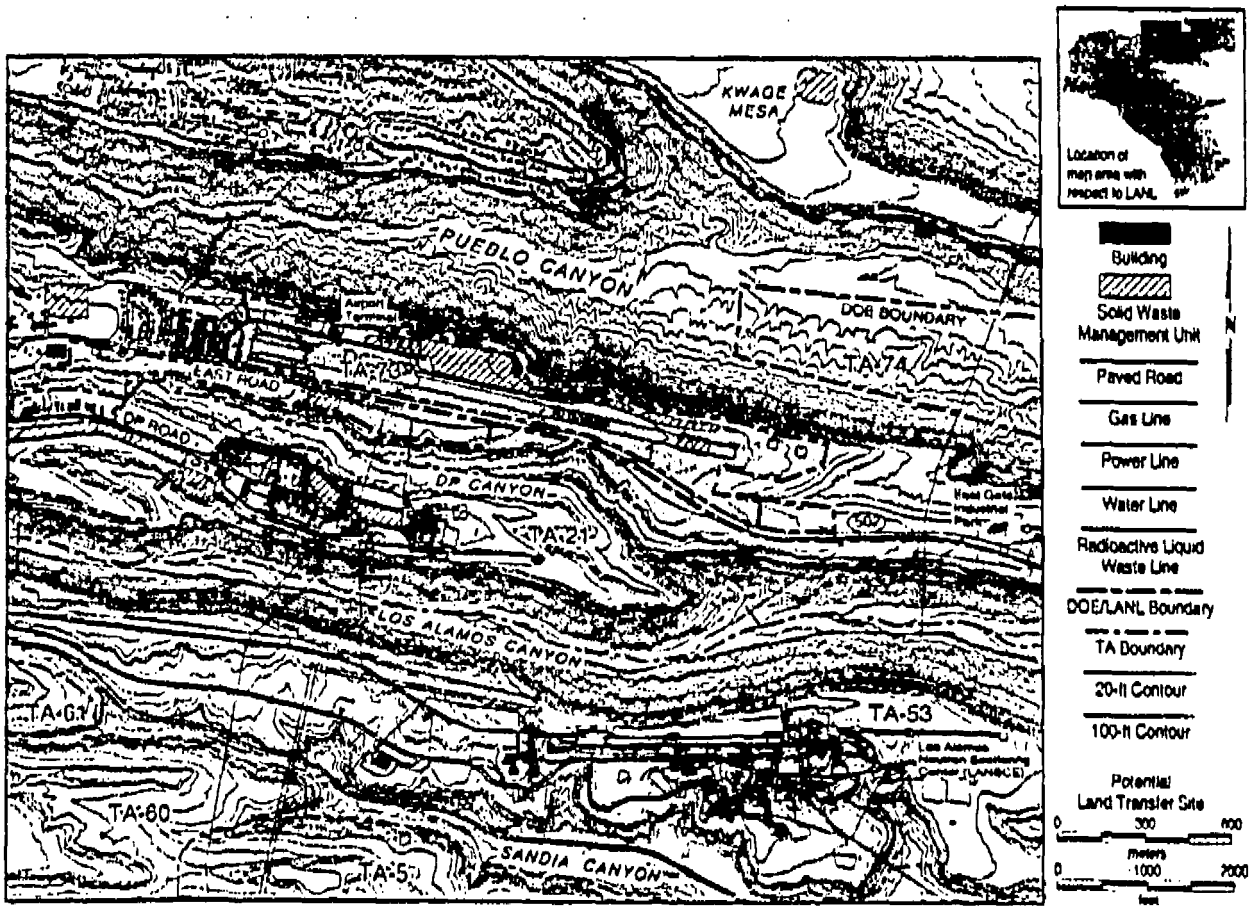


Figure 5.1 **Airport**

5.0 Airport Parcel

5.1 Introduction

The Airport parcel is approximately a 205-acre site, located east of the Los Alamos town site on the northeastern edge of the mesa above Pueblo Canyon. Figure 5.1 illustrates the location of this parcel with respect to the eastern portion of the Los Alamos town site. A single-family residential development borders the western boundary, and East Gate Park and East Gate Business Park are located east of the site. To the north is Pueblo Canyon, and to the south is Main Hill Road (NM Highway 502) leading into the town site, and DP Canyon, a small secondary canyon connected to Los Alamos Canyon, just south of the road. NM Highway 502 is the main entrance to the community of Los Alamos, and the airport is one of the first developments one passes upon entering the town site.

The land uses proposed by the potential land recipients include commercial and industrial development and, possibly, retention of the airport.

5.2 Description of PRSs and Structures within the Airport Parcel

This parcel contains 24 PRSs, and there is one additional PRS located in proximity (i.e., within a 50-foot buffer) of the parcel. The parcel also contains four LANL numbered structures. Figure 5.2 shows the locations of the PRSs and structures within the parcel. The 25 PRSs include six material disposal areas (MDAs), eight subsurface units, and 16 surface units.

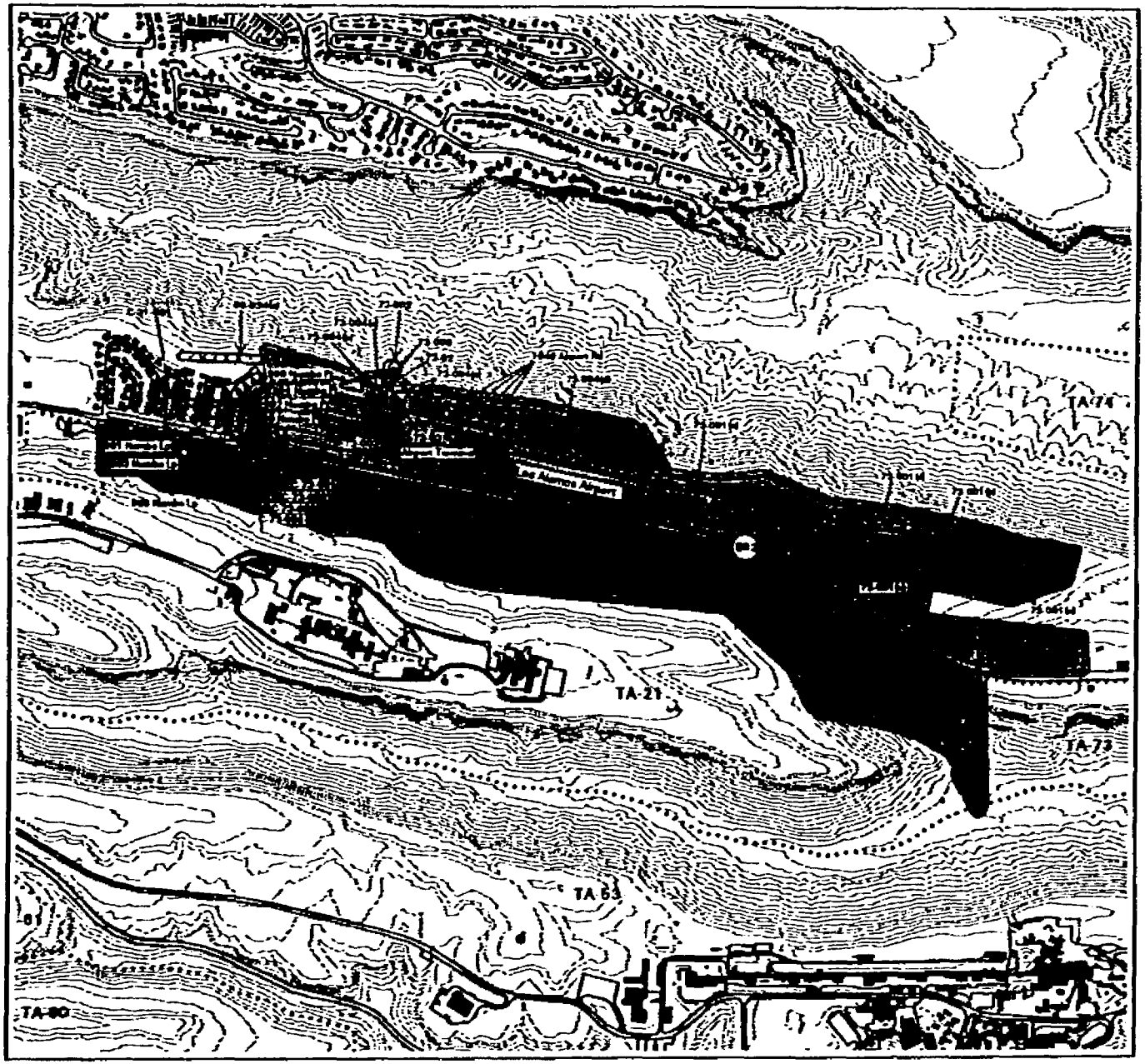
The four LANL numbered structures include the airport terminal building; a storage building and a storage shed, which are both associated with airport operations; and a gas meter station. The gas meter station is essential for utilities, and it is assumed that it would be retained under the proposed land use scenario. The D&D costs for the terminal building, the storage building, the storage shed, and the gas meter are not included in Table 5.7.1, "Estimated Remedial Action and D&D Costs and Estimated Durations". D&D costs have been estimated for these structures for information purposes only, and can be found in Appendix A of this report.

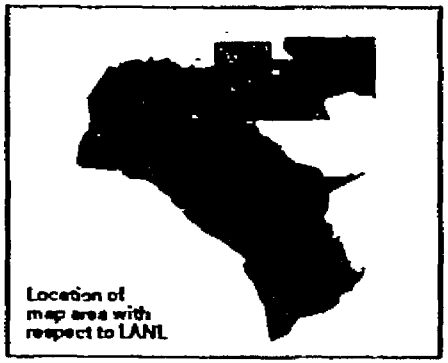
Of the 25 PRSs within or in proximity to this parcel, characterization sampling has been performed at 19 of them. The results of such sampling are presented and discussed in Section 5.3, Extent of Contamination. Remediation activities have been conducted at two PRSs, and these PRSs, as well as an additional five, have been proposed for NFA because they pose no unacceptable risk to human health. The remaining 18 of the PRSs are under investigation. The regulatory status of all of the parcel's PRSs is presented in Section 5.4, Regulatory Status.

5.3 Extent of Contamination

Some of the PRSs in this parcel have been sampled and, in particular, a substantial amount of sampling has been performed at the airport landfill. The results of compounds exceeding cleanup goals are summarized in Table 5.3.1 for an industrial future use. Arsenic, lead, iron, and five organic compounds exceeded PRGs in one or more samples. The organic compounds exceeded cleanup goals in less than five percent of the samples, except for two dioxin compounds. The lead and arsenic were detected much more frequently above cleanup goals. However, natural levels of arsenic in the Los Alamos area are frequently above the industrial PRG. This area is currently under continuing investigation to determine what remedies are appropriate for the sites located here.

Figure 5.2: Airport





Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site

N

0 1250 2500
FEET

0 381 762
METERS

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and cartography and their accuracy may not have been established. Data are from various sources and are part of the FIMAD repository.

FIMAD Plot ID: G107295 08 Jan 99

Table 5.3.1
Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Commercial Development

Contaminant	Industrial PRG (mg/kg)	# Samples Collected	# Samples > PRG	Mean Conc. of Detects (mg/kg)
Arsenic	3	184	39	7.2
Iron	100,000	167	8	16,684
Lead	1000	184	14	333
Arochlor-1254	1.0	149	2	1.3
Benzo(a)pyrene	0.36	158	5	0.36
DDT[4,4'-]	13	148	1	1.5
Heptachlorodibenzodioxins (total)	0.00003	5	2	0.00072
Octachlorodibenzodioxin	0.00003	5	4	0.002

5.4 Regulatory Status

Eleven of the 25 PRSs contained in or in proximity to the airport parcel are listed in the HSWA Module of LANL's RCRA permit. Seven of the eleven PRSs listed on the permit are currently under investigation. The NMED is the AA for this permit, and must concur that no further action is required at a PRS before the PRS can be removed from the permit. The NMED has not yet concurred with the LANL ER Project's NFA recommendations for the remaining four PRSs listed on the permit. Fourteen PRSs are not listed on the permit. The LANL ER Project has made NFA recommendations on five of these PRSs and DOE, which is the AA that must concur on a "no further action" recommendation, has concurred on all five of them. No additional ER action at these five PRSs is necessary. The remaining nine PRSs are currently under investigation.

Presented below is a summary of the regulatory status of the PRSs within the bounds of this parcel.

Table 5.4.1
Summary of Regulatory Status

PRS/Structure Type	Under Investigation	Recommended for Human Health NFA	NFA Concurrence by DOE	NFA Concurrence by NMED	Under Reconsideration	Recommended for Integrated NFA
MDAs	6	-	-	-	-	-
Surface Units	4	-	1	-	-	-
Subsurface Units	4	-	4	-	-	-
Outfalls	2	4	-	-	-	-

5.5 Other Concerns

The parcel, as it is currently defined, extends to the bottom of one canyon to the south, and another canyon to the north. Because of their extreme steepness and unusual form, the canyon sides and canyon bottoms are not topographically suited for industrial or commercial development. The canyon bottoms will have to be characterized and, if necessary, remediated, prior to conveyance and transfer. The characterization of any canyons system can be very complex, and the complexity will depend on the drainage basin area; the number of subdrainages; the number, size and distribution of the source terms located upstream; the depth to alluvial groundwater; and the presence of ephemeral or perennial surface waters. The steep slopes of both of the canyons associated with the Airport parcel will make their characterization complex, and it will be further complicated because of the number of varied historical source terms located upstream. Remediation, if it s required, will be complicated by the steep slopes of both of the canyons, which will make access difficult in many areas. As a consequence, the DOE anticipates any remediation that might be required in these canyons could be extremely difficult and costly and, in some areas, perhaps infeasible.

5.6 Proposed Remedies by Type

The proposed use for this parcel by the potential land recipients is commercial development. The remedies described for the 25 PRSs in this parcel were identified on the basis of this land use scenario, and reflect the estimated costs of the remedial actions necessary under this scenario for conveyance and transfer of this parcel. It is assumed in this and the following sections that the airport terminal building, storage building, and storage shed will continue to be put to beneficial use after the parcel is transferred[35]. Table 5.6.1 summarizes the remedies proposed to be undertaken, given the land use scenario of commercial development.

Table 5.6.1
Proposed Remedies by Type
Land Use Scenario: Commercial Development

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
MDAs	6	-	-	-
Surface Units	2	-	2	1
Subsurface Units	-	-	4	4
Outfalls	1	-	4	1
Type II Structures	-	-	-	1
Type IV Structures	-	-	-	3

[35] The DOE assumes that because these three structures currently support commercial activity, they can be transferred "as is", with no associated costs for modification or upgrade.

5.7 Estimated Costs and Schedule

The following table summarizes the estimated costs and duration for the remedial activities within the Airport parcel that are necessary to prepare the parcel for transfer under a land use scenario of commercial development. The terms "estimated costs for completion" and "estimated duration" are defined in Section 1.4 of this report. PRS- and structure-specific information on remedies is included in Appendix A.

Note that there are almost always costs associated with the "no action" remedy. These reflect the costs of site characterization and reporting, which are necessary to justify a "no action" proposal.

Note also that costs are not included for characterizing and, if necessary, remediating the portion of DP canyon that falls within the Airport parcel. Because the Airport parcel shares its boundary with the TA-21 parcel within DP Canyon, the canyons characterization and remediation costs are included only in the TA-21 cost estimate to eliminate double counting.

Table 5.7.1
Estimated Remedial Action and D&D Costs and Estimated Duration
Land Use Scenario: Commercial Development

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs and Structures (months)
MDAs	6	814	19
Surface Units	5	13,621	13-24
Subsurface Units	8	13,105	1-75
Outfalls	6	677	1-17
Total	-	28,217	-

5.8 Estimated Waste Volumes

The following table summarizes the estimated waste volumes to be generated as a result of remedial activities and D&D within the Airport parcel.

Table 5.8.1
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Commercial Development

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Surface Units	4,001	0	400	0	0	0	0	0
Outfalls	20	0	0	0	0	0	0	0
Subsurface Units	20,000	0	0	0	0	0	0	0
MDAs	35	0	0	0	0	0	0	0
Type II Structures								
Total	24,056	0	400	0	0	0	0	0

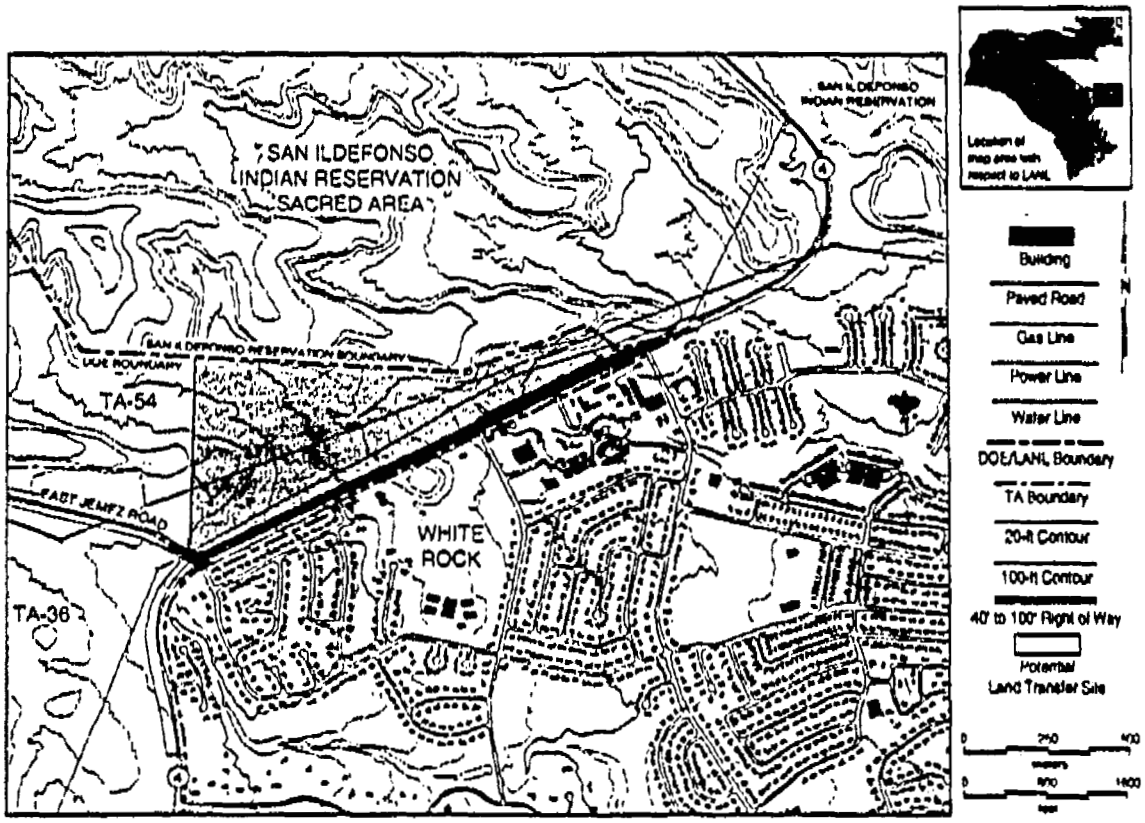


Figure 6.1 White Rock Site

6.0 White Rock Parcel

6.1 Introduction

The White Rock Parcel is located north and west of the White Rock residential and commercial areas and is adjacent to NM Highway 4; it lies within the lower reaches of Canada del Buey. Figure 6.1 illustrates the location of the parcel with respect to the community of White Rock. The site consists of approximately 100 acres and is undeveloped except for utility lines and a water pump station.

The two proposed land uses by the potential land recipients include residential development, and a combination of cultural preservation and commercial development.

6.2 Description of PRSs and Structures within the White Rock Parcel

There are no PRSs located within or in proximity to (i.e., within 50 feet of the boundary) the White Rock parcel. One LANL numbered structure is located within the parcel: a pump station that is part of the water supply system that DOE leased to Los Alamos County in 1998. Figure 6.2 shows the location of the pump station within the parcel. The ER Project assumes that this structure will remain intact and in beneficial use after the transfer of this parcel. Consequently, the costs of D&D are not included in Tables 6.7.1 and 6.7.2, "Estimated Remedial Action and D&D Costs and Durations" for the preservation and residential land use scenarios, respectively. D&D costs for this structure have been estimated for information purposes only, and can be found in Appendix A of this report.

6.3 *Extent of Contamination*

To date, the LANL ER Project has not sampled either within this parcel or upstream in Canada del Buey. Therefore, the extent of any potential surface site contamination is unknown.

6.4 Regulatory Status

Although there are no PRSs within the White Rock parcel, the NMED is the AA for LANL's canyon systems, and must concur that no further action is required within such a system or systems before ER activity can be considered complete.

Presented below is a summary of the regulatory status of the canyon systems within the bounds of this parcel.

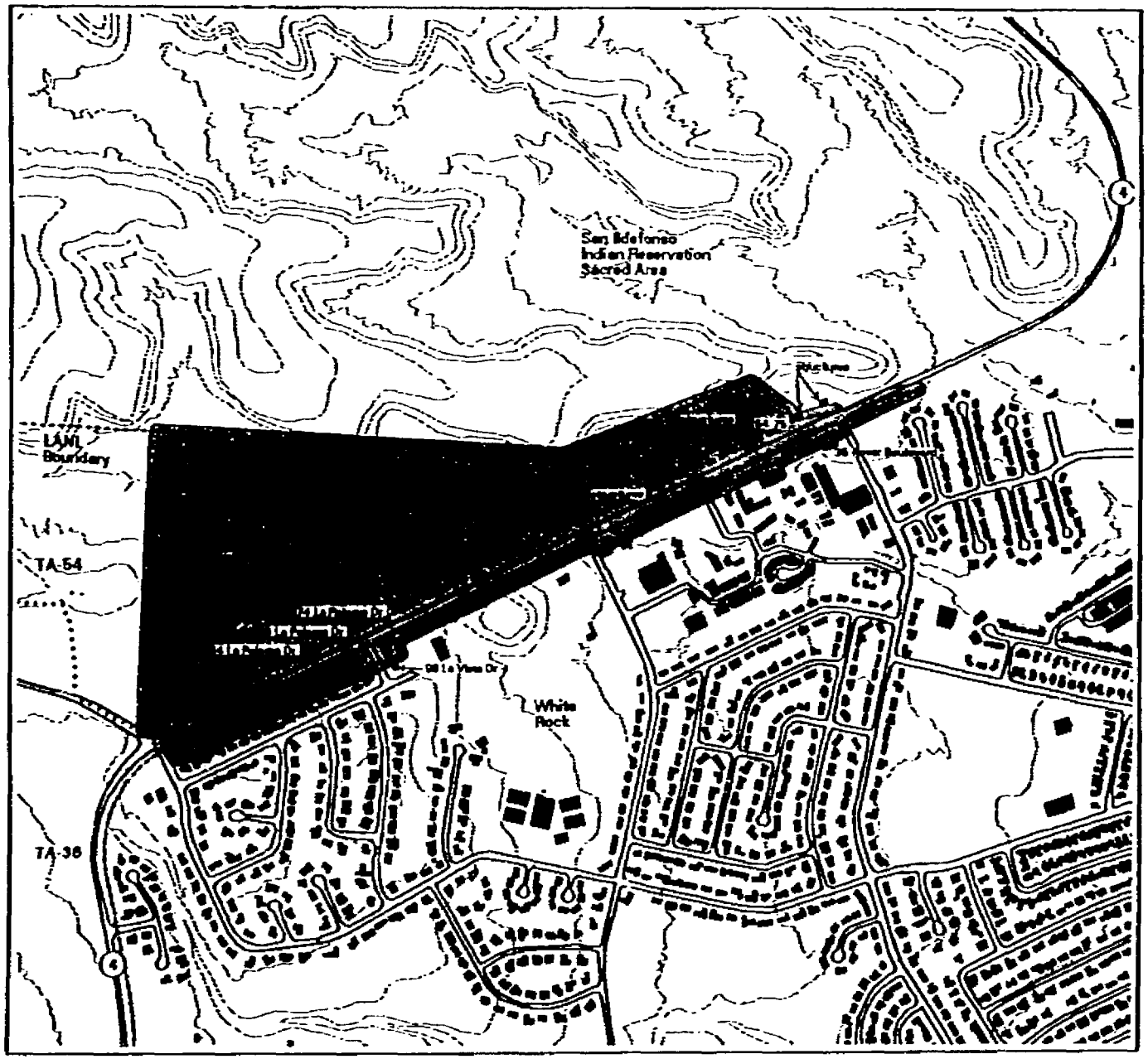
Table 6.4.1
Summary of Regulatory Status

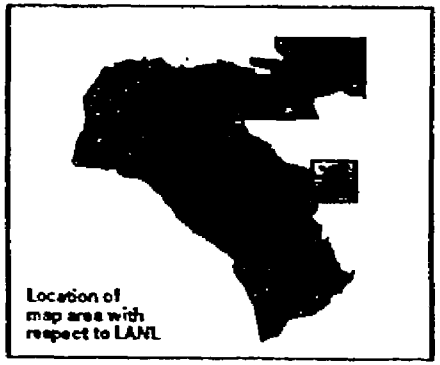
PRS/Other	Under Investigation	Recommended for Human Health NFA	NFA Concurrence by DOE	NFA Concurrence by NMED	Under Reconsideration	Recommended for Integrated NFA
Canyons systems	1	-	-	-	-	-

6.5 Other Concerns

Although there are no PRSs within this parcel, environmental contamination could be of concern in the portion of it that lies within the stream channel and flood plain of Canada del Buey. There has been only limited sampling in Canada del Buey by the Laboratory's Environmental Surveillance Program. These samples have detected uranium and plutonium in sediments and, in 1997, showed a possible detect of strontium-90 in the shallow groundwater upstream of

Figure 6.2: White Rock Site





Boundary, TA

Contour, 20 foot

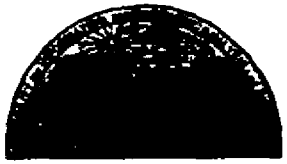
Road, Paved

Building

50 Foot Buffer Around

Potential Land Transfer Site

N



0 1000 2000
FEET

0 305 610
METERS

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is generalized. Feature locations are dependent on scale and cartography and their accuracy may not have been monitored. Data are from various sources and are part of the FIMAD repository.

FIMAD Plot ID: G107296 05 Jan 99

the parcel. However, the level was not high enough above the detection limit to be certain that strontium-90 was, indeed, present.

Although additional sampling is warranted to more fully characterize the nature and extent of contamination in the stream channel of Cañada del Buey, the limited sampling conducted to date indicates that the existing levels of contamination are well below levels that would elicit health concerns. The levels of contaminants that exist today are expected only to decrease over time even though there are still active Laboratory operations upstream of the parcel. This is because such operations are now subject to existing State and federal environmental regulations, which require the rigorous management of materials and wastes, and limit the levels of contaminants that can be released either from discharge points or from storm water runoff. Moreover, existing contamination in sediments will be dispersed over time by stream flow. It is not known whether the existing contamination of sediments and spring waters could limit their use as sources for cultural [medicinal and artistic] uses and ceremonial use, even with contamination levels orders of magnitude below those eliciting health concerns.

In any case, the canyon bottoms will have to be characterized and, if necessary, remediated, prior to conveyance and transfer. The characterization of any canyons system can be very complex, and the complexity will depend on the drainage basin area; the number of subdrainages; the number, size and distribution of the source terms located upstream; the depth to alluvial groundwater; and the presence of ephemeral or perennial surface waters. The features of the canyon associated with the White Rock parcel will make its characterization complex, particularly because of the types and numbers of source terms located upstream, and the presence of shallow alluvial groundwater. Remediation, if it is required, may be complicated by the presence of cultural resources that exist within the canyon, which will make access difficult in many areas without disturbing such resources. As compared with other canyon systems that drain into the parcels proposed to be transferred, Cañada del Buey is relatively broad and flat. Residential and/or cultural preservation future land uses are possible, given due consideration to the fact that large parts of the canyon is considered floodplain. DOE anticipates any remediation that might be required in this canyon could be difficult and costly, though perhaps not as difficult as other canyons in the LANL region.

6.6 Proposed Remedies by Type

The two proposed uses for this parcel include residential development, and a combination of cultural preservation and commercial development. The remedies described for the portions of the canyon systems located within this parcel were identified on the basis of the two land use scenarios expected to require the least and the most cleanup, respectively, and reflect the estimated costs of the remedial actions necessary under each scenario for conveyance and transfer of this parcel.

The DOE acknowledges that a proposed land use of cultural preservation requires many factors to be considered, and that a balance must be struck between these factors. For example, the balance must be weighed between preservation of cultural resources and ecosystems, and the disruption resulting

from remediation activities to reduce residual contamination. The DOE recognizes that each of these (and other) factors might be of greater or lesser importance to each of the potential land recipients, and that the remedies proposed in this report might have to be modified to make a particular parcel acceptable to its recipient.

Table 6.6.1 summarizes the remedies proposed to be undertaken, given the land use scenario of cultural preservation. Table 6.6.2 summarizes the proposed remedies under a residential development land use scenario.

Table 6.6.1
Proposed Remedies by Type
Land Use Scenario: Cultural Preservation

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Type IV Structure	-	-	-	1
Canyons systems	-	-	-	1

Table 6.6.2
Proposed Remedies by Type
Land Use Scenario: Residential Development

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Type IV Structure	-	-	-	1
Canyons systems	1	-	-	1

6.7 Estimated Costs and Schedule

The following tables summarize the estimated costs and duration for the remedial activities within the White Rock parcel. The terms "estimated costs for completion" and "estimated duration" are defined in Section 1.4 of this report. Table 6.7.1 summarizes the estimated costs and duration of remedial activities necessary to prepare the parcel for transfer under a land use scenario of cultural preservation. Table 6.7.2 summarizes the estimated costs and duration of remedial activities necessary to prepare the parcel for transfer under a residential development land use scenario.

Note that there are almost always costs associated with the "no action" remedy. These reflect the costs of site characterization and reporting, which are necessary to justify a "no action" proposal.

Table 6.7.1
Estimated Remedial Action and D&D Costs and Duration
Land Use Scenario: Cultural Preservation

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Estimated Duration (months)
Canyons systems	1	954	16

Table 6.7.2
Estimated Remedial Action and D&D Costs and Duration
Land Use Scenario: Residential Development

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Estimated Duration (months)
Canyons systems	1	3,374	16

6.8 Estimated Waste Volumes

The following tables summarize the estimated waste volumes to be generated during remedial activities within the White Rock parcel. Table 6.8.1 presents the estimated volume of waste to be generated to prepare the parcel for transfer under a land use scenario of cultural preservation. Table 6.8.2 presents the estimated volume of waste that will be generated to prepare the parcel for transfer under a residential development land use scenario.

Table 6.8.1
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Cultural Preservation

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Canyons systems	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

Table 6.8.2
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Residential Development

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Canyons systems	0	0	942	0	0	0	0	0
Total	0	0	942	0	0	0	0	0

Figure 7.1 Rendija Canyon Site

7.0 Rendija Canyon Parcel

7.1 Introduction

The Rendija Canyon Parcel consists of approximately 910 acres and is located north of and below Los Alamos town site's Barranca Mesa residential subdivision. Figure 7.1 illustrates the location of this parcel with respect to the northernmost residential areas of the Los Alamos town site. An unpaved road extending from Barranca Road to the east divides the site. This site is undeveloped except for a shooting range that serves the local community; the shooting range is located on land that is currently under lease from the DOE to the Los Alamos Sportsman's Club. .

The two proposed land uses by the potential recipients of the parcel are cultural and environmental preservation, and residential development.

7.2 Description of PRSs and Structures within the Rendija Canyon Parcel

This parcel contains four PRSs and no LANL-numbered structures. There are no additional PRSs or structures within a 50-foot buffer surrounding the parcel. Figure 7.2 shows the locations of the PRSs within the parcel. The four PRSs are all historical-use mortar impact areas that were used by the army between 1944 and 1948. All four PRSs are categorized as surface units. The LANL ER Project has conducted sampling for characterization purposes at all four PRSs and the results are presented in Section 7.3, Extent of Contamination. Of the four PRSs in this parcel, the LANL ER Project has recommended one for NFA and received concurrence on this recommendation from DOE. However, this recommendation was made based on the land remaining under the institutional control of LANL. Therefore, for the purpose of this report, the DOE assumes that further action will be required at this PRS. The ER Project has recommended the remaining three for NFA; however, the NMED has not concurred with this recommendation. More detail is presented in Section 7.4, Regulatory Status.

Because DOE maintains no LANL numbered structures within the Rendija Canyon parcel, no D&D activity is required to prepare this parcel for conveyance and transfer.

7.3 Extent of Contamination

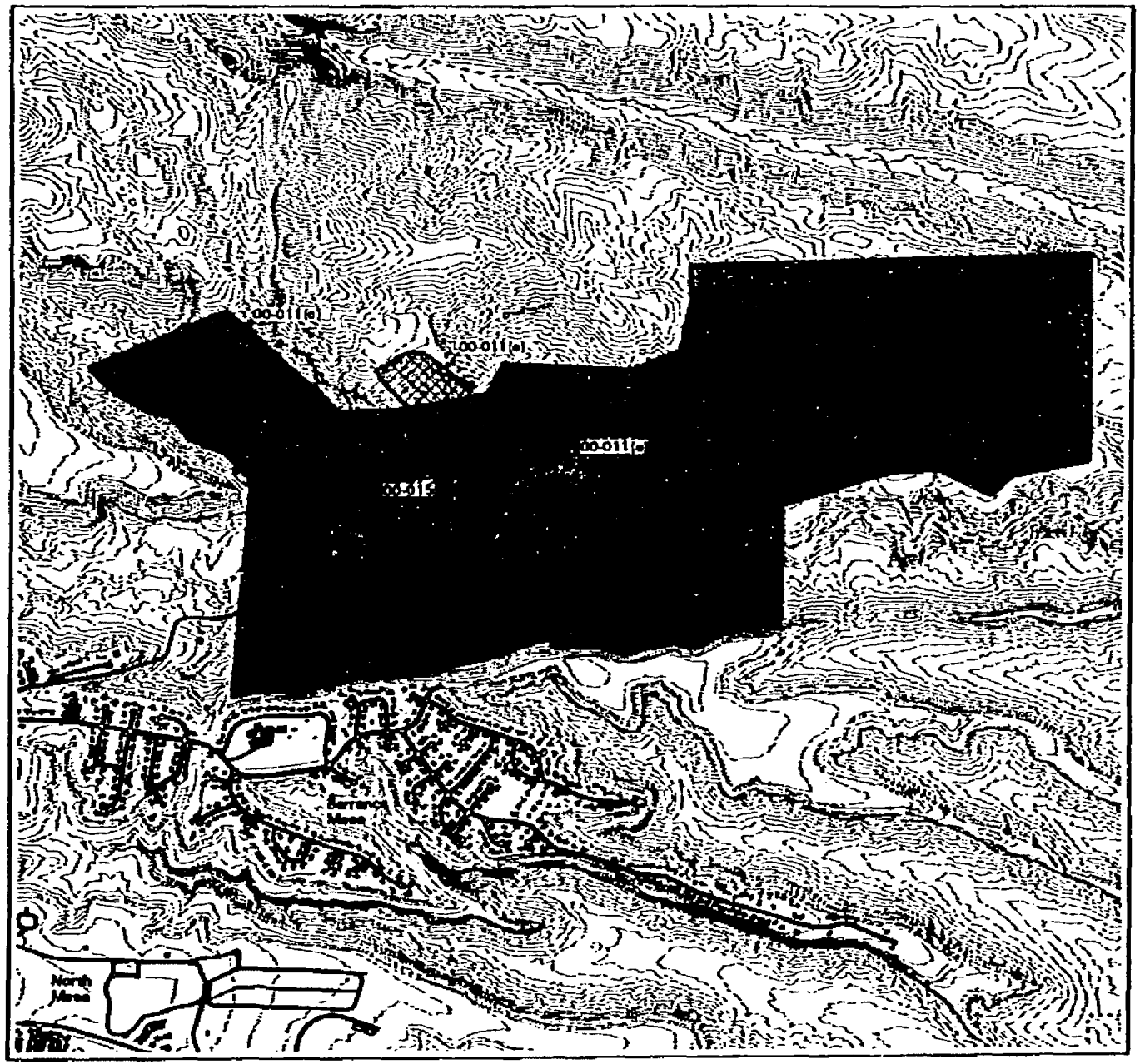
Three of the four PRSs in the parcel have been sampled for environmental contamination, and the results show that no contamination exists above cleanup levels appropriate for either preservation or residential development. Although there are no unacceptable human health-based or ecologically-based risks associated with environmental contamination in the Rendija Canyon parcel, there may be safety risks associated with unexploded ordnance. This situation is discussed in detail in Section 7.5, Other Concerns.

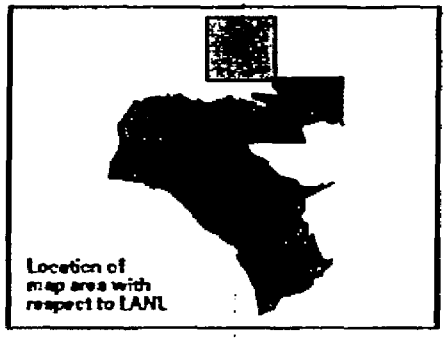
7.4 Regulatory Status

Three of the PRSs contained in this parcel are listed in the HSWA Module of LANL's RCRA permit. The NMED is the AA for this permit, and must concur that no further action is required at a PRS before the PRS can be removed from the permit. The NMED has not yet concurred with the LANL ER Project's NFA recommendations for these three PRSs. The remaining PRS is not listed on the permit and DOE, which is the AA that must concur on a "no further action" recommendation for this site, has concurred. However, since concurrence was based on the assumption that this property would remain under the institutional control of LANL, the DOE assumes, for the purpose of this report, that additional action might be necessary at the PRS to prepare the parcel for transfer.

Presented below is a summary of the regulatory status of the PRSs within the bounds of this parcel.

Figure 7.2: Rendija Canyon Site





Boundary, TA

Contour, 20 foot

Road, Dirt

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and their accuracy may not have been considered. Data are from various sources and are part of the FIMAD repository

FIMAD Plot ID: G107297 05 Jan 99

Table 7.4.1
Summary of Regulatory Status

PRS/Structure Type	Under Investigation	Recommended for Human Health NFA	NFA Concurrence by DOE	NFA Concurrence by NMED	Under Reconsideration	Recommended for Integrated NFA
Surface Units	-	3	1	-	-	-

7.5 Other Concerns

There were no historical Laboratory operations conducted upstream of the Rendija Canyon parcel, and so upstream contamination is not believed to be an issue. However, there is the potential for unexploded ordnance to exist within the parcel. A fatal accident involving a bazooka shell in the early 1960s prompted a semiannual sweep of all known impact areas to pick up ordnance exposed by weather. The semiannual surveys were later discontinued, but the Department of Defense conducted ordnance sweeps periodically into the 1980s. In 1993, the LANL ER Project removed from the area live mortar rounds with lives fuses, as well as approximately 3000 pieces of ordnance fragments and expended bullets. Although it appears at this time that unexploded ordnance is no longer of concern in the Rendija Canyon parcel, it has also been demonstrated that previously undetected ordnance can subsequently become exposed over time.

The most effective way to mitigate the safety hazard posed by unexploded ordnance is to excavate the potentially affected soils to a depth below which ordnance could be found. However, this approach would also be costly, because the areal extent of unexploded ordnance is potentially significantly larger than the boundaries of the mortar impact areas as defined today. Nonetheless, excavation might be appropriate under the proposed land use scenario of residential development, but less so under the cultural and environmental preservation scenario, where the effects of soil disturbance on the ecosystem and on cultural relics must be balanced against safety concerns.

7.6 Proposed Remedies by Type

The proposed uses for this parcel include cultural and environmental preservation, and residential development. The remedies described for the three remaining PRSs in the Rendija Canyon parcel were identified on the basis of these two land use scenarios, and reflect the estimated costs of the remedial actions necessary under each scenario for conveyance and transfer of this parcel. Table 7.6.1 summarizes the remedies proposed to be undertaken, given the land use scenario of cultural and environmental preservation. Table 7.6.2 summarizes the proposed remedies under a residential development land use scenario.

Table 7.6.1
Proposed Remedies by Type
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Canyons systems	-	-	-	1
Surface Units	1	-	-	3

Table 7.6.2
Proposed Remedies by Type
Land Use Scenario: Residential Development

PRS/Structure Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Canyons systems	-	-	-	1
Surface Units	4	-	-	-

7.7 Estimated Costs and Schedule

The following tables summarize the estimated costs and duration for the remedial activities within the Rendija Canyon parcel. The terms "estimated costs for completion" and "estimated duration" are defined in Section 1.4 of this report. Table 7.7.1 summarizes the costs and duration of remedial activities necessary to prepare the parcel for transfer under a land use scenario of cultural and environmental preservation. Table 7.7.2 summarizes the costs and duration of remedial activities necessary to prepare the parcel for transfer under a residential development land use scenario. PRS-specific information is included in Appendix A.

Note that there are almost always costs associated with the "no action" remedy. These reflect the costs of characterization and reporting, which are necessary to justify a "no action" proposal to the AA.

Table 7.7.1
Estimated Remedial Action and D&D Costs and Estimated Duration
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs (months)
Surface Units	4	18,901	14-30
Canyons systems	1	944	16
Total	-	19,053	-

Table 7.7.2
Estimated Remedial Action and D&D Costs and Estimated Duration
Land Use Scenario: Residential Development

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs (months)
Surface Units	4	19,518	14-30
Canyons systems	1	944	16
Total	-	20,462	44

7.8 Estimated Waste Volumes

The following tables summarize the estimated waste volumes to be generated during remedial activities within the Rendija Canyon parcel. Table 7.8.1 presents the estimated volume of waste to be generated to prepare the parcel for transfer under a land use scenario of cultural and environmental preservation. Table 7.8.2 presents the estimated volume of waste that will be generated to prepare the parcel for transfer under a residential development land use scenario.

Table 7.8.1
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Surface Units	0	7,500	0	0	0	0	0	0
Canyons systems	0	0	0	0	0	0	0	0
Total	0	7,500	0	0	0	0	0	0

Table 7.8.2
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Residential Development

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Surface Units	1	7,500	0	0	0	0	0	0
Canyons systems	0	0	0	0	0	0	0	0
Total	1	7,500	0	0	0	0	0	0

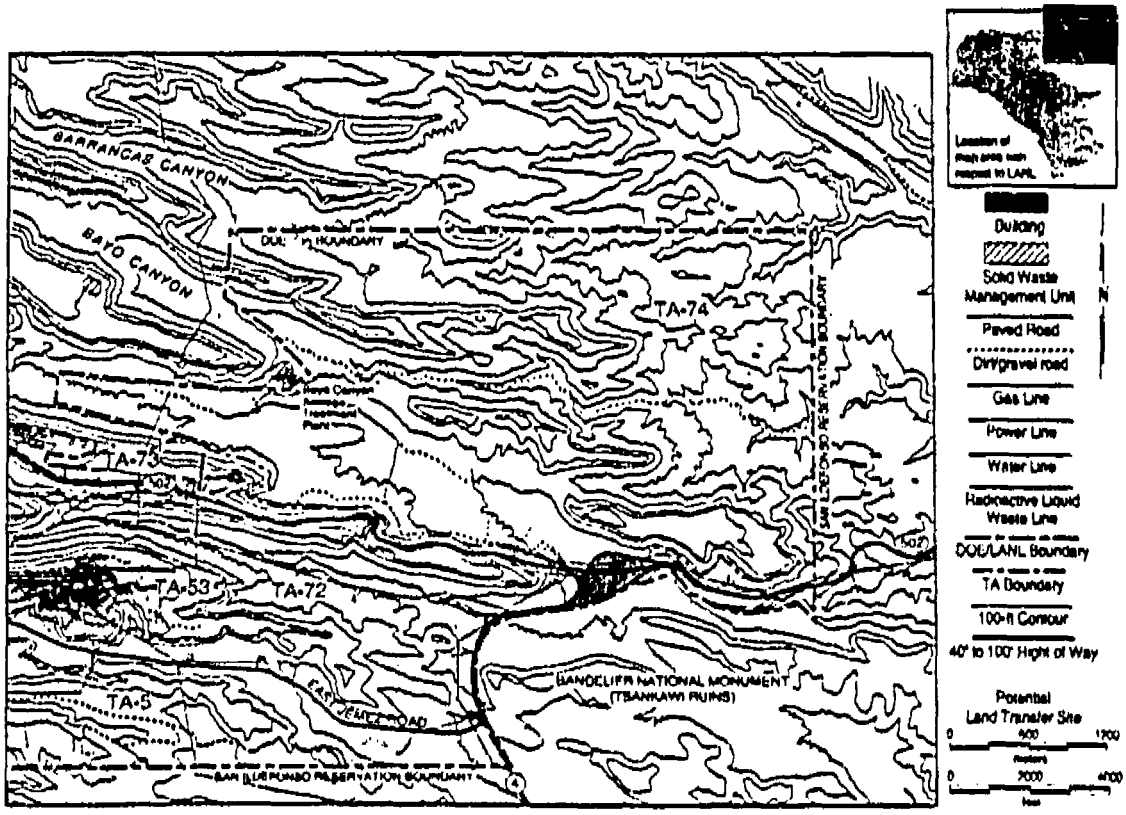


Figure 8.1 White Rock Y Site

8.0 White Rock Y Parcel

8.1 Introduction

The White Rock Y Parcel is an area with a complex shape. It incorporates the alignments and intersections of State Route 502, State Route 4, and the easternmost part of East Jemez Road. It is traversed by Los Alamos and Sandia Canyons, which may contain residual contamination from historical LANL operations located upstream from this parcel. Figure 8.1 shows the location of the parcel with respect to these transportation corridors. The parcel is approximately 540 acres and includes the State-owned, grade separated intersection and surrounding land known as the White Rock Y. This site is largely undeveloped except for the major transportation routes connecting Los Alamos with northern New Mexico.

The land use proposed by the potential recipients of this parcel include cultural or environmental preservation. In addition, transportation corridors and utilities are proposed to be maintained, but this is an incidental use that will not affect the primary use of cultural and environmental preservation.

8.2 Description of PRSs and Structures within the White Rock Y Parcel

The White Rock Y parcel contains no PRSs within its boundaries, nor within proximity (i.e., within 50 feet of the perimeter of the parcel). The parcel contains six LANL numbered structures, which are all part of the water supply system that DOE transferred to Los Alamos County via long-term lease. Figure 8.2 shows the locations of the structures within the parcel. The structures include a water tank, a booster station, a water well, a chlorinator station, a sand trap, and a fluorine station. None of these structures is currently scheduled for D&D. The ER Project assumes that these structures will all remain intact and in beneficial use after the transfer of this parcel, and so D&D costs are not included in Table 8.7.1, "Estimated Remedial Action Costs and Durations". D&D costs for each of these structures have been estimated for information purposes only, and can be found in Appendix A of this report.

8.3 Extent of Contamination

Although there are no PRSs within this parcel, environmental contamination is, nonetheless, of potential concern within the portions of the parcel that lie within the Los Alamos and Sandia Canyon bottoms. Such contamination, if present, is most likely to have been generated in the upper portions of these watersheds. The LANL ER Project is investigating all of the canyons systems for the presence of contamination and in 1997, sediments were sampled in the portion of Los Alamos Canyon within the White Rock Y parcel. Several radionuclides were detected above levels associated with fallout from world-wide nuclear tests. These included americium-241, cesium-137, plutonium-238, plutonium-239, and strontium-90. None of these radionuclides was detected above cleanup levels for a preservation land use scenario. Two additional radionuclides, thorium-230 and thorium 232, were detected at concentrations exceeding cleanup levels for this land use scenario; however, the background concentrations of these two radionuclides in the Los Alamos area frequently exceed calculated cleanup levels. The analytical data for these radionuclides is presented in Table 8.3.1

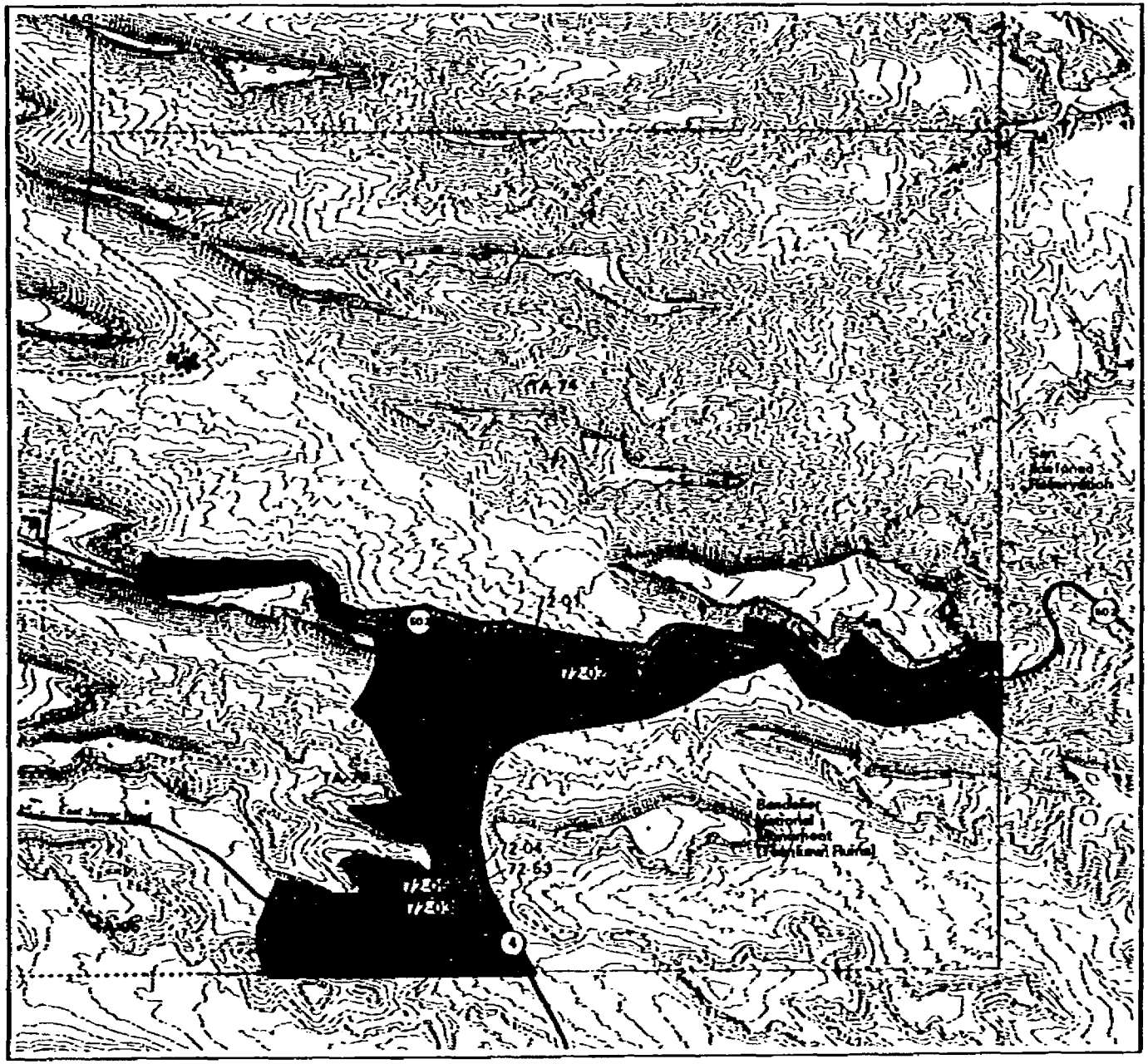
Table 8.3.1
Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Cultural and Environmental Preservation

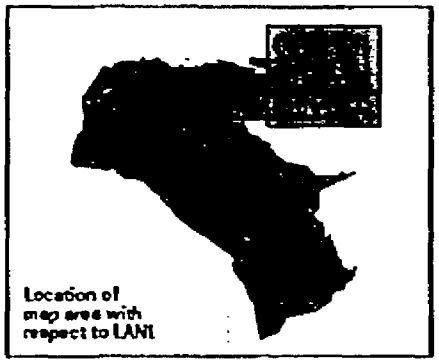
Contaminant	Industrial PRG (pCi/g)	# Samples Collected	# Detects > PRG	Mean Conc. Of Detects (pCi/g)
Thorium-230	0.54	8	8	1.7
Thorium-232	2.31	8	1	1.9

8.4 Regulatory Status

Although there are no PRSs within the White Rock Y parcel, the NMED is the AA for LANL's canyon systems, and must concur that no further action is required within this canyon system before ER activity can be considered complete.

Figure 8.2: White Rock Y Site





Boundary, TA

Contour, 20 foot

Road, Paved

Building

50 Foot Buffer Around

Potential Land Transfer Site

N

0 2500 5000
FEET

0 762 1524
METERS

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and their accuracy may not have been considered. Data are from various sources and are part of the FIMAD repository

FIMAD Plot ID: G107298 06 Jan 99

Presented below is a summary of the regulatory status of the canyon systems within the bounds of this parcel.

Table 8.4.1
Summary of Regulatory Status

PRS/Structure Type/Other	Under Investigation	Recommended for Human Health NFA	NFA Concurrence by DOE	NFA Concurrence by NMED	Under Reconsideration	Recommended for Integrated NFA
Canyons systems	2	•	•	•	•	•

8.5 Other Concerns

The White Rock Y parcel is traversed by Los Alamos and Sandia Canyons, which may contain residual contamination from historical operations at the Laboratory. Los Alamos Canyon is of particular interest, since it received discharges and surface runoff from TA-21, which served as the Laboratory site at which plutonium purification activities were conducted from 1945 until the 1970s. The eastern portion of TA-21 currently houses facilities used for tritium research activities. Other PRSs in Los Alamos Canyon are located in TAs-2, 41, 53, 0, and 7. The historical and current discharges from Laboratory operations to Sandia Canyon are believed to be negligible.

The LANL ER Project is in the process of investigating these and other canyons drainage systems to characterize the nature and extent of contamination they contain. Thus far, radionuclides that have been detected above background levels, but below cleanup levels, in the White Rock Y parcel include americium-241, cesium-137, plutonium-238, plutonium-239, and strontium-90. Although thorium-230 and thorium-232 have been detected above calculated cleanup levels, the Los Alamos area background concentrations of these two compounds often exceed such levels. The distribution of these radionuclides is limited to the sediment deposits within either existing stream channels or the channels that the streams might have formerly followed at any time since the 1940s. Contaminants were identified in the perched groundwater at monitoring well R-9, which is located in the Los Alamos Canyon portion of this parcel. Above background concentrations of tritium and uranium were found 180 to 280 feet below the land surface. Any further characterization or remediation of these groundwaters would be done in the context of the entire canyon system and not at the scale of this parcel. Therefore, no characterization or remediation costs for groundwater are included in this assessment.

Although additional sampling might be warranted to more fully characterize the nature and extent of canyons contamination, the limited sampling conducted to date indicates that the existing levels of contamination found in the White Rock Y

parcel canyons systems are lower than those that would elicit human health concerns. The levels of contaminants that exist today are expected only to decrease over time, because there is no longer a significant source of contaminant discharge into either of the canyons systems, and contaminated sediments will be dispersed over time by stream flow. It is not known whether the existing contamination of sediments could limit their use as sources for cultural [medicinal and artistic] uses and ceremonial use, even with contamination levels below those eliciting human health concerns.

In any case, the canyon bottoms will have to be characterized and, if necessary, remediated, prior to conveyance and transfer. The characterization of any canyons system can be very complex, and the complexity will depend on the drainage basin area; the number of subdrainages; the number, size and distribution of the source terms located upstream; the depth to alluvial groundwater; and the presence of ephemeral or perennial surface waters. The features of the canyon associated with the White Rock Y parcel will make its characterization complex, particularly because of the types and numbers of source terms located upstream. Remediation, if it is required, may be complicated by the presence of cultural resources that exist within the canyon, which will make access difficult in many areas without disturbing such resources. As compared with other canyon systems that drain into the parcels proposed to be transferred, these canyons are relatively broad and flat. Residential and/or cultural preservation future land uses are possible, given due consideration to fact that large parts of the canyons are considered floodplains. DOE anticipates any remediation that might be required in this canyon could be difficult and costly, though perhaps not as difficult as other canyons in the LANL region.

8.6 Proposed Remedies by Type

The proposed use for this parcel is cultural and environmental preservation. The remedies described for the portions of the canyon systems situated within the White Rock Y parcel were identified on the basis of this land use scenario, and reflect the estimated costs of the remedial actions necessary for conveyance and transfer of this parcel. The following table summarizes the remedies proposed to be undertaken, given the land use scenario of cultural and environmental preservation.

Table 8.6.1
Proposed Remedies by Type
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure/Other	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Type IV Structures				6
Canyons systems				2

8.7 Estimated Costs and Schedule

The following table summarizes the estimated costs and duration for the remedial activities within the White Rock Y parcel, to prepare it for transfer under a land use scenario of cultural and environmental preservation.

Note that although the proposed remedy for the canyons systems is "no action", the estimated cost of the alternative remedy, selective removal of sediments, is presented so that cost information can be factored into a decision-making process.

Table 8.7.1
Estimated Remedial Action Costs and Duration
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Canyons Systems (months)
Canyons systems (no remediation)	2	1,880	16
Canyons systems (selective removal)	2	10,424	24
Total (low/high)	-	1,880/10,424	-

8.8 Estimated Waste Volumes

The following table summarizes the estimated waste volumes to be generated during remedial activities within the White Rock Y parcel.

Table 8.8.1
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Canyons systems (no removal)	0	0	0	0	0	0	0	0
Canyons systems (selective removal)	0	0	3,767[36]					
Total (low/high)	0	0	0/3,767	0	0	0	0	0

36 This number is not shown in Appendix A because the database cannot hold two different sets of waste volumes under one land use scenario. It is documented in LANL ER Project files.

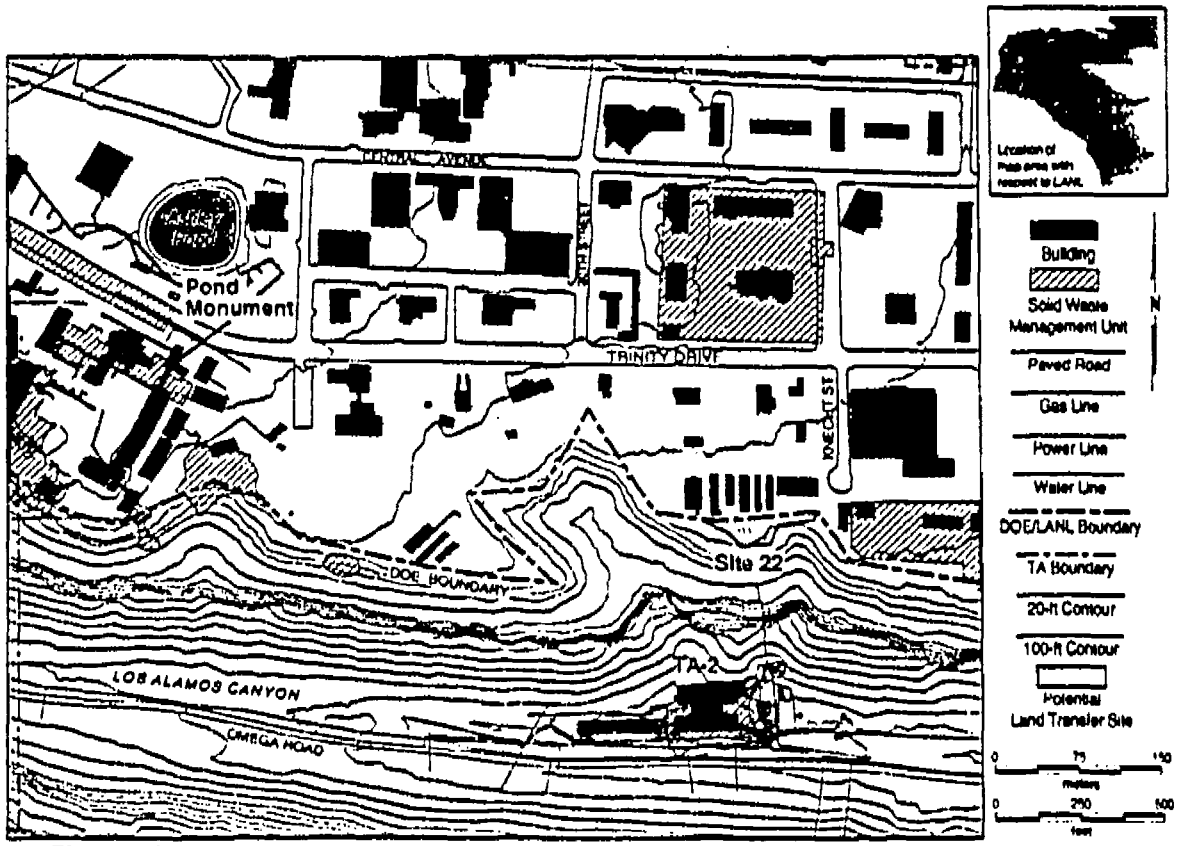


Figure 9.1 Site 22

9.0 Site 22 Parcel

9.1 Introduction

Site 22 is a small land parcel (less than half an acre) located at the edge of the townsite mesa, south of Trinity Drive and above Los Alamos Canyon. Figure 9.1 illustrates the location of this parcel with respect to the Los Alamos town site. Site 22 abuts privately owned property that is currently developed as a commercial storage business located behind a McDonald's restaurant. This parcel currently has no public access and there is no development on Site 22.

The potential land use by the potential land recipients is commercial development.

9.2 Description of PRSs and Structures within the Site 22 Parcel

The Site 22 parcel contains no PRSs within its boundaries, and there are no PRSs in proximity (i.e., within 50 feet) to the parcel. However, some non-LANL

construction debris was recently discovered onsite, and may have to be addressed prior to transfer of the parcel. There are no LANL numbered structures located on the Site 22 parcel and, consequently, there are no D&D costs associated with the transfer of this parcel. Figure 9.2 shows the Site 22 parcel in detail.

9.3 Extent of Contamination

Some construction debris was recently found on the surface of this parcel. It is neither known nor suspected to have been generated as a result of historical or current LANL operations. Because the debris is of a recent origin and is not known or suspected to be associated with LANL operations, it is not within the scope of work of the LANL ER Project to address it. Nonetheless, DOE may want to characterize and dispose of the debris prior to the transfer of the parcel. No sampling has yet been conducted to determine whether the debris is simply a solid waste, or whether it contains asbestos or other regulated materials.

9.4 Regulatory Status

There are no regulatory issues currently known to be associated with this parcel pursuant to environmental restoration or D&D.

9.5 Other Concerns

There are no other environmental restoration or D&D concerns known to be associated with this parcel.

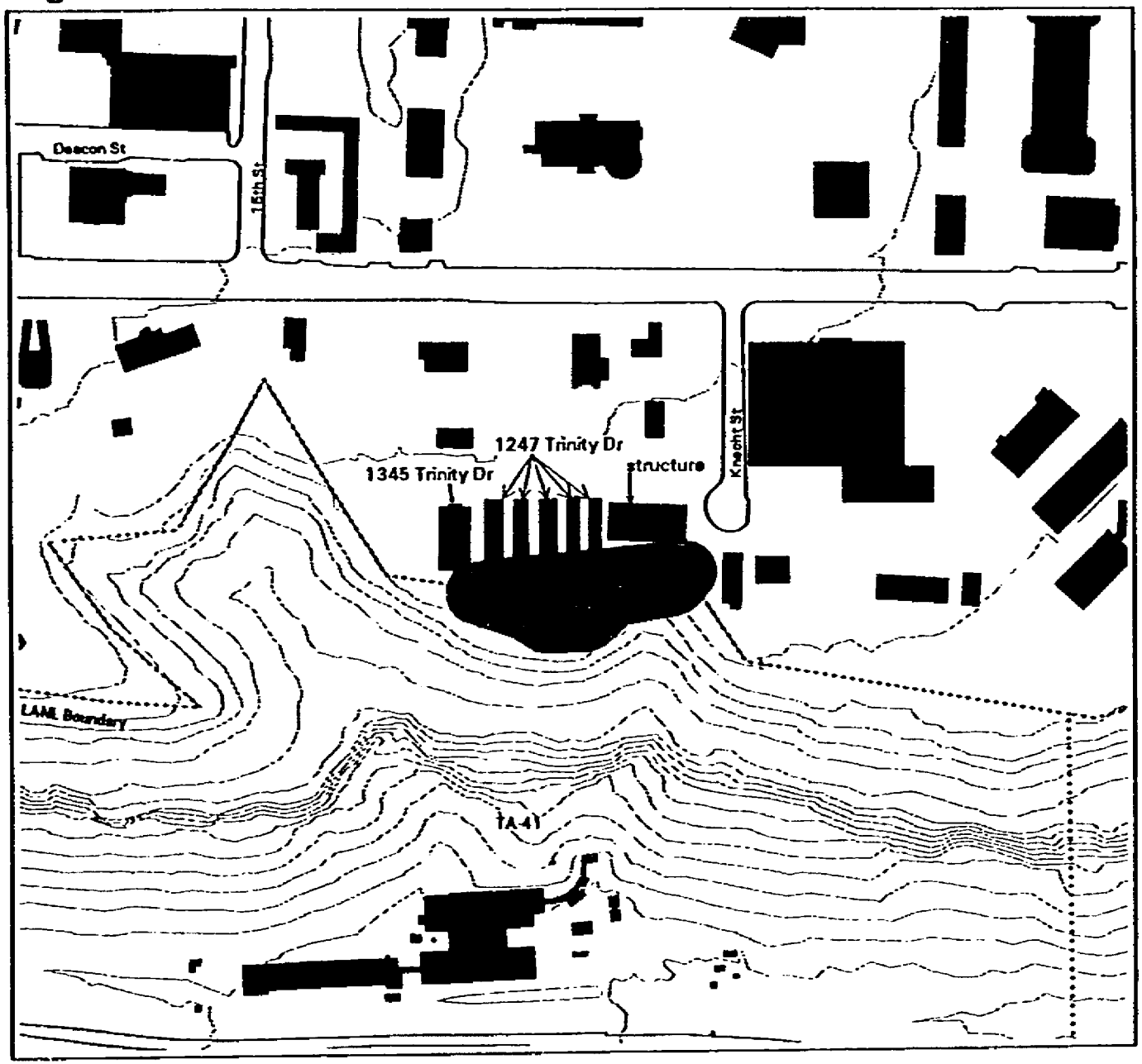
9.6 Proposed Remedies by Type

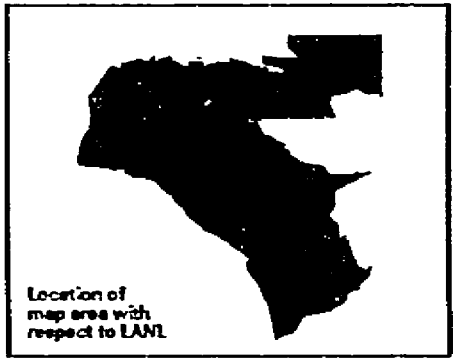
The potential recipients propose to use this parcel for commercial development. The remedy described for the surface debris on the parcel was identified on the basis of this land use scenario, and reflects the estimated cost DOE could incur should action be necessary for conveyance and transfer of this parcel. Table 9.6.1 presents the action.

Table 9.6.1
Proposed Remedies by Type
Land Use Scenario: Commercial Development

PRS/Structure Type/Other	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Non-LANL construction debris	1	-	-	-

Figure 9.2: Site 22





Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

N

0 250 500
FEET

0 76 152
METERS

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and their accuracy may not have been confirmed. Data are from various sources and are part of the FIMAD repository

FIMAD Plot ID: G107299 06 Jan 99

9.7 Estimated Costs and Schedule

The following table summarizes the estimated cost and duration for the action that might be necessary to prepare the parcel for transfer under a land use scenario of commercial development. The parcel requires no D&D activity prior to transfer.

Table 9.7.1
Estimated Remedial Action Costs and Durations
Land Use Scenario: Commercial Development

PRS/Structure Type	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Duration (months)
Non-LANL construction debris	1	91	9

9.8 Estimated Waste Volumes

The following table summarizes the estimated waste volumes to be generated as a result of remedial activities within the Site 22 parcel.

Table 9.8.1
Estimated Remedial Action Waste Volumes
Land Use Scenario: Commercial Development

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Non-LANL construction	10	0	0	0	0	0	0	0

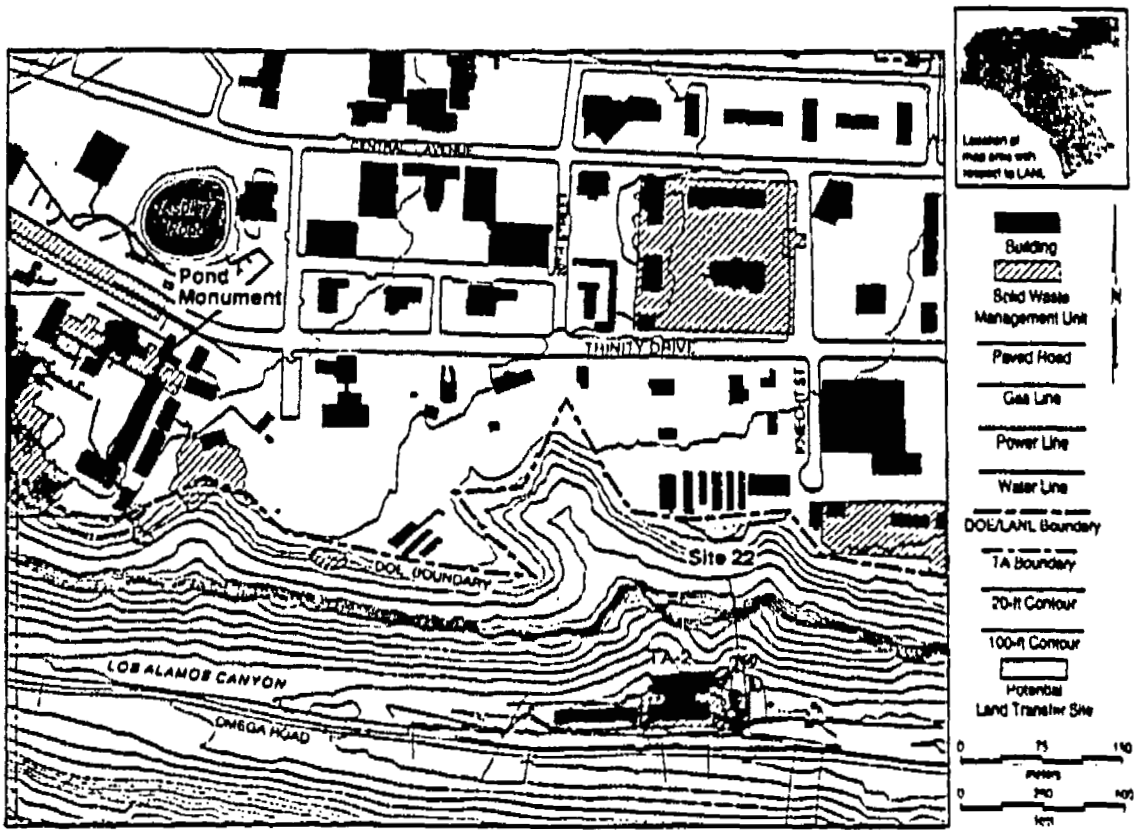


Figure 10.1 Manhattan Monument

10.0 Manhattan Monument Parcel

10.1 Introduction

The Manhattan Monument Parcel is a small, town site parcel (less than half an acre) located within Los Alamos County land and adjacent to Ashley Pond where most of the first Los Alamos Laboratory work was conducted. Figure 10.1 illustrates the location of this parcel with respect to the central area of the Los Alamos town site. This site consists of a plaque covered by a small pavilion. The contemplated land use by the potential land recipients is historic preservation.

10.2 Description of PRSs and Structures within the Manhattan Monument Parcel

The Manhattan Monument parcel contains no PRSs within its boundaries. Evaluating PRSs within a buffer area was not considered to be appropriate for this parcel, inasmuch as its use will be limited primarily by its size rather than by the impacts of surrounding PRSs on the subject parcel. Moreover, the "buffer area" surrounding the Manhattan Monument is already under the administrative

control of Los Alamos County, and is being used by the public for recreational purposes.

The only structure situated on the parcel is the monument, itself. It is not currently scheduled for D&D, and the LANL ER Project assumes that it will remain intact and in beneficial use after the transfer of this parcel. Consequently, D&D costs are not estimated for the monument. Figure 10.2 shows the Manhattan Monument parcel in detail.

10.3 Extent of Contamination

It is not specifically known whether or not there is any contamination in the subsurface soils of the parcel, itself. However, even if these soils are contaminated, there is no potential for harm to human health under the proposed land use scenario of historic preservation, because there is no realistic mechanism by which exposure to contaminants could occur.

10.4 Regulatory Status

There are no regulatory issues associated with this parcel pursuant to environmental restoration or D&D.

10.5 Other Concerns

There are no other concerns known to be associated with this parcel.

10.6 Proposed Remedies by Type

Neither environmental remediation nor D&D are anticipated to be required within this parcel to prepare it for transfer under the proposed land use scenario of cultural preservation.

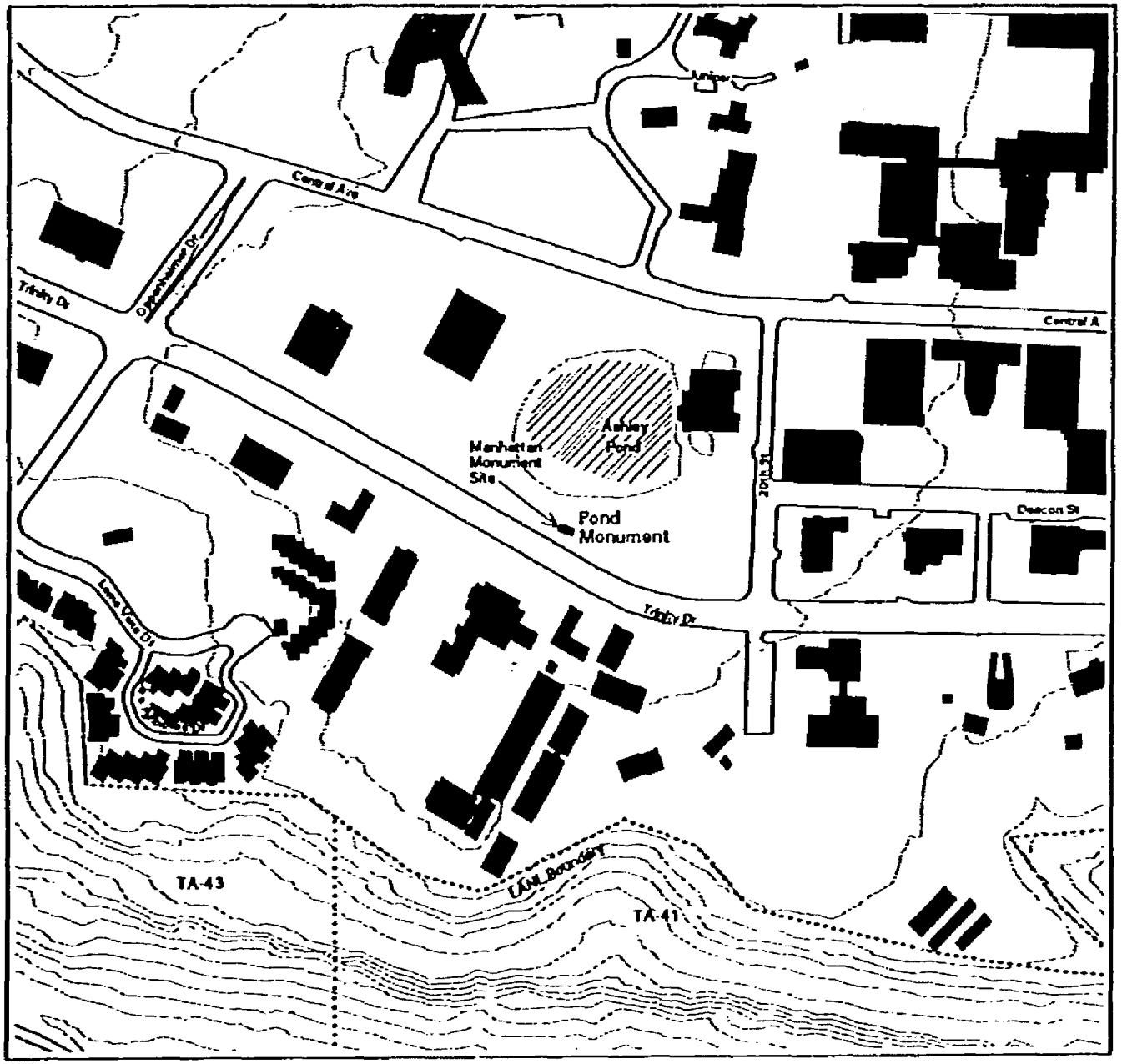
10.7 Estimated Costs and Schedule

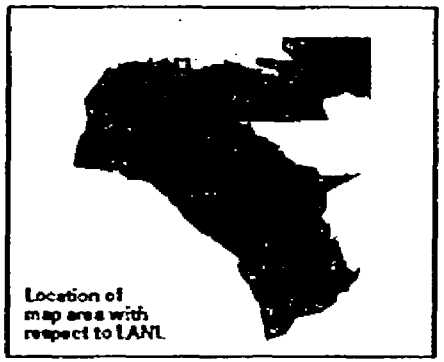
No environmental restoration or D&D costs are expected to be incurred to prepare this parcel for transfer under a proposed land use scenario of cultural preservation.

10.8 Estimated Waste Volumes

No waste is expected to be generated to prepare this parcel for transfer under a proposed land use scenario of cultural preservation.

Figure 10.2: Manhattan Monument Site





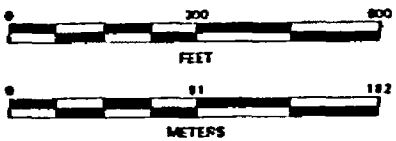
Boundary, TA

Contour, 20 foot

Road, Paved

Building

Potential Land Transfer Site



State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and symbology and their accuracy may not have been confirmed. Data are from various sources and are part of the FIMAD repository.

FIMAD Plot ID: G107292 06 Jan 99

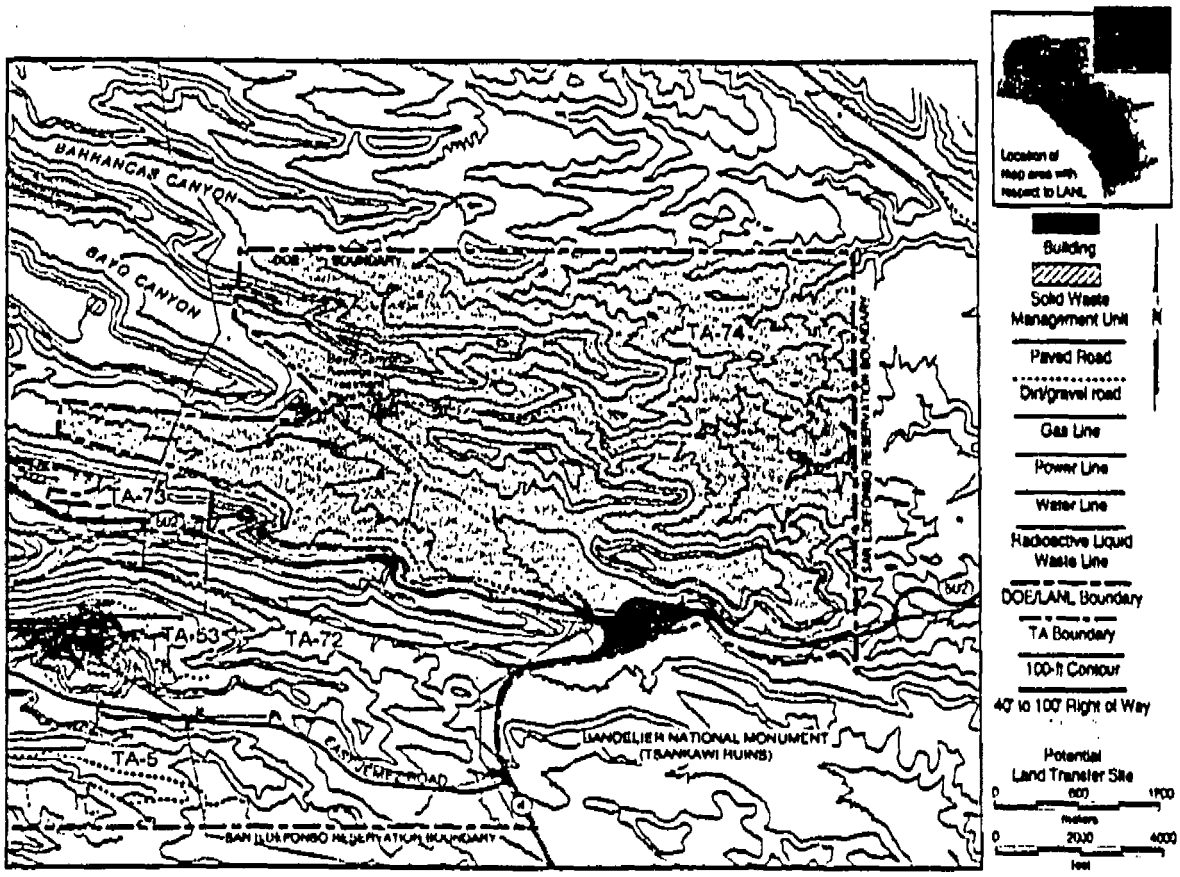


Figure 11.1 **Technical Area - 74 Site**

11.0 TA-74 Parcel

11.1 Introduction

TA-74 comprises approximately 2,715 acres, and is located north-northeast of the Los Alamos town site and of the Laboratory. Figure 11.1 illustrates the location of this parcel with respect to the eastern portion of the Los Alamos town site, and the northeastern portion of the Laboratory. The parcel spans portions of Bayo and Pueblo Canyons. A small portion of the parcel (less than 20 acres) is situated on a mesa top and is adjacent to a business park on Los Alamos County land. Land north of the parcel is administered by the United States Forest Service and to the east are lands held by the Department of the Interior in trust for the San Ildefonso Pueblo. The western and southern boundaries of TA-74 are determined by the limits of the Los Alamos town site and the Airport parcel to the west, and the White Rock Y parcel to the south. The TA-74 parcel was restored to the public domain by Presidential Proclamation 3539 on May 27, 1963.

The land use proposed by the potential recipients of the parcel include cultural and environmental preservation. In addition, existing utility infrastructure is proposed to be maintained, but this is an incidental use that will not affect the primary proposed land use.

11.2 Description of PRSs and Structures within the TA-74 Parcel

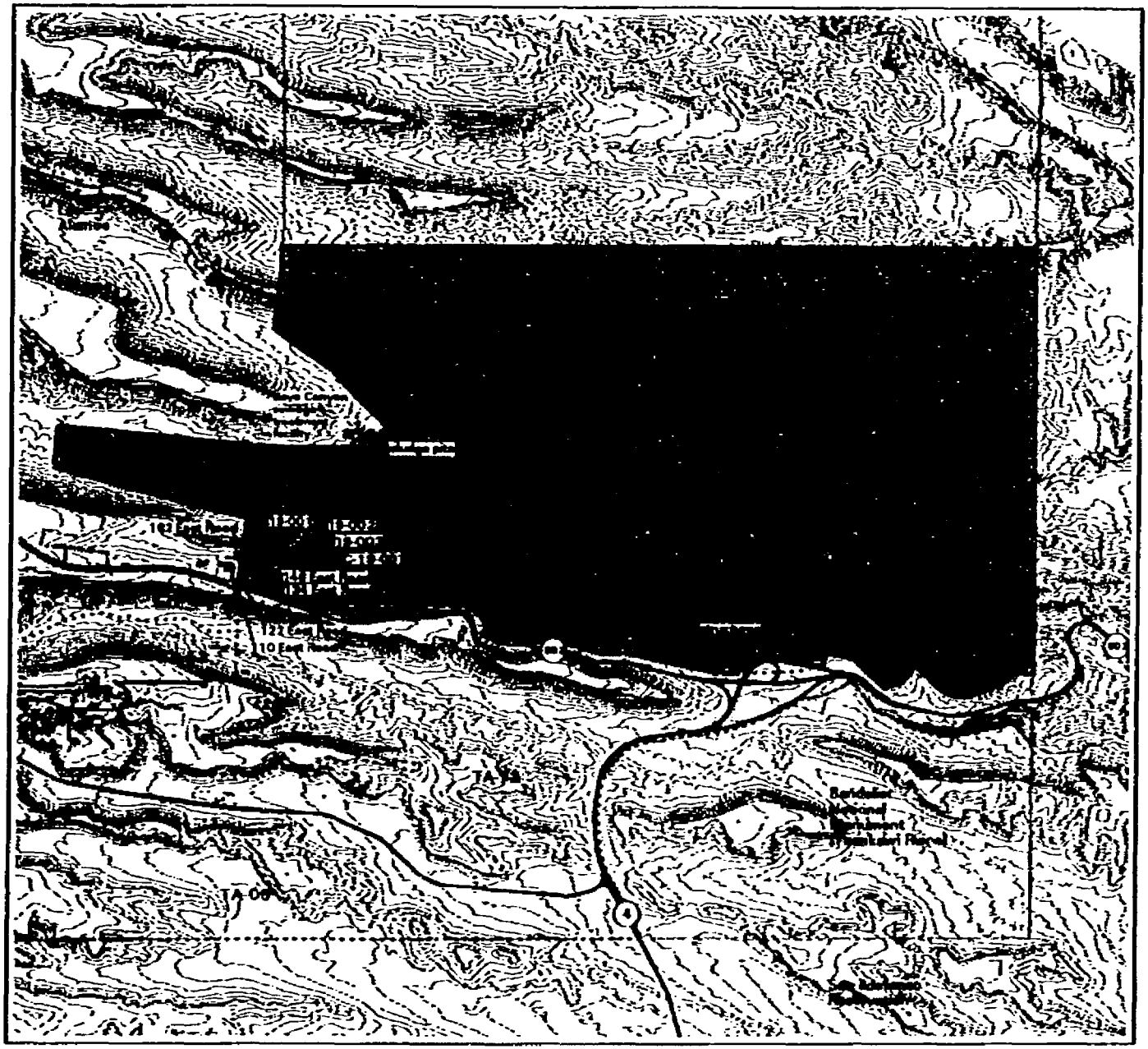
The TA 74 parcel contains four PRSs and three LANL numbered structures. Figure 11.2 shows the locations of the PRSs and structures within the parcel. Three of the PRSs are located on a mesa point situated at the southwestern corner of the parcel, and the fourth, a former surface disposal area for demolition debris, is situated on the canyon wall below this mesa. Two of the three mesa-top PRSs are categorized as subsurface units. The third mesa-top PRS and the canyonside PRS are categorized as surface units. All four PRSs were the result of historical laboratory operations at TA-19. TA-19 is no longer an active technical area at LANL.

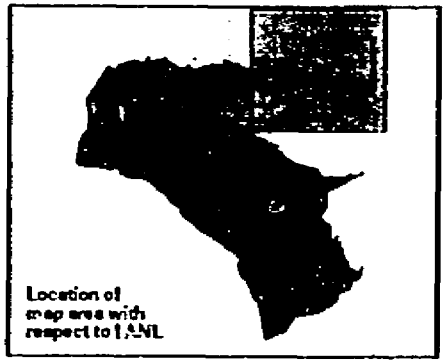
The four PRSs were sampled by the LANL ER Project, and the results are presented and discussed in Section 5.3, "Extent of Contamination". A septic tank and a drain line associated with the subsurface units were subsequently removed, and the debris in the canyonside surface disposal area was removed and disposed. All four sites have been recommended for NFA because they to do not present a risk to human health.

The TA-74 parcel also contains three LANL numbered structures. These include a water tower, water storage tank, and a water well, which are all part of the water supply system that DOE transferred to Los Alamos County via long-term lease (September 8, 1998). None of these structures is currently scheduled for D&D and so D&D costs are not presented in Table 11.7.1, "Estimated Remedial Action and D&D Costs and Durations", for these structures. D&D costs for these structures have been estimated for information purposes only, and can be found in Appendix A of this report.

The Bayo Canyon sewage treatment plant abuts the western boundary of the TA-74 parcel. This facility was constructed by and is operated by Los Alamos County. The facility is not now, nor has it ever been, under DOE control, and so it is not discussed in this report.

Figure 11.2: Technical Area 74 Site





Boundary, TA

Contour, 20 foot

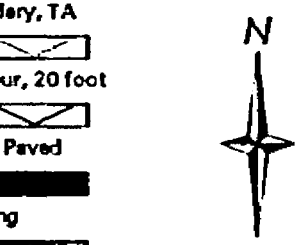
Road, Paved

Building

Potential Land Transfer Site

50 Foot Buffer Around Potential Land Transfer Site

Potential Release Site



0 3000 6000
FEET

0 914 1828
METERS

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum

NOTICE: The information on this map is provisional. Feature locations are dependent on scale and cartography and their accuracy may not have been confirmed. Data are from various sources and are part of the FIMAD repository.

FIMAD Plot ID: G107291 06 Jan 99

11.3 Extent of Contamination

The four PRSs located in TA-74 have been sampled, and the results are presented in Table 11.3.1. All of the PRSs are located on a small mesa point in the southwestern corner of the parcel, and so the existing PRS-related contamination is remote from the main area of the parcel. All sampling was conducted in surface soils found at the vicinity of the four PRSs. The results show that only arsenic and five organic compounds were detected at concentrations exceeding cleanup goals. Naturally-occurring background concentrations of arsenic in the Los Alamos area are frequently found to be above calculated cleanup goals, however.

Table 11.3.1
PRS Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)[37]
Land Use Scenario: Cultural and Environmental Preservation

Contaminant	Industrial PRG (mg/kg)	Number Samples Collected	Number Detects > PRG	Mean Conc. of Detects (mg/kg)
Arsenic	3	50	12	2.2
Benzo(a)anthracene	3.6	22	2	4.4
Benzo(a)pyrene	0.36	22	3	4.6
Benzo(b)fluoranthene	3.6	22	2	5.1
Dibenz(a,h,)anthracene	0.36	22	2	1.00
Indeno(1,2,3-cd)pyrene	3.6	22	2	3.4

Sampling has also been conducted in the reaches of Pueblo Canyon contained in the TA-74 parcel. The results, which are presented in Table 11.3.2, show that arsenic and one organic compound have been detected above cleanup goals. Additional investigations in the reaches of Pueblo and Bayo Canyons are currently ongoing to support decision-making on final actions for the canyon bottoms.

Table 11.3.2
Canyons Contaminants Exceeding Region 9 Preliminary Remediation Goals (PRGs)
Land Use Scenario: Cultural and Environmental Preservation

Contaminant	Industrial PRG (mg/kg)	Number Samples Collected	Number Detects > PRG	Mean Conc. of Detects (mg/kg)
Arsenic	3	22	1	2.0
Benzo(a)pyrene	0.36	9	1	0.68

[37] PRGs represent the cleanup goals that must be achieved to prepare a site for a specified land use. Residential PRGs are lower, and allow for the least amount of residual contamination to remain on site. Industrial PRGs are higher, and are appropriate to use when a site is being proposed for commercial and industrial development. To determine which set of PRGs would be appropriate for cultural and environmental preservation, both the potential for exposure to residual contamination and the impacts of remediation were evaluated. On the basis of this evaluation, it was determined that industrial PRGs are appropriate for use under a cultural or environmental preservation land use scenario.

11.4 Regulatory Status

Three of the PRSs contained in this parcel are listed in the HSWA Module of LANL's RCRA permit, and one is not. The NMED is the AA for PRSs listed on the permit, and must concur that no further action is required at a PRS before the PRS can be removed from the permit. For the one TA-74 PRS that is not on the permit, DOE is the AA that must concur on "NFA" recommendations for ER action to be considered complete. All four units have been recommended for NFA because they do not present a risk to human health. Neither the DOE nor NMED has concurred with any of the four recommendations for NFA based on human health risk, alone. The NMED has directed that additional sampling is to be conducted to more fully define the extent of surface contamination, and to ascertain whether or not subsurface contamination exists at levels above cleanup goals.

Presented below is a summary of the regulatory status of the PRSs within the bounds of this parcel.

Table 11.4.1
Summary of Regulatory Status

PRS Type	Under Investigation	Recommended for Human Health NFA	NFA Concurrence by DOE	NFA Concurrence by NMED	Under Reconsideration	Recommended for Integrated NFA
Subsurface units	-	1	-	-	-	-
Surface units	-	1	-	-	-	-
Outfalls	-	2	-	-	-	-

11.5 Other Concerns

The TA-74 parcel is traversed by Pueblo and Bayo Canyons, which are known to contain residual contamination from historical operations at the Laboratory. Specifically, radioactive liquid waste was discharged into upper Pueblo Canyon from 1943 to 1965 as a result of operations at TA-45. TA-45 was decommissioned and cleaned up in 1965, and there has been no discharge of radioactive liquid waste into Pueblo Canyon since that time. The sources of contamination in upper Bayo Canyon were firing sites that operated from 1945 to 1963, and dispersed both metals and depleted uranium during test shots. The firing sites were decommissioned in 1965.

The LANL ER Project is in the process of investigating these and other canyons drainage systems to characterize the nature and extent of contamination they contain. Thus far, radionuclides that have been detected in the TA-74 parcel above levels associated with fallout from world-wide nuclear tests include tritium, plutonium-238, 239, and 240, and americium-241. The distribution of these

radionuclides is limited to the sediment deposits within either existing stream channels or the channels that the streams might have formerly followed at any time since 1943. Contaminants were identified in the perched groundwater in wells in Pueblo Canyon. Above background concentrations of tritium and uranium were found 180 to 280 feet below the land surface. Any further characterization or remediation of these groundwaters would be done in the context of the entire canyon system and not at the scale of this parcel. Therefore, no characterization or remediation costs for groundwater are included in this assessment.

Although additional sampling might be warranted to more fully characterize the nature and extent of canyons contamination, the limited sampling conducted to date indicates that the existing levels of contamination found in the TA-74 parcel canyons systems are orders of magnitude lower than those that would elicit health concerns. The levels of contaminants that exist today are expected only to decrease over time, because there is no longer a source of contaminant discharge into either of the canyons systems, and contaminated sediments will be dispersed over time by stream flow. However, the existing contamination of sediments and spring waters may limit their use as sources for cultural [medicinal and artistic] uses and ceremonial use, even with contamination levels orders of magnitude below those eliciting health concerns. The latter is relevant because the proposed land use for the TA-74 parcel is cultural and environmental preservation.

In any case, the canyon bottoms will have to be characterized and, if necessary, remediated, prior to conveyance and transfer. The characterization of any canyons system can be very complex, and the complexity will depend on the drainage basin area; the number of subdrainages; the number, size and distribution of the source terms located upstream; the depth to alluvial groundwater; and the presence of ephemeral or perennial surface waters. The features of the canyon associated the TA-74 parcel will make its characterization complex, particularly because of the types and numbers of source terms located upstream, and the presence of shallow alluvial groundwater. Remediation, if it is required, may be complicated by the presence of cultural resources that exist within these canyons, which will make access difficult in many areas without disturbing such resources. As compared with other canyon systems that drain into the parcels proposed to be transferred these canyons are relatively broad and flat. Residential and/or cultural preservation future land uses are possible, given due consideration to the fact that large parts of the canyons are considered floodplains. DOE anticipates any remediation that might be required in this canyon to be difficult and costly, though perhaps not as difficult as other canyons in the LANL region.

11.6 Proposed Remedies by Type

The potential recipients propose to use this parcel for cultural and environmental preservation. The remedies described for the PRSs in the TA-74 parcel were identified on the basis of this land use scenario, and reflect the estimated costs of the remedial actions necessary for conveyance and transfer of this parcel. The

following table summarizes the remedies proposed to be undertaken given the land use scenario of cultural and environmental preservation.

Table 11.6.1
Proposed Remedies by Type
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure/Other Type	Proposed Remedy			
	Removal	In Situ Treatment	In Situ Containment	No Action
Subsurface units	-	-	-	1
Surface units	-	-	-	1
Outfalls	-	-	-	2
Type II Structures	-	-	-	3
Canyons systems	-	-	-	2

11.7 Estimated Costs and Schedule

The following table summarizes the estimated costs and duration for the remedial activities and D&D within the TA-74 parcel, to prepare it for transfer under a land use scenario of cultural and environmental preservation. PRS and structure-specific information is included in Appendix A.

Note that although the proposed remedy for the canyons systems is "no remediation", the estimated cost of the alternative remedy, selective removal of sediments, is presented so that cost information can be evaluated as part of a decision-making process. The selective removal scenario assumes that ten percent of the soils and sediments in the wide canyon bottoms of this parcel will be removed (i.e., 98,881 cubic yards of low-level radioactively contaminated soils and sediments).

Table 11.7.1
Estimated Remedial Action and D&D Costs and Duration
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure Type/Other	Number of PRS/Structure Types	Estimated Costs for Completion ($K)	Range in Estimated Durations for Individual PRSs and Structures (months)
Subsurface units	1	0	0
Surface units	1	0	0
Outfalls	2	1,887	18
Canyons systems (no remediation/selective removal)	2	1,796/213,779	11-16/22
Total (low/high)	-	3,683/215,666	-

11.8 Estimated Waste Volumes

The following table summarizes the estimated volumes of waste to be generated during remedial activities within the TA-74 parcel.

Table 11.8.1
Estimated Remedial Action and D&D Waste Volumes
Land Use Scenario: Cultural and Environmental Preservation

PRS/Structure Type/Other	Projected Waste Volumes (cubic yards)							
	Solid	Hazardous	Low-Level	Mixed	PCB	PCB/Mixed	TRU	Asbestos
Surface Units	0	0	0	0	0	0	0	0
Outfalls	2	2	1	2	0	0	0	0
Subsurface Units	0	0	0	0	0	0	0	0
Canyons systems (no remediation/ Selective removal)	0	0	0/98,881 [36]	0	0	0	0	0
Total (low/high)	2	2	1/98,882	2	0	0	0	0

[36] The higher number is not shown in Appendix A because the database cannot hold two different sets of waste volumes under one land use scenario. It is documented in LANL ER Project files.

APPENDIX A

PRS, STRUCTURE, AND LAND USE REPORTS

From the

ER-CAT DATABASE

This appendix is composed of five data reports that were generated from the Environmental Restoration Conveyance and Transfer (ER-CAT) database. Details about the information provided in each report can be found in Appendix C.

The five data reports found in Appendix A were used to prepare the remedy, cost, and waste summary tables found in the parcel chapters (Chapters 2-11) of the ER report. An overview of each of the five data reports, in the order in which they appear, is provided below. Following the overview is a road map for performing a crosswalk between the data reports and the chapter tables.

Overview of Data Reports

PRS Parcel Report. This report is organized by parcel. It contains general information for every PRS and canyons system located in a parcel. It does not include the Site 22 or Manhattan Monument parcels because there are no PRSs in these parcels. For crosswalk purposes, the most important pieces of information it contains are the PRS Number and the PRS Type. The PRS Type is important because the remedy, cost, and waste tables in the parcel chapters summarize all information by PRS type. The PRS Number is important because it must be used to perform a crosswalk between this report and the two subsequent reports, PRS Reports for Land Use Scenarios 1 and 2, respectively.

PRS Report for Land Use Scenario 1. This report is organized by parcel. For each PRS and canyons system located within a parcel, it contains information on proposed remedy, estimated waste volumes to be generated, and estimated costs of remedial action (which includes both characterization and remediation) under one of the proposed land use scenarios for that parcel. The specific proposed land use to which the data pertains, is listed beneath the parcel name. Because the field PRS Type does not appear in this report, it is necessary to use the PRS Number from the PRS Parcel Report to perform the crosswalk between PRS Type and remedy, waste volume, and cost. The Site 22 and Manhattan Monument parcels are excluded from this report because they contain no PRSs.

PRS Report for Land Use Scenario 2. This report is identical to the previous report, except that it contains the proposed remedies (and associated waste volumes and costs) that would be employed if a parcel is contemplated for a second land use. The TA-21, Airport, White Rock Y, and TA-74 parcels have only one contemplated land use, and so the information presented in this report for those parcels is identical to that provided in the previous report. The DP Road, LAAO, White Rock, and Rendija Canyon parcels have two contemplated land uses, and so the information presented in this report will differ in some, if not all, cases from that presented in the previous report. The Site 22 and Manhattan Monument parcels are excluded from this report because they contain no PRSs.

Structure Parcel Report. This report is analogous to the PRS parcel report, in that it contains general information about the structures located in each parcel. The Structure Type is found in this report; this information is necessary to conduct a crosswalk between the remedy, cost, and waste summary tables found in Chapters 2-11. The Structure Number is necessary to perform a crosswalk between this report and the Structure Report for Land Use, which contains information on the estimated costs and waste volumes associated with decommissioning each structure.

Structure Report for Land Use. This report is analogous to the PRS Reports for Land Use Scenarios 1 and 2, in that it contains information about the costs and waste volumes associated with decommissioning each structure. However, because there is only one remedy available for structures – decommissioning – regardless of land use, there is only one structure report. The Rendija Canyon, Site 22, and Manhattan Monument parcels are excluded from this report, because they have no structures associated with them.

Performing a Crosswalk between Data Reports and Chapter Tables

The LAAO Parcel, which is discussed in Chapter 4, will be used as an example to illustrate how to perform a crosswalk between the chapter tables and the data reports.

Table 4.6.1: Proposed Remedies by Type, Commercial Development. The data reports can be used to gather specific information on the PRSs and structures listed by type in this table. Turn first to the PRS Parcel Report, to the LAAO Parcel. The one "surface unit", for example, is PRS Number 00-003. Now turn to the second data report in Appendix A, the PRS Report for Land Use Scenario 1. Locate PRS Number 00-003 in the LAAO parcel, and you will see the proposed remedy for that PRS under the land use of commercial development; the estimated types and volumes of waste to be generated during remedial action; and the estimated costs for remedial action. To locate similar information for structures, turn first to the Structure Parcel Report. Then, using the Structure Number for the crosswalk, turn to the last data report in Appendix A, Structure Report for Land Use, and see the proposed remedy (decommissioning), estimated waste volumes, and costs.

It is important to note that the ER Report assumes that some structures may be retained for beneficial use under certain land use scenarios (the same is not true for PRSs; it is assumed that all PRSs will be remediated). For example, under the commercial land use scenario at LAAO, it is assumed that both the LAAO building and the pump station will be retained for beneficial reuse. When assumptions are made about certain structures being retained for beneficial use, these assumptions will always be stated in the chapter section entitled, "Description of PRSs and Structures within the...Parcel".

Note that the proposed remedy in Table 4.6.1 for the LAAO building (Structure Number 43-39) and one Type IV structure (Structure Number 43-40) is "no action". Nevertheless, the estimated costs and waste volumes associated with decommissioning these structures are presented in the data report entitled, "Structure Report for Land Use", simply for the benefit of any decision-makers or stakeholders (e.g., Congress, the DOE, the potential land recipients) who might need to know the impacts associated with a different set of decommissioning assumptions. These cost and waste volumes are not, however, rolled up into Tables 4.7.1, Estimated Remedial Action and D&D Costs and Duration: Commercial Development" or Table 4.8.1, "Estimated Remedial Action and D&D Waste Volumes: Commercial Development".

Table 4.6.2: Proposed Remedies by Type, Residential Development. This table differs from the previous table only in the land use assumption. Therefore, the crosswalk between this table and the data reports is equivalent to that described for the previous table. The only difference is that the data report entitled, "PRS Report for Land Use Scenario 2" should be used instead of "PRS Report for Land Use Scenario 1" to obtain estimated costs and waste volumes for remedial action under the residential development scenario, which is the alternative scenario at the LAAO parcel to commercial development.

Table 4.7.1: Estimated Remedial Action and D&D Costs and Duration, Commercial Development. Every PRS and structure listed in Table 4.6.1 that has a proposed remedy other than "no action" is carried over to Table 4.7.1. Consequently, all three PRSs appear in Table 4.7.1 because the proposed remedy for each one is removal. In contrast, only one structure appears in Table 4.7.1; the two structures that are to be retained for beneficial use are not carried over from Table 4.6.1.

To calculate the remedial action and D&D costs presented in Table 4.7.1 from the data reports in Appendix A, first turn to the first data report, "PRS Parcel Report", and identify the PRS Numbers associated with each PRS Type. For example, there is one subsurface unit listed in this table. The PRS Parcel Report identifies this subsurface unit as PRS Number 00-012. Turning then to the PRS Report for Land Use Scenario 1, we see that the proposed remedy for this PRS is removal, and the estimated cost is $726,666 (which is rounded to $727K in Table 4.7.1).

The process for structures is equivalent. Turn first to the data report entitled, "Structure Parcel Report", and locate the structure number for the one, remaining Type IV structure (which we know from the text in Section 4.2 is Structure Number 43-41). Then, turn to the data report called "Structure Report for Land Use" and locate Structure Number 43-41. The estimated cost of decommissioning this structure is $2,455,378 (which is rounded to $2455K in Table 4.7.1).

Table 4.7.2: Estimated Remedial Action and D&D Costs and Duration, Residential Development. The process for the crosswalk between this table and the previous one is equivalent, except that the data report "PRS Report for Land Use Scenario 2" must be substituted in place of "PRS Report for Land Use Scenario 1". Using the same example as above, there is one subsurface unit listed in Table 4.7.2. The PRS Parcel Report identifies this subsurface unit as PRS Number 00-012. Turning then to the PRS Report for Land Use Scenario 2, we see that the proposed remedy for this PRS is removal, and the estimated cost is $836,882 (which is rounded to $837K in Table 4.7.2). Note that the remedial action cost under the residential land use scenario is slightly higher than it is under the commercial land use scenario, even thought the proposed remedy is the same. The reason for this cost difference becomes clear when waste volumes are compared. Under the commercial land use scenario, and estimated 83 cubic yards of solid waste will be removed. In contrast, under the residential land use scenario, the remedial action is more extensive, and an estimated 121 cubic yards of solid waste will be removed.

The crosswalk process for structures is identical to that described above. To restate, turn first to the data report entitled, "Structure Parcel Report", and locate the structure number for the one, remaining Type IV structure (which we know from the text in Section 4.2 is Structure Number 43-41). Then, turn to the data report called "Structure Report for Land Use" and locate Structure Number 43-41. The estimated cost of decommissioning this structure is $2,455,378 (which is rounded to $2455K in Table 4.7.2). Note that the decommissioning cost for each structure does not vary with land use; the only choices are to leave it intact at no cost, or to decommission it at the cost listed in the Structure Report for Land Use.

Table 4.8.1: Estimated Remedial Action and D&D Waste Volumes, Commercial Development. Every PRS and structure listed in Table 4.6.1 that has a proposed remedy other than "no action" is carried over to Table 4.8.1. Consequently, all three PRSs appear in Table 4.8.1 because the proposed remedy for each one is removal. In contrast, only one structure appears in Table 4.8.1; the two structures that are to be retained for beneficial use are not carried over from Table 4.6.1.

To calculate the remedial action and D&D waste volumes presented in Table 4.8.1 from the data reports in Appendix A, first turn to the first data report, "PRS Parcel Report", and identify the PRS Numbers associated with each PRS Type. For example, there is one subsurface unit listed in this table. The PRS Parcel Report identifies this subsurface unit as PRS Number 00-012. Turning then to the PRS Report for Land Use Scenario 1, we see that the proposed remedy for this PRS is removal, and the estimated waste volume is 83 cubic yards of solid waste. This number is carried over to Table 4.8.1

The crosswalk process for structures is equivalent. Turn first to the data report entitled, "Structure Parcel Report", and locate the structure number for the one, remaining Type IV structure (which we know from the text in Section 4.2 is Structure Number 43-41). Then, turn to the data report called "Structure Report for Land Use" and locate Structure Number 43-41. The estimated waste volumes associated with decommissioning this structure are 256 cubic yards of solid waste, and 46 cubic yards of asbestos. These numbers are carried over to Table 4.8.1.

Table 4.8.2: Estimated Remedial Action and D&D Waste Volumes, Residential Development. The process for the crosswalk between this table and the previous one is equivalent, except that the data report "PRS Report for Land Use Scenario 2" must be substituted in place of "PRS Report for Land Use Scenario 1". Using the same example as above, there is one subsurface unit listed in Table 4.8.2. The PRS Parcel Report identifies this subsurface unit as PRS Number 00-012. Turning then to the PRS Report for Land Use Scenario 2, we see that the proposed

remedy for this PRS is removal, and the estimated waste volume is 121 cubic yards of solid waste. This number is carried over to Table 4.8.2.

The crosswalk process for structures is identical to that described above. To restate, turn first to the data report entitled, "Structure Parcel Report", and locate the structure number for the one, remaining Type IV structure (which we know from the text in Section 4.2 is Structure Number 43-41). Then, turn to the data report called "Structure Report for Land Use" and locate Structure Number 43-41. The estimated waste volumes associated with decommissioning this structure are 256 cubic yards of solid waste, and 46 cubic yards of asbestos. These numbers are carried over to Table 4.8.2.

PRS Parcel Report

***Does not include the following Parcels:*

Site 22
Monument Site

Airport Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
00-034(a)	0			Surface Unit	70000	Non-HSWA	Under Investigation	In progress	No	FY 04
73-001(a)	73	1775863.06	1634544.46	Subsurface Unit	606946	HSWA	Under Investigation	In progress	Yes	FY 07
73-001(b)	73	1775180.57	1637329.28	Subsurface Unit	3226	HSWA	Under Investigation	In progress	Yes	FY 07
73-001(c)	73	Multiple Locations	Multiple Locations	Subsurface Unit	88879	HSWA	Under Investigation	In progress	Yes	FY 07
73-001(d)	73	1775262.42	1636743.31	Subsurface Unit	74873	HSWA	Under Investigation	In progress	Yes	FY 07
73-002	73	1776502.03	1632859.24	Surface Unit	18434	HSWA	Under Investigation	In progress	Yes	FY 01
73-003	73	1776263.50	1632723.01	Surface Unit	127	Non-HSWA	Under Investigation	In progress	Yes	FY 00
73-004(a)	73	Multiple Locations	Multiple Locations	Outfall	71	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 00
73-004(b)	73	Multiple Locations	Multiple Locations	Outfall	79	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 00

Airport Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
73-004(c)	73	Multiple Locations	Multiple Locations	Outfall	84	HSWA	Proposed for NFA based on Human Health	In progress	No	NA
73-004(d)	73	1775923.20	1634261.76	Outfall	112	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 07
73-005	73	1775489.59	1632760.44	Surface Unit	59495	HSWA	Under Investigation	In progress	Yes	FY 00
73-006	73	Multiple Locations	Multiple Locations	Outfall	2	HSWA	Under Investigation	In progress	Yes	FY 00
73-007	73			Outfall	500	Non-HSWA	Under Investigation	In progress	Yes	FY 00
C-31-001	31	1776101.40	1631357.48	Surface Unit	173663	Non-HSWA	NFA Concurrence by DOE	Completed	Yes	FY 00
C-73-001	73	1775988.53	1631977.90	Subsurface Unit	3444	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 00
C-73-002	73	1775988.53	1631977.90	Subsurface Unit	3444	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 00
C-73-003	73	1775988.53	1631977.90	Subsurface Unit	3444	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 00

Airport Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
C-73-004	73	1775988.52	1631977.90	Subsurface Unit	3444	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 00
C-73-005(a)	73			Material Disposal Unit	150	Non-HSWA	Under Investigation	In progress	Yes	FY 00
C-73-005(b)	73			Material Disposal Unit	100	Non-HSWA	Under Investigation	In progress	Yes	FY 00
C-73-005(c)	73			Material Disposal Unit	100	Non-HSWA	Under Investigation	In progress	Yes	FY 00
C-73-005(d)	73			Material Disposal Unit	100	Non-HSWA	Under Investigation	In progress	Yes	FY 00
C-73-005(e)	73			Material Disposal Unit	100	Non-HSWA	Under Investigation	In progress	Yes	FY 00
C-73-005(f)	73			Material Disposal Unit	100	Non-HSWA	Under Investigation	In progress	Yes	FY 00

DOE LAAO Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
00-003	0	1776373.95	1620862.75	Surface Unit	513	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 04
00-012	0	1776388.12	1620805.41	Subsurface Unit	3973	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 04
00-030(i)	0	1776405.84	1622106.12	Outfall	185	Non-HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 04

DP Road Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
00-004	0	1775086.53	1627977.57	Surface Unit	14330	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 00
00-010(a)	0	1774673.74	1629220.40	Subsurface Unit	11866	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 04
00-010(b)	0	1775129.49	1628149.40	Subsurface Unit	617	Non-HSWA	Under Reconsideration	In progress	Yes	FY 00
00-027	0			Surface Unit	45000	Non-HSWA	Under Investigation	In progress	Yes	FY 04
00-030(b)	0	1775215.26	1628454.06	Surface Unit	27702	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 00
00-030(l)	0	1774888.32	1628062.54	Surface Unit	174	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 00
00-030(m)	0	1774910.97	1628137.57	Surface Unit	93	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 00
00-033(a)	0			Surface Unit	500	Non-HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 00
00-033(b)	0			Surface Unit	500	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 00

DP Road Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-029	21	1775538.31	1628801.03	Surface Unit	422272	HSWA	Under Investigation	Remediation	Yes	FY 01
DP Canyon2	21	Multiple Locations	Multiple Locations	Canyon		Non-HSWA	Under Investigation	In progress	No	FY 02

Rendija Canyon

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
00-011(a)	0	1786696.40	1634563.55	Surface Unit	1248063	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 04
00-011(c)	0	1788892.16	1630207.25	Surface Unit	373747	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 04
00-011(e)	0	1788491.36	1632942.35	Surface Unit	650801	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 04
00-015	0	1786583.46	1632701.12	Surface Unit	520882	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 03
C-00-002	0	Multiple Locations	Multiple Locations	Canyon	0	Non-HSWA	Under Investigation	In progress	Yes	FY 00

TA-21 Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-001	21	Multiple Locations	Multiple Locations	Surface Unit	9877	Non-HSWA	Under Investigation	In progress	No	FY 06
21-002(a)	21	Multiple Locations	Multiple Locations	Surface Unit	1	HSWA	Under Investigation	In progress	No	FY 01
21-002(b)	21	1774839.05	1631931.46	Surface Unit	567	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 02
21-003	21	1773957.39	1633361.83	Surface Unit	23805	HSWA	Under Investigation	In progress	Yes	FY 04
21-004(a)	21	1774811.99	1632265.69	Surface Unit	2545	Non-HSWA	Proposed for NFA based on Human Health	In progress	No	FY 03
21-004(b)	21	1774411.98	1633701.04	Surface Unit	921	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 03
21-004(c)	21	1774411.98	1633701.04	Surface Unit	921	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 03
21-004(d)	21	1774338.69	1633745.33	Outfall	1416	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 03
21-005	21	1774802.23	1631850.22	Subsurface Unit	66	HSWA	Under Investigation	In progress	No	FY 00

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-006(a)	21	Multiple Locations	Multiple Locations	Subsurface Unit	2347	HSWA	Under Investigation	In progress	No	FY 03
21-006(b)	21	Multiple Locations	Multiple Locations	Subsurface Unit	3775	HSWA	Under Investigation	In progress	Yes	FY 03
21-006(c)	21	1774375.46	1632238.22	Subsurface Unit	170	HSWA	Under Investigation	In progress	No	FY 02
21-006(d)	21	1774351.85	1632260.60	Subsurface Unit	305	HSWA	Under Investigation	In progress	No	FY 02
21-006(e)	21	1774225.27	1632373.32	Subsurface Unit	258	HSWA	Under Investigation	In progress	No	FY 02
21-006(f)	21	1774225.27	1632373.32	Subsurface Unit	258	Non-HSWA	Under Investigation	In progress	No	FY 02
21-007	21	1774519.12	1632657.54	Incinerator	1	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 05
21-008	21	1774451.33	1632173.49	Incinerator	234	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 03
21-009	21	1774802	1631200	Surface Unit	1500	Non-HSWA	Under Investigation	In progress	No	FY 01

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-010(a)	21	1774442.98	1632744.33	Surface Unit	4355	HSWA	Under Investigation	In progress	Yes	FY 06
21-010(b)	21	1774442.98	1632744.33	Surface Unit	4355	HSWA	Under Investigation	In progress	Yes	FY 06
21-010(c)	21	1774442.98	1632744.33	Surface Unit	4355	HSWA	Under Investigation	In progress	Yes	FY 06
21-010(d)	21	1774442.98	1632744.33	Surface Unit	4355	HSWA	Under Investigation	In progress	Yes	FY 06
21-010(e)	21	1774442.98	1632744.33	Surface Unit	4355	HSWA	Under Investigation	In progress	Yes	FY 06
21-010(f)	21	1774442.98	1632744.33	Surface Unit	4355	HSWA	Under Investigation	In progress	Yes	FY 06
21-010(g)	21	1774442.98	1632744.33	Surface Unit	4355	HSWA	Under Investigation	In progress	Yes	FY 06
21-010(h)	21	1774442.93	1632744.33	Surface Unit	4355	HSWA	Under Investigation	In progress	Yes	FY 06
21-011(a)	21	1774326.28	1632960.34	Surface Unit	9376	HSWA	Under Investigation	In progress	No	FY 05

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-011(b)	21	1774247.52	1633714.41	Subsurface Unit	481	HSWA	Under Investigation	In progress	No	FY 03
21-011(c)	21	1774501.94	1632745.20	Subsurface Unit	157	HSWA	Under Investigation	In progress	Yes	FY 06
21-011(d)	21	1774328.68	1632922.45	Surface Unit	27	HSWA	Under Investigation	In progress	No	FY 05
21-011(e)	21	1774323.64	1632937.09	Surface Unit	52	HSWA	Under Investigation	In progress	No	FY 05
21-011(f)	21	1774412.48	1632937.09	Surface Unit	54	HSWA	Under Investigation	In progress	No	FY 05
21-011(g)	21	1774404.40	1632949.71	Surface Unit	64	HSWA	Under Investigation	In progress	No	FY 05
21-011(h)	21	1774281.31	1632929.94	Surface Unit	162	Non-HSWA	Under Investigation	In progress	No	FY 05
21-011(i)	21	1774302.44	1632938.10	Surface Unit	83	HSWA	Under Investigation	In progress	No	FY 05
21-011(j)	21	1774302.44	1632938.10	Surface Unit	83	HSWA	Under Investigation	In progress	No	FY 05

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-011(k)	21	1774542.07	1633016.72	Outfall	3461	HSWA	Under Investigation	Interim Action	Yes	FY 02
21-012(a)	21	1774101.40	1633185.09	Subsurface Unit	597	HSWA	NFA Concurrence by NMED	Completed	No	FY 98
21-012(b)	21	1774056.15	1633007.75	Subsurface Unit	231	HSWA	Under Investigation	In progress	No	FY 06
21-013(a)	21	1773808.07	1635328.89	Surface Unit	1018	HSWA	Under Investigation	In progress	Yes	FY 03
21-013(b)	21	1774550	1631100	Surface Unit	9800	HWSA	Under Investigation	In progress	Yes	FY 05
21-013(c)	21	1774266.31	1634302.67	Surface Unit	22986	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 01
21-013(d)	21	1775070.81	1631089.14	Surface Unit	6916	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 01
21-013(e)	21	1775194.24	1630754.96	Surface Unit	9497	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 01
21-013(f)	21	1773885.80	1633285.57	Surface Unit	6358	Non-HSWA	Under Investigation	In progress	Yes	FY 04

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-013(g)	21	1774448	1631267	Surface Unit	13897	Non-HSWA	Under Investigation	In progress	Yes	FY 05
21-014	21	1774220.96	1633400.58	Material Disposal Unit	77811	HSWA	Under Investigation	In progress	Yes	FY 06
21-015	21	1775073.32	1630142.11	Material Disposal Unit	325431	HSWA	Under Investigation	In progress	Yes	FY 05
21-016(a)	21	Multiple Locations	Multiple Locations	Material Disposal Unit	7259	HSWA	Under Investigation	In progress	Yes	FY 06
21-016(b)	21	Multiple Locations	Multiple Locations	Material Disposal Unit	6676	HSWA	Under Investigation	In progress	Yes	FY 06
21-016(c)	21	Multiple Locations	Multiple Locations	Material Disposal Unit	487	HSWA	Under Investigation	In progress	Yes	FY 06
21-017(a)	21	1774310.77	1634043.75	Material Disposal Unit	15701	HSWA	Under Investigation	In progress	Yes	FY 04
21-017(b)	21	1774310.77	1634043.75	Material Disposal Unit	15701	HSWA	Under Investigation	In progress	Yes	FY 03
21-017(c)	21	1774310.77	1634043.75	Material Disposal Unit	15701	HSWA	Under Investigation	In progress	Yes	FY 03

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-018(a)	21	1774620	1631300	Material Disposal Unit	43560	HWSA	Under Investigation	In progress	Yes	FY 05
21-018(b)	21	1774774.00	1631373.72	Surface Unit	9608	HSWA	Under Investigation	In progress	Yes	FY 05
21-019(a)	21	1774406.69	1632325.09	Surface Unit	223	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(b)	21	1774271.06	1632421.31	Surface Unit	235	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(c)	21	1774578.67	1632275.63	Surface Unit	215	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(d)	21	1774174.04	1632662.25	Surface Unit	148	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(e)	21	1774098.81	1633792.27	Surface Unit	341	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(f)	21	1774059.95	1634012.23	Surface Unit	249	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(g)	21	1774286.87	1632980.06	Surface Unit	310	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-019(h)	21	1774376.78	1632195.40	Surface Unit	390	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(i)	21	1774322.39	1632366.52	Surface Unit	323	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(j)	21	1774314.62	1632482.46	Surface Unit	270	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(k)	21	1774061.20	1633850.94	Surface Unit	313	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(l)	21	1774074.08	1633920.78	Surface Unit	221	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-019(m)	21	1774639.34	1632331.99	Surface Unit	154	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 01
21-020(a)	21	1774597.34	1632450.19	Surface Unit	7868	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 05
21-020(b)	21	1774206.11	1634100.22	Surface Unit	5341	Non-HSWA	NFA Concurrence by DOE	In progress	Yes	FY 05
21-021	21	Multiple Locations	Multiple Locations	Surface Unit	10675107	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 06

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-022(a)	21	1774695.71	1632202.82	Subsurface Unit	1019	HSWA	Under Investigation	In progress	No	FY 06
21-022(b)	21	1774505.44	1632231.47	Subsurface Unit	316	HSWA	Under Investigation	In progress	Yes	FY 06
21-022(c)	21	1774459.28	1632367.86	Subsurface Unit	316	HSWA	Under Investigation	In progress	Yes	FY 06
21-022(d)	21	1774416.04	1632498.21	Subsurface Unit	297	HSWA	Under Investigation	In progress	Yes	FY 06
21-022(e)	21	1774367.42	1632618.58	Subsurface Unit	287	HSWA	Under Investigation	In progress	Yes	FY 06
21-022(f)	21	1774176.29	1633939.77	Subsurface Unit	1948	HSWA	Under Investigation	In progress	Yes	FY 02
21-022(g)	21	1774302.90	1632677.83	Subsurface Unit	191	HSWA	Under Investigation	In progress	Yes	FY 06
21-022(h)	21	1773925.16	1632594.56	Subsurface Unit	1853	HSWA	Under Investigation	In progress	Yes	FY 03
21-022(i)	21	1774291.30	1632171.59	Subsurface Unit	77	HSWA	Under Investigation	In progress	Yes	FY 03

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-022(j)	21	Multiple Locations	Multiple Locations	Subsurface Unit	401	HSWA	Under Investigation	Remediation	Yes	FY 03
21-023(a)	21	1774398.20	1632368.69	Subsurface Unit	97	HSWA	Under Investigation	In progress	No	FY 01
21-023(b)	21	1774415.28	1632367.26	Subsurface Unit	117	HSWA	Under Investigation	In progress	No	FY 01
21-023(c)	21	1774695	1631140	Outfall	255	HSWA	Under Investigation	In progress	Yes	FY 05
21-023(d)	21	1774422.62	1632252.91	Subsurface Unit	135	HSWA	Under Investigation	In progress	No	FY 01
21-024(a)	21	Multiple Locations	Multiple Locations	Outfall	790	HSWA	Under Investigation	In progress	Yes	FY 04
21-024(b)	21	Multiple Locations	Multiple Locations	Outfall	258	HSWA	Under Investigation	In progress	Yes	FY 01
21-024(c)	21	Multiple Locations	Multiple Locations	Outfall	248	HSWA	Under Investigation	In progress	Yes	FY 04
21-024(d)	21	1774167.84	1631841.24	Outfall	2269	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 03

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-024(e)	21	Multiple Locations	Multiple Locations	Outfall	532	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 02
21-024(f)	21	Multiple Locations	Multiple Locations	Outfall	4878	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 03
21-024(g)	21	1775034.19	1631837.61	Outfall	3919	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 02
21-024(h)	21	1774391.35	1633686.96	Outfall	1993	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 03
21-024(i)	21	Multiple Locations	Multiple Locations	Outfall	1439	HSWA	Under Investigation	In progress	Yes	FY 00
21-024(j)	21	1773975.76	1633688.80	Outfall	75	HSWA	Under Reconsideration	Completed	Yes	FY 03
21-024(k)	21	1773823.09	1633746.66	Subsurface Unit	1361	HSWA	Under Reconsideration	Completed	Yes	FY 03
21-024(l)	21	1774680.31	1632193.77	Outfall	23467	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 03
21-024(m)	21	1773783.15	1633973.03	Outfall	3774	HSWA	NFA Concurrence by NMED	Completed	Yes	FY 93

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-024(n)	21	1774310.15	1633910.08	Outfall	3183	HSWA	Under Reconsideration	Completed	Yes	FY 05
21-024(o)	21	Multiple Locations	Multiple Locations	Outfall	460	HSWA	Under Reconsideration	Completed	Yes	FY 02
21-025(a)	21	1774145.87	1633784.26	Subsurface Unit	1	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 00
21-025(b)	21	1774095.87	1634018.23	Subsurface Unit	1	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 00
21-026(a)	21	1773739.66	1635134.08	Subsurface Unit	2971	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 06
21-026(b)	21	1773739.04	1635189.93	Surface Unit	9236	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 06
21-026(c)	21	1773710.16	1635172.84	Subsurface Unit	1535	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 06
21-026(d)	21	1773861.91	1635286.76	Outfall	2963	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 03
21-027(a)	21	Multiple Locations	Multiple Locations	Surface Unit	3787	HSWA	Under Investigation	In progress	Yes	FY 04

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
21-027(b)	21	1773783.15	1633973.08	Outfall	3774	HSWA	NFA Concurrence by NMED	Completed	Yes	FY 93
21-027(c)	21	1774180.16	1631987.93	Outfall	1986	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 04
21-027(d)	21	1774630	1630980	Outfall	12000	HSWA	Under Investigation	In progress	Yes	FY 05
21-028(a)	21	1774507.37	1632733.95	Surface Unit	1	Non-HSWA	Under Investigation	In progress	Yes	FY 06
21-028(b)	21	1774247.94	1632680.20	Surface Unit	110	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 06
21-028(c)	21	1774421.45	1632364.14	Surface Unit	2306	Non-HSWA	Under Investigation	In progress	No	FY 06
21-028(d)	21	1774145.85	1633974.89	Surface Unit	4779	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 06
21-028(e)	21	1774601.02	1631932.49	Surface Unit	200	Non-HSWA	NFA Concurrence by DOE	Completed	Yes	FY 06
C-21-001	21	1774285.24	1632517.23	Surface Unit	1	Non-HSWA	Under Investigation	In progress	No	FY 06

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
C-21-002	21	1774431.62	1632732.95	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-003	21	1774292.87	1632187.66	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-004	21	1774237.24	1632099.94	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-005	21	1774360.49	1632889.41	Surface Unit	1	Non-HSWA	Under Investigation	In progress	No	FY 06
C-21-006	21	1774336.74	1632084.54	Surface Unit	1	Non-HSWA	Under Investigation	In progress	No	FY 06
C-21-007	21	1774321.99	1632971.23	Surface Unit	1	Non-HSWA	Under Investigation	In progress	No	FY 06
C-21-008	21	1774241.87	1632382.07	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-009	21	1774451.12	1632845.53	Surface Unit	1	Non-HSWA	Under Investigation	In progress	Yes	FY 06
C-21-010	21	1774431.62	1632740.07	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
C-21-011	21	1773998.37	1633770.17	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-012	21	1774543.62	1632709.26	Surface Unit	1	Non-HSWA	Under Investigation	In progress	Yes	FY 06
C-21-013	21	1774791.99	1632056.10	Subsurface Unit	1	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 06
C-21-014	21	1774739.24	1632561.07	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	Completed	No	FY 06
C-21-015	21	1774950	1631300	Subsurface Unit	2000	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 00
C-21-016	21	1775063.37	1631517.95	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-017	21	1775087.12	1631439.70	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-018	21	1775115.62	1631373.32	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-019	21	1775148.74	1631311.66	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
C-21-020	21	1775172.49	1631257.13	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-021	21	1775205.62	1631200.26	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-022	21	1774567.37	1632525.51	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-023	21	1774076.62	1633428.79	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-024	21	1774751.62	1631958.88	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-025	21	1774435.12	1631963.63	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-026	21	1774152.37	1633741.73	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-027	21	1774205.11	1632223.22	Surface Unit	1	Non-HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 06
C-21-028	21	1774885.62	1631233.19	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
C-21-029	21	1774633.12	1631480.01	Surface Unit	1	Non-HSWA	NFA Concurrence by DOE	In progress	No	FY 06
C-21-030	21	1774710	1631170	Surface Unit	1	Non-HSWA	Under Investigation	In progress	No	FY 06
C-21-031	21	1774368.74	1632108.26	Subsurface Unit	1	Non-HSWA	Under Investigation	In progress	No	FY 06
C-21-032	21	1773995.99	1633869.76	Subsurface Unit	1	Non-HSWA	Under Investigation	In progress	No	FY 06
C-21-033	21	1774319.62	1632975.95	Surface Unit	1	Non-HSWA	Under Investigation	In progress	No	FY 06
C-21-034	21	1774389.49	1632702.13	Subsurface Unit	1	Non-HSWA	Under Investigation	In progress	Yes	FY 06
C-21-035	21	1774340.87	1632796.98	Surface Unit	1	Non-HSWA	Under Investigation	In progress	Yes	FY 06
C-21-036	21	1774355.12	1632775.63	Surface Unit	1	Non-HSWA	Under Investigation	In progress	Yes	FY 06
C-21-037	21	1774372.87	1632730.57	Surface Unit	1	Non-HSWA	Under Investigation	In progress	Yes	FY 06

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Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
DP Canyon	21	Multiple Locations	Multiple Locations	Canyon		Non-HSWA	Under Investigation	In progress	No	FY 01
LA Canyon	21	Multiple Locations	Multiple Locations	Canyon		Non-HSWA	Under Investigation	In progress	No	FY 02
Sitewide Excavation	21	Multiple Locations	Multiple Locations	Surface Unit	10675107	Non-HSWA	Under Investigation	In progress	Yes	FY 06

TA-74 Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
19-001	19	1774193.51	1641743.60	Outfall	27	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 06
19-002	19	1774308.77	1641893.72	Subsurface Unit	15845	HSWA	Proposed for NFA based on Human Health	Remediation	Yes	FY 06
19-003	19	1774145.82	1641936.72	Outfall	66	HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 06
C-00-004	0	Multiple Locations	Multiple Locations	Canyon	0	Non-HSWA	Under Investigation	In progress	Yes	FY 00
C-00-005	0	Multiple Locations	Multiple Locations	Canyon	5425011	Non-HSWA	Under Investigation	In progress	Yes	FY 00
C-19-001	19	1774114.39	1641856.47	Surface Unit	58879	Non-HSWA	Proposed for NFA based on Human Health	In progress	Yes	FY 06

White Rock Site

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
C-00-009	0	Multiple Locations	Multiple Locations	Canyon	51667	Non-HSWA	Under Investigation	In progress	Yes	FY 00

White Rock Y

Identification Code-PRS Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Areal Extent (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	Schedule for Completion
C-00-006	0	Multiple Locations	Multiple Locations	Canyon	12917	Non-HSWA	Under Investigation	In progress	Yes	FY 01
C-00-007	0	Multiple Locations	Multiple Locations	Canyon	77500	Non-HSWA	Under Investigation	In progress	Yes	FY 00

PRS Report for Land Use Scenario 1

***Does not include the following Parcels:*

Site 22
Monument Site

Airport Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-034(a)	In Situ Containment	1	0	0	0	0	0	0	0	$544,305	PRS In/Remedy Different	
73-001(a)	In Situ Containment	20000	0	0	0	0	0	0	0	$13,091,470	PRS In/Remedy Different	
73-001(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-001(a)
73-001(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-001(a)
73-001(d)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-001(a)
73-002	Removal	4000	0	400	0	0	0	0	0	$12,398,751	PRS In/Remedy Different	
73-003	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-004(a)
73-004(a)	In Situ Containment	20	0	0	0	0	0	0	0	$663,856	PRS In/Remedy Different	

Airport Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
73-004(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-004(a)
73-004(c)	No Action	0	0	0	0	0	0	0	0	$13,608	PRS Out	
73-004(d)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-001(a)
73-005	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
73-006	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-004(a)
73-007	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
C-31-001	No Action	0	0	0	0	0	0	0	0	$677,937	PRS Out	
C-73-001	No Action	0	0	0	0	0	0	0	0	$13,975	PRS Out	

Airport Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-73-002	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with C-73-001
C-73-003	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with C-73-001
C-73-004	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with C-73-001
C-73-005(a)	Removal	35	0	0	0	0	0	0	0	$814,036	PRS In/Remedy Different	
C-73-005(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
C-73-005(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
C-73-005(d)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
C-73-005(e)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)

Airport Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-73-005(f)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
25	24056	0	400	0	0	0	0	0	$28,217,937

DOE LAAO Site

Proposed Commercial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-003	Removal	1	0	0	0	0	0	0	0	$469,229	PRS In/Remedy Different	
00-012	Removal	83	0	0	0	0	0	0	0	$726,656	PRS In/Remedy Different	
00-030(i)	Removal	10	0	0	0	0	0	0	0	$601,938	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
3	94	0	0	0	0	0	0	0	$1,797,823

DP Road Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-004	Removal	0	10	0	0	0	0	0	50	$247,056	PRS In/Remedy Different	
00-010(a)	No Action	0	0	0	0	0	0	0	0	$356,876	PRS In/Remedy Different	
00-010(b)	No Action	0	0	0	0	0	0	0	0	$421,396	PRS In/Remedy Different	
00-027	In Situ Containment	10	0	0	0	0	0	0	0	$2,511,795	PRS In/Remedy Different	
00-030(b)	In Situ Containment	0	0	0	0	0	0	0	0	$474,542	PRS In/Remedy Different	
00-030(l)	No Action	0	0	0	0	0	0	0	0	$471,586	PRS In/Remedy Different	
00-030(m)	No Action	0	0	0	0	0	0	0	0	$584,166	PRS In/Remedy Different	
00-033(z)	Removal	0	740	0	0	0	0	0	0	$1,820,216	PRS In/Remedy Different	

DP Road Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-033(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 00-033(a)
21-029	Removal	0	0	0	0	0	0	0	0	$1,503,197	PRS In/Remedy Different	
DP Canyon2	No Action	0	0	0	0	0	0	0	0	$786,036	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
11	10	750	0	0	0	0	0	50	$9,176,865

Rendija Canyon

Proposed Preservation Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-011(a)	No Action	0	0	0	0	0	0	0	0	$304,088	PRS In/Remedy Different	
00-011(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 00-011(a)
00-011(e)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 00-011(a)
00-015	Removal	0	7500	0	0	0	0	0	0	$17,804,828	PRS Out	
C-00-002	No Action	0	0	0	0	0	0	0	0	$943,851	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
5	0	7500	0	0	0	0	0	0	$19,052,767

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-001	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-002(a)	No Action	0	0	0	0	0	0	0	0	$7,176	PRS In/Remedy Different	
21-002(b)	No Action	0	0	0	0	0	0	0	0	$289,973	PRS In/Remedy Different	
21-003	In Situ Treatment	0	0	0	91	0	0	0	0	$6,724,287	PRS In/Remedy Different	
21-004(a)	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$295,308	PRS In/Remedy Different	
21-004(b)	No Action	0	0	0	0	0	0	0	0	$287,739	PRS In/Remedy Different	
21-004(c)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-004(b)
21-004(d)	No Action	0	0	0	0	0	0	0	0	$406,212	PRS Out	

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-005	No Action	0	0	0	0	0	0	0	0	$294,208	PRS In/Remedy Different	
21-006(a)	Removal	0	0	16	0	0	0	10	0	$2,299,954	PRS In/Remedy Different	
21-006(b)	Removal	0	0	3	91	0	0	0	0	$351,250	PRS In/Remedy Different	
21-006(c)	Removal	0	0	5	0	0	0	0	0	$569,421	PRS In/Remedy Different	
21-006(d)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-006(c)
21-006(e)	No Action	0	0	0	0	0	0	0	0	$306,607	PRS In/Remedy Different	
21-006(f)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-006(e)
21-007	No Action	0	0	0	0	0	0	0	0	$82,123	PRS In/Remedy Different	

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-008	No Action	0	0	0	0	0	0	0	0	$243,846	PRS In/Remedy Different	
21-009	In Situ Containment	0	0	0	0	0	0	0	0	$390,386	PRS In/Remedy Different	
21-010(a)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(d)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(e)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(f)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-010(g)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(h)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-011(a)	No Action	0	0	0	0	0	0	0	0	$1,391,526	PRS In/Remedy Different	
21-011(b)	Removal	0	0	69	0	0	0	0	0	$1,090,034	PRS In/Remedy Different	
21-011(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-011(d)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(e)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(f)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-011(g)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(h)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(i)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(j)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(k)	Removal	0	0	2000	0	0	0	0	0	$9,123,162	PRS In/Remedy Different	
21-012(a)	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	
21-012(b)	No Action	16	0	0	0	0	0	0	0	$662,932	PRS In/Remedy Different	
21-013(a)	No Action	0	0	0	0	0	0	0	0	$283,432	PRS In/Remedy Different	

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-013(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)
21-013(c)	No Action	0	0	0	0	0	0	0	0	$1,084,345	PRS In/Remedy Different	
21-013(d)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-013(c)
21-013(e)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-013(c)
21-013(f)	In Situ Treatment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-003
21-013(g)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)
21-014	In Situ Containment	0	0	13	0	0	0	13	0	$7,269,015	PRS In/Remedy Different	
21-015	In Situ Containment	150	0	177	0	0	0	0	0	$21,440,417	PRS In/Remedy Different	

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-016(a)	In Situ Containment	0	0	53	0	0	0	0	0	$7,768,278	PRS In/Remedy Different	
21-016(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-016(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-017(a)	Removal	0	0	13	0	0	0	0	0	$25,504,234	PRS In/Remedy Different	
21-017(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-017(a)
21-017(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-017(a)
21-018(a)	Removal	0	0	7	14	0	0	0	0	$59,796,603	PRS In/Remedy Different	
21-018(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-019(a)	No Action	0	0	0	0	0	0	0	0	$114,161	PRS In/Remedy Different	
21-019(b)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(c)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(d)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(e)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(f)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(g)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(h)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-019(i)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(j)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(k)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(l)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(m)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-020(a)	No Action	0	0	0	0	0	0	0	0	$399,030	PRS In/Remedy Different	
21-020(b)	No Action	0	0	0	0	0	0	0	0	$392,422	PRS In/Remedy Different	
21-021	No Action	0	0	0	0	0	0	0	0	$3,451,571	PRS In/Remedy Different	

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-022(a)	Removal	0	0	45	0	0	0	0	0	$1,053,359	PRS In/Remedy Different	
21-022(b)	Removal	0	0	620	0	0	0	31	0	$8,010,938	PRS In/Remedy Different	
21-022(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(b)
21-022(d)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(b)
21-022(e)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(b)
21-022(f)	Removal	0	0	42	0	0	0	0	0	$966,289	PRS In/Remedy Different	
21-022(g)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(b)
21-022(h)	Removal	0	0	26	0	0	0	0	0	$1,133,237	PRS In/Remedy Different	

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-022(i)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(h)
21-022(j)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(h)
21-023(a)	No Action	0	0	0	0	0	0	0	0	$345,585	PRS In/Remedy Different	
21-023(b)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-023(a)
21-023(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)
21-023(d)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-023(a)
21-024(a)	Removal	32	0	0	0	0	0	0	0	$861,676	PRS In/Remedy Different	
21-024(b)	Removal	0	0	65	0	34	0	0	0	$1,474,923	PRS In/Remedy Different	

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-024(c)	Removal	0	0	0	0	14	20	0	0	$2,292,170	PRS In/Remedy Different	
21-024(d)	Removal	0	0	94	0	0	0	0	0	$1,740,508	PRS In/Remedy Different	
21-024(e)	Removal	0	0	38	0	0	0	0	0	$1,709,170	PRS In/Remedy Different	
21-024(f)	Removal	0	0	16	0	0	0	0	0	$1,567,491	PRS In/Remedy Different	
21-024(g)	Removal	34	0	0	0	0	0	0	0	$851,533	PRS In/Remedy Different	
21-024(h)	Removal	0	0	0	27	0	0	0	0	$1,511,721	PRS In/Remedy Different	
21-024(i)	Removal	0	0	34	15	0	20	0	0	$2,525,783	PRS In/Remedy Different	
21-024(j)	Removal	38	0	0	0	0	0	0	0	$787,118	PRS In/Remedy Different	

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-024(k)	Removal	65	0	23	0	0	0	0	0	$1,180,959	PRS In/Remedy Different	
21-024(l)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-004(a)
21-024(m)	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	
21-024(n)	Removal	17	0	0	0	0	0	0	0	$851,555	PRS In/Remedy Different	
21-024(o)	Removal	22	0	0	0	0	0	0	0	$861,755	PRS In/Remedy Different	
21-025(a)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	
21-025(b)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	
21-026(a)	Removal	211	0	0	0	0	0	0	0	$951,792	PRS In/Remedy Different	

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-026(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-026(a)
21-026(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-026(a)
21-026(d)	Removal	0	0	20	0	0	0	0	0	$2,014,610	PRS In/Remedy Different	
21-027(a)	Removal	12	0	62	0	0	0	0	0	$1,968,428	PRS In/Remedy Different	
21-027(b)	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	
21-027(c)	Removal	1	0	0	0	0	0	0	0	$871,379	PRS In/Remedy Different	
21-027(d)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-028(a)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-028(b)	No Action	0	0	0	0	0	0	0	0	$57,391	PRS In/Remedy Different	
21-028(c)	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-028(b)
21-028(d)	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-028(b)
21-028(e)	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-028(b)
C-21-001	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-002	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-003	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-004	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-005	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with 21-011(a)
C-21-006	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-007	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with 21-011(a)
C-21-008	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-009	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
C-21-010	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-011	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-012	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-013	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-014	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D/D Structure
C-21-015	Removal	0	0	19	0	0	0	0	0	$917,232	PRS In/Remedy Different	
C-21-016	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-017	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-018	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-019	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-020	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015

TA-21 Site

Proposed **Commercial and Industrial Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-021	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-022	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-023	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-024	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-025	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-026	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-027	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-028	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-029	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-030	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-031	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-032	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-033	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with 21-011(a)
C-21-034	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
C-21-035	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
C-21-036	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)

TA-21 Site

Proposed Commercial and Industrial Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-037	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
DP Canyon	No Action	0	0	0	0	0	0	0	0	$1,479,756	PRS In/Remedy Different	
LA Canyon	No Action	0	0	0	0	0	0	0	0	$815,006	PRS In/Remedy Different	
Sitewide Excavation	No Action	0	121	4346	241	121	0	0	0	$21,363,060	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
156	598	121	7826	479	169	40	54	0	$212,514,075

TA-74 Site

Proposed Preservation Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
19-001	No Action	2	2	1	2	0	0	0	0	$1,837,156	PRS In/Remedy Different	
19-002	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 19-001
19-003	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 19-001
C-00-004	No Action	0	0	0	0	0	0	0	0	$945,579	PRS In/Remedy Different	
C-00-005	No Action	0	0	0	0	0	0	0	0	$850,362	PRS In/Remedy Different	
C-19-001	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 19-001

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
6	2	2	1	2	0	0	0	0	$3,633,097

White Rock Site

Proposed Preservation Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards) Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos	Estimated Cost	Baseline Scope - FY 99	Aggregation
C-00-009	No Action	0	0	0	0	0	0	0	0	$954,197	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
1	0	0	0	0	0	0	0	0	$954,197

White Rock Y

Proposed Preservation Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards) Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos	Estimated Cost	Baseline Scope - FY 99	Aggregation
C-00-006	No Action	0	0	0	0	0	0	0	0	$936,293	PRS In/Remedy Different	
C-00-007	No Action	0	0	0	0	0	0	0	0	$943,851	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
2	0	0	0	0	0	0	0	0	$1,880,144

PRS Report for Land Use Scenario 2

Does not include the following Parcels:

Site 22
Monument Site

Airport Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-034(a)	In Situ Containment	0	0	0	0	0	0	0	0	$544,305	PRS In/Remedy Different	
73-001(a)	In Situ Containment	20000	0	0	0	0	0	0	0	$13,091,470	PRS In/Remedy Different	
73-001(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-001(a)
73-001(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-001(a)
73-001(d)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-001(a)
73-002	Removal	4000	0	400	0	0	0	0	0	$12,398,751	PRS In/Remedy Different	
73-003	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-004(a)
73-004(a)	In Situ Containment	20	0	0	0	0	0	0	0	$663,656	PRS In/Remedy Different	

Airport Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
73-004(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-004(a)
73-004(c)	No Action	0	0	0	0	0	0	0	0	$13,608	PRS Out	
73-004(d)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-001(a)
73-005	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
73-006	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 73-004(a)
73-007	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
C-31-001	No Action	1	0	0	0	0	0	0	0	$677,937	PRS Out	
C-73-001	No Action	0	0	0	0	0	0	0	0	$13,975	PRS Out	

Airport Site

Proposed | **Not Applicable** | **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-73-002	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with C-73-001
C-73-003	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with C-73-001
C-73-004	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with C-73-001
C-73-005(a)	Removal	35	0	0	0	0	0	0	0	$314,036	PRS In/Remedy Different	
C-73-005(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
C-73-005(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
C-73-005(d)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)
C-73-005(e)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)

Airport Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-73-005(f)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-73-005(a)

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
25	24056	0	400	0	0	0	0	0	$28,217,937

DOE LAAO Site

Proposed Residential Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards) Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos	Estimated Cost	Baseline Scope - FY 99	Aggregation
00-003	Removal	100	0	0	0	0	0	0	0	$615,940	PRS In/Remedy Different	
00-012	Removal	121	0	0	0	0	0	0	0	$836,882	PRS In/Remedy Different	
00-030(i)	Removal	10	0	0	0	0	0	0	0	$601,938	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
3	231	0	0	0	0	0	0	0	$2,054,760

DP Road Site

Proposed Residential Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-004	Removal	0	0	0	0	0	0	0	0	$528,431	PRS In/Remedy Different	
00-010(a)	No Action	0	0	0	0	0	0	0	0	$356,876	PRS In/Remedy Different	
00-010(b)	No Action	0	0	0	0	0	0	0	0	$421,396	PRS In/Remedy Different	
00-027	In Situ Containment	10	0	0	0	0	0	0	0	$4,099,542	PRS In/Remedy Different	
00-030(b)	In Situ Containment	0	0	0	0	0	0	0	0	$474,542	PRS In/Remedy Different	
00-030(l)	No Action	0	0	0	0	0	0	0	0	$471,586	PRS In/Remedy Different	
00-030(m)	No Action	0	0	0	0	0	0	0	0	$584,166	PRS In/Remedy Different	
00-033(a)	Removal	0	740	0	0	0	0	0	0	$1,884,649	PRS In/Remedy Different	

DP Road Site

Proposed **Residential Development** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-033(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 00-033(a)
21-029	Removal	0	0	0	0	0	0	0	0	$1,503,197	PRS In/Remedy Different	
DP Canyon2	No Action	0	0	0	0	0	0	0	0	$786,035	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
11	10	740	0	0	0	0	0	0	$11,110,422

Rendija Canyon

Proposed Residential Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
00-011(a)	Removal	1	0	0	0	0	0	0	0	$1,713,215	PRS In/Remedy Different	
00-011(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 00-011(a)
00-011(e)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 00-011(a)
00-015	Removal	0	7500	0	0	0	0	0	0	$17,804,828	PRS Out	
C-00-002	No Action	0	0	0	0	0	0	0	0	$943,851	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
5	1	7500	0	0	0	0	0	0	$20,461,894

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-001	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-002(a)	No Action	0	0	0	0	0	0	0	0	$7,176	PRS In/Remedy Different	
21-002(b)	No Action	0	0	0	0	0	0	0	0	$269,973	PRS In/Remedy Different	
21-003	In Situ Treatment	0	0	0	91	0	0	0	0	$5,724,287	PRS In/Remedy Different	
21-004(a)	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$295,308	PRS In/Remedy Different	
21-004(b)	No Action	0	0	0	0	0	0	0	0	$287,739	PRS In/Remedy Different	
21-004(c)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-004(b)
21-004(d)	No Action	0	0	0	0	0	0	0	0	$405,212	PRS Out	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-005	No Action	0	0	0	0	0	0	0	0	$294,208	PRS In/Remedy Different	
21-006(a)	Removal	0	0	16	0	0	0	10	0	$2,299,954	PRS In/Remedy Different	
21-006(b)	Removal	0	0	3	91	0	0	0	0	$351,250	PRS In/Remedy Different	
21-006(c)	Removal	0	0	5	0	0	0	0	0	$569,421	PRS In/Remedy Different	
21-006(d)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-006(c)
21-006(e)	No Action	0	0	0	0	0	0	0	0	$306,607	PRS In/Remedy Different	
21-006(f)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-006(e)
21-007	No Action	0	0	0	0	0	0	0	0	$82,123	PRS In/Remedy Different	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-008	No Action	0	0	0	0	0	0	0	0	$243,846	PRS In/Remedy Different	
21-009	In Situ Containment	0	0	0	0	0	0	0	0	$390,386	PRS In/Remedy Different	
21-010(a)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(d)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(e)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-015(a)
21-010(f)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-010(g)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-010(h)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-011(a)	No Action	0	0	0	0	0	0	0	0	$1,391,526	PRS In/Remedy Different	
21-011(b)	Removal	0	0	83	0	0	0	0	0	$1,090,034	PRS In/Remedy Different	
21-011(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-011(d)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(e)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(f)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)

TA-21 Site

Proposed — Not Applicable — Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-011(g)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(h)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(i)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(j)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-011(a)
21-011(k)	Removal	0	0	2000	0	0	0	0	0	$9,123,162	PRS In/Remedy Different	
21-012(a)	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	
21-012(b)	No Action	16	0	0	0	0	0	0	0	$662,932	PRS In/Remedy Different	
21-013(a)	No Action	0	0	0	0	0	0	0	0	$283,432	PRS In/Remedy Different	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-013(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)
21-013(c)	No Action	0	0	0	0	0	0	0	0	$1,054,345	PRS In/Remedy Different	
21-013(d)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-013(c)
21-013(e)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-013(c)
21-013(f)	In Situ Treatment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-003
21-013(g)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)
21-014	In Situ Containment	0	0	13	0	0	0	13	0	$7,269,015	PRS In/Remedy Different	
21-015	In Situ Containment	150	0	177	0	0	0	0	0	$21,440,417	PRS In/Remedy Different	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-016(a)	In Situ Containment	0	0	53	0	0	0	0	0	$7,788,278	PRS In/Remedy Different	
21-016(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-016(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
21-017(a)	Removal	0	0	13	0	0	0	0	0	$25,504,234	PRS In/Remedy Different	
21-017(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-017(a)
21-017(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-017(a)
21-018(a)	Removal	0	0	7	14	0	0	0	0	$59,796,603	PRS In/Remedy Different	
21-018(b)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-019(a)	No Action	0	0	0	0	0	0	0	0	$114,161	PRS In/Remedy Different	
21-019(b)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(c)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(d)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(e)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(f)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(g)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(h)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-019(i)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(j)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(k)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(l)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-019(m)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-019(a)
21-020(a)	No Action	0	0	0	0	0	0	0	0	$399,030	PRS In/Remedy Different	
21-020(b)	No Action	0	0	0	0	0	0	0	0	$392,422	PRS In/Remedy Different	
21-021	No Action	0	0	0	0	0	0	0	0	$3,461,571	PRS In/Remedy Different	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-022(a)	Removal	0	0	45	0	0	0	0	0	$1,053,359	PRS In/Remedy Different	
21-022(b)	Removal	0	0	620	0	0	0	31	0	$8,010,938	PRS In/Remedy Different	
21-022(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(b)
21-022(d)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(b)
21-022(e)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(b)
21-022(f)	Removal	0	0	42	0	0	0	0	0	$966,289	PRS In/Remedy Different	
21-022(g)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(b)
21-022(h)	Removal	0	0	26	0	0	0	0	0	$1,133,237	PRS In/Remedy Different	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-022(i)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(h)
21-022(j)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-022(h)
21-023(a)	No Action	0	0	0	0	0	0	0	0	$345,565	PRS In/Remedy Different	
21-023(b)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-023(a)
21-023(c)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)
21-023(d)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-023(a)
21-024(a)	Removal	32	0	0	0	0	0	0	0	$861,676	PRS In/Remedy Different	
21-024(b)	Removal	0	0	65	0	34	0	0	0	$1,474,923	PRS In/Remedy Different	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-024(c)	Removal	0	0	0	0	14	20	0	0	$2,292,170	PRS In/Remedy Different	
21-024(d)	Removal	0	0	94	0	0	0	0	0	$1,740,506	PRS In/Remedy Different	
21-024(e)	Removal	0	0	38	0	0	0	0	0	$1,709,170	PRS In/Remedy Different	
21-024(f)	Removal	0	0	16	0	0	0	0	0	$1,567,491	PRS In/Remedy Different	
21-024(g)	Removal	34	0	0	0	0	0	0	0	$351,533	PRS In/Remedy Different	
21-024(h)	Removal	0	0	0	27	0	0	0	0	$1,511,721	PRS In/Remedy Different	
21-024(i)	Removal	0	0	34	15	0	20	0	0	$2,525,763	PRS In/Remedy Different	
21-024(j)	Removal	38	0	0	0	0	0	0	0	$787,118	PRS In/Remedy Different	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-024(k)	Removal	65	0	23	0	0	0	0	0	$1,180,959	PRS In/Remedy Different	
21-024(l)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-004(a)
21-024(m)	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	
21-024(n)	Removal	17	0	0	0	0	0	0	0	$851,555	PRS In/Remedy Different	
21-024(o)	Removal	22	0	0	0	0	0	0	0	$861,755	PRS In/Remedy Different	
21-025(a)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	
21-025(b)	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	
21-026(a)	Removal	211	0	0	0	0	0	0	0	$951,792	PRS In/Remedy Different	

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-026(b)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-026(a)
21-026(c)	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-026(a)
21-026(d)	Removal	0	0	20	0	0	0	0	0	$2,014,610	PRS In/Remedy Different	
21-027(a)	Removal	12	0	62	0	0	0	0	0	$1,968,428	PRS In/Remedy Different	
21-027(b)	No Action	0	0	0	0	0	0	0	0	$0	PRS Out	
21-027(c)	Removal	1	0	0	0	0	0	0	0	$871,379	PRS In/Remedy Different	
21-027(d)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-018(a)
21-028(a)	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)

TA-21 Site

Proposed — Not Applicable — Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
21-028(b)	No Action	0	0	0	0	0	0	0	0	$57,391	PRS In/Remedy Different	
21-028(c)	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-028(b)
21-028(d)	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-028(b)
21-028(e)	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-028(b)
C-21-001	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-002	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-003	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-004	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-005	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with 21-011(a)
C-21-006	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-007	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with 21-011(a)
C-21-008	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-009	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
C-21-010	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-011	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-012	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-013	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-014	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-015	Removal	0	0	19	0	0	0	0	0	$917,232	PRS In/Remedy Different	
C-21-016	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-017	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-018	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-019	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-020	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-021	Removal	0	0	0	0	0	0	0	0	$0	PRS/Remedy In	Aggregated with C-21-015
C-21-022	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-023	Removal	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with C-21-015
C-21-024	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D/D Structure
C-21-025	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D/D Structure
C-21-026	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D/D Structure
C-21-027	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D/D Structure
C-21-028	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D/D Structure

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-029	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-030	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-031	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-032	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with D&D Structure
C-21-033	Aggregated with D&D of Associated Structure	0	0	0	0	0	0	0	0	$0	PRS Out	Aggregated with 21-011(a)
C-21-034	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
C-21-035	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
C-21-036	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)

TA-21 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-21-037	In Situ Containment	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 21-016(a)
DP Canyon	NA	0	0	0	0	0	0	0	0	$1,479,756	PRS In/Remedy Different	
LA Canyon	NA	0	0	0	0	0	0	0	0	$815,006	PRS In/Remedy Different	
Sitewide Excavation	No Action	0	121	4346	241	121	0	0	0	$21,363,060	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
156	598	121	7826	479	169	40	54	0	$212,514,075

TA-74 Site

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
19-001	No Action	2	2	1	2	0	0	0	0	$1,887,156	PRS In/Remedy Different	
19-002	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 19-001
19-003	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 19-001
C-00-004	NA	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	
C-00-005	NA	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	
C-19-001	No Action	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	Aggregated with 19-001

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
6	2	2	1	2	0	0	0	0	$1,887,156

White Rock Site

Proposed Residential Development Land Use

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-00-009	NA	0	0	942	0	0	0	0	0	$3,374,285	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
1	0	0	942	0	0	0	0	0	$3,374,285

White Rock Y

Proposed **Not Applicable** **Land Use**

PRS	Proposed Remedy	Expected Volume of Contaminated Material (cu. yards)								Estimated Cost	Baseline Scope - FY 99	Aggregation
		Solid	Hazardous	LLW	Mixed	PCB	PCB/Mixed	TRU	Asbestos			
C-00-006	NA	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	
C-00-007	NA	0	0	0	0	0	0	0	0	$0	PRS In/Remedy Different	

Total Number of PRSs in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
2	0	0	0	0	0	0	0	0	$0

Structure Parcel Report

Airport Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
73-0001	73	1776244.19	1632903 87	Type 4	4290	Not Applicable	Not Applicable	Not On Surplus List	No	No
73-0002	73	1776375 57	1632822 81	Type 4	3375	Not Applicable	Not Applicable	Not On Surplus List	No	No
73-0003	73	1776265 92	1632913 55	Type 2	112	Not Applicable	Not Applicable	Not On Surplus List	No	No
73-0005	73	1775816 51	1631718 66	Type 4	399.13	Not Applicable	Not Applicable	Not On Surplus List	No	No

DOE LAAO Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
43-0039	43	1776054.11	1621195.77	Type 4	440000	Not Applicable	Not Applicable	Not On Surplus List	No	No
43-0040	43	1776178.5	1620963.91	Type 4	160	Not Applicable	Not Applicable	Not On Surplus List	No	No
43-0041	43	1776383.96	1620803.03	Type 4	4508	Not Applicable	Not Applicable	Not On Surplus List	No	No

DP Road Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-1001	21	1775170.8	1627922.65	Type 4	16500	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-1002	21	1775089.73	1627966.94	Type 4	16500	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-1003	21	1774905.24	1626186.81	Type 4	192	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-1004	21	1775015.77	1628100.82	Type 2	120	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-1005	21	1775002.44	1628071.93	Type 2	120	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-1006	21	1774988	1628051.93	Type 2	120	Not Applicable	Not Applicable	Not On Surplus List	No	No

DP Road Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-1007	21	1774981.34	1628039.71	Type 2	120	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-1008	21	1774971.34	1628025.27	Type 2	120	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-1009	21	1775010.22	1628069.71	Type 2	120	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-1010	21	1774945.78	1627954.17	Type 2	120	Not Applicable	Not Applicable	Not On Surplus List	No	No

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
16-1414	16			Type 2	160	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0001	21	1774565.62	1631987.01	Type 2	1416	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0002	21	1774409.08	1632168.71	Type 5	13427	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0003	21	1774416.07	1632298.69	Type 5	13433.56	DOE Order 5400.5	Completion Report Submitted and Approved	Final Report Approved	Yes	Yes
21-0004	21	1774369.95	1632444.04	Type 5	8530.33	DOE Order 5400.5	Completion Report Submitted and Approved	Final Report Approved	Yes	Yes
21-0005	21	1774288.68	1632562.84	Type 5	16321	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0014	21	1774683 61	1631556 54	Type 3	3000	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0018	21			Type 4	1550	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0021	21	1774664 65	1632174 3	Type 5	4322	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0030	21	1774842 35	1631749 41	Type 3	1330 31	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0031	21	1774310 84	1631799.73	Type 3	5288 93	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0042	21	1774170 08	1632948 6	Type 2	65 27	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0046	21	1774670 44	1631613 84	Type 3	1982.41	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0057	21	1774154 01	1633015 68	Type 4	623.95	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0059	21	1774028 92	1633286 83	Type 2	209.09	DOE Order 5400 5	No Completion Report	Draft Management Plan In Progress	No	Yes
21-0061	21	1773981.4	1633288 22	Type 4	1815 05	DOE Order 5400 5	No Completion Report	Draft Management Plan In Progress	No	Yes
21-0065	21	1774024 73	1633419 6	Type 2	464 23	DOE Order 5400 5	No Completion Report	Draft Management Plan In Progress	No	Yes
21-0066	21	1774026 12	1633386 06	Type 2	201.45	DOE Order 5400 5	No Completion Report	Draft Management Plan In Progress	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0069	21			Type 2	25	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0075	21			Type 2	25	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0077	21			Type 2	25	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0080	21	1774504.12	1632233	Type 2	35.4	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0081	21			Type 2	25	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0082	21			Type 2	25	Not Applicable	Not Applicable	Not On Surplus List	No	No

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0086	21	1774420.26	1632497.15	Type 2	40	DOE Order 5400.5	Completion Report Submitted and Approved	Final Report Approved	Yes	Yes
21-0087	21			Type 2	25	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0088	21			Type 2	25	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0089	21	1774382.99	1632615.86	Type 2	40	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0110	21	1774327.32	1632924.14	Type 5	450	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0111	21	1774323.12	1632938.11	Type 5	450	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0112	21	1774411.88	1632936.72	Type 5	450	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0113	21	1774403.46	1632951.28	Type 5	450	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0116	21	1774267.92	1632477.59	Type 5	2233 63	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0144	21			Type 2	160	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0148	21			Type 2	72	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0149	21	1774255 34	1632632.73	Type 5	3286	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0150	21	1774228 78	1632676 05	Type 5	14919	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0152	21	1774089 02	1633682 22	Type 5	13750 32	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0155	21	1774091 81	1633796.97	Type 5	14768 05	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0160	21	1774277.7	1633815 53	Type 2	262 65	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0164	21			Type 2	100	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0166	21	1774010 05	1633916 47	Type 5	856 85	Not Applicable	Not Applicable	Not On Surplus List	No	No

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0167	21	1774133 04	1633943.72	Type 5	873 62	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0188	21			Type 2	504	Not Applicable	Not Applicable			
21-0193	21			Type 2	72	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0209	21	1774042 2	1633999 63	Type 5	23912.3	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0210	21	1774519.49	1631900 36	Type 3	20851	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0212	21	1774792 04	1632056 9	Type 4	571	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0213	21	1774245.56	1633840.29	Type 3	1722.94	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0216	21			Type 2	25	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0218	21			Type 2	25	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0220	21	1774199.43	1633713.11	Type 5	450	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0222	21			Type 2	25	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0223	21	1774256.74	1633756.44	Type 2	48.16	Not Applicable	Not Applicable	Not On Surplus List	No	No

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0227	21	1773742.4	1635128.93	Type 4	452.61	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0228	21	1774520.89	1632558.65	Type 2	6161	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0229	21	1773747.29	1635148.49	Type 4	214.99	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0230	21	1773750.09	1635198.11	Type 4	1258.37	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0254	21	1774765.48	1631594.27	Type 2	291	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0257	21	1774302.16	1632967.46	Type 5	4229	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0258	21	1774859.12	1631557.93	Type 4	1600	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0259	21			Type 2	25	DOE Order 5400 5	No Completion Report	Draft Management Plan In Progress	No	Yes
21-0260	21			Type 2	25	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0261	21			Type 2	25	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0286	21	1774716.56	1632554.46	Type 4	3682.84	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0300	21			Type 2	5	DOE Order 5400 5	No Completion Report	Draft Management Plan In Progress	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0303	21			Type 2	72	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0307	21			Type 2	72	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0308	21			Type 2	72	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0309	21			Type 2	72	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0310	21			Type 2	5	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0311	21			Type 2	5	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0312	21	1774421.66	1632115.6	Type 5	1805	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0313	21	1774388.12	1632216.23	Type 5	4799	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0314	21	1774337.8	1632372.76	Type 5	4610	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0315	21	1774318.03	1632496.5	Type 5	3561	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0316	21			Type 2	5	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0320	21			Type 2	5	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0322	21	1774058.97	1633847.63	Type 4	98	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0323	21	1774061.42	1633913.67	Type 4	99	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0328	21	1774459.4	1631975.83	Type 2	320	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0334	21	1774836.91	1631550.33	Type 2	58.55	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	Yes	Yes
21-0335	21	1774826.98	1632269.34	Type 5	100.65	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0338	21			Type 2	72	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0342	21	1774176.37	1632892.91	Type 4	1600	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0346	21	1774024.73	1633419.6	Type 3	720.82	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0353	21	1774381.42	1631924.73	Type 2	295.95	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0355	21	1774365.87	1632887.92	Type 4	495.09	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0357	21	1774061.07	1633011.49	Type 4	5682.02	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0359	21	1774824.18	1631802.52	Type 2	465.31	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0361	21	1774202.23	1632790.66	Type 2	1670.51	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0365	21	1774198.04	1632741.74	Type 2	1735.06	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0369	21	1774081.46	1633692.26	Type 2	831.69	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0370	21	1774162.4	1633937.43	Type 5	544.6	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0387	21	1773767.83	1635117.62	Type 2	65.3	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0388	21			Type 4	256	Not Applicable	Not Applicable	Not On Surplus List	No	No

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0402	21	1774548.08	1632432.86	Type 2	1268.55	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0414	21	1774611.39	1632535.75	Type 2	304.52	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0427	21	1774595.83	1631500.34	Type 2	36.16	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0428	21	1774706.93	1631591.44	Type 2	231.03	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0443	21			Type 2	520	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0450	21	1774513.61	1631588.11	Type 2	248.55	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0451	21	1774589.15	1631579.22	Type 2	63.39	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0452	21	1773003.74	1637327.43	Type 4	594	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0454	21	1774542.49	1631477.01	Type 2	263.78	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0455	21	1774631.38	1631488.12	Type 2	320.34	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0456	21	1774615.83	1631494.79	Type 2	255.25	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0458	21	1774381.42	1631924.73	Type 2	80.23	DOE Order 5400.5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
21-0461	21	1774722.48	1631455.9	Type 2	320 08	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0462	21	1774926 21	1631956 26	Type 2	320 02	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0466	21	1774175.67	1633990 89	Type 4	27.37	Not Applicable	Not Applicable	Not On Surplus List	No	No
21-0550	21	1774392.53	1631909 17	Type 2	191 91	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-0553	21			Type 2	5	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes
21-BC	21			Type 6	100	DOE Order 5400 5	No Completion Report	Draft Management Plan Complete	No	Yes

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
63-0039	63			Type 2	208	Not Applicable	Not Applicable	Not On Surplus List	No	No
Communications	21				6068	Not Applicable	Not Applicable	Not On Surplus List	No	No
Fire Alarm System	21				1878	Not Applicable	Not Applicable	Not On Surplus List	No	No
Industrial Wastewater	21				6519	Not Applicable	Not Applicable	Not On Surplus List	No	No
No Structure Number 1	21			Type 4	200	Not Applicable	Not Applicable	Not On Surplus List	No	No
No Structure Number 2	21			Type 4	160	Not Applicable	Not Applicable	Not On Surplus List	No	No

TA-21 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
No Structure Number 3	21			Type 4	35	Not Applicable	Not Applicable	Not On Surplus List	No	No
Power	21				3767	Not Applicable	Not Applicable	Not On Surplus List	No	No
Sanitary Wastewater	21				4529	Not Applicable	Not Applicable	Not On Surplus List	No	No
Steam	21				1878	Not Applicable	Not Applicable	Not On Surplus List	No	No
Supply Water	21				7659	Not Applicable	Not Applicable	Not On Surplus List	No	No

TA-74 Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
74-0003	74	1772338.47	1649770.7	Type 2	544	Not Applicable	Not Applicable	Not On Surplus List	No	No
74-0004	74	1772309.12	1649817.52	Type 2	36	Not Applicable	Not Applicable	Not On Surplus List	No	No
74-0005	74	1772286.51	1649872.05	Type 2	604	Not Applicable	Not Applicable	Not On Surplus List	No	No

White Rock Site

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
54-0075	54	1756689 3	1652800 38	Type 4	1620	Not Applicable	Not Applicable	Not On Surplus List	No	No

White Rock Y

Structure Number	Location-Technical Area	Location Coordinate Northing	Location Coordinate Easting	Type	Building Area (sq. ft.)	Regulatory Driver	Regulatory Status	Status of Investigation	COPCs-Has Sampling Occurred?	D/D Facility?
72-0001	72	1772024	1648750.41	Type 4	800	Not Applicable	Not Applicable	Not On Surplus List	No	No
72-0002	72	1771881.43	1648756	Type 4	314	Not Applicable	Not Applicable	Not On Surplus List	No	No
72-0003	72	1767975.71	1647916.02	Type 4	110	Not Applicable	Not Applicable	Not On Surplus List	No	No
72-0004	72			Type 4	283	Not Applicable	Not Applicable	Not On Surplus List	No	No
72-0005	72			Type 4	100	Not Applicable	Not Applicable	Not On Surplus List	No	No
72-0053	72	1768093.81	1647728.03	Type 4	45	Not Applicable	Not Applicable	Not On Surplus List	No	No

Structure Report for Land Use

Does not include the following Parcels:

Rendija Canyon Site
Site 22
Manhattan Monument Site

Airport Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
73-0001	Decommissioning	238	0	0	0	0	0	0	43	$2,285,932	Out	NA
73-0002	Decommissioning	188	0	0	0	0	0	0	34	$1,798,374	Out	NA
73-0003	Decommissioning	6	0	0	0	0	0	0	0	$29,734	Out	NA
73-0005	Decommissioning	22	0	0	0	0	0	0	4	$212,608	Out	NA

Total Number of Structures in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
4	454	0	0	0	0	0	0	81	$4,326,648

DOE LAAO Site

Proposed Commercial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
43-0039	Decommissioning	2444	0	0	0	0	0	0	440	$5,170,000	Out	NA
43-0040	Decommissioning	9	0	0	0	0	0	0	16	$85,257	Out	NA
43-0041	Decommissioning	256	0	0	0	0	0	0	461	$2,455,378	Out	NA

Total Number of Structures in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
3	2709	0	0	0	0	0	0	488	$7,710,635

DP Road Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-1001	Decommissioning	917	2	0	0	0	0	0	165	$8,793,210	Out	NA
21-1002	Decommissioning	917	2	0	0	0	0	0	165	$8,793,210	Out	NA
21-1003	Decommissioning	11	0	0	0	0	0	0	0	$102,161	Out	NA
21-1004	Decommissioning	7	0	0	0	0	0	0	0	$31,857	Out	NA
21-1005	Decommissioning	7	0	0	0	0	0	0	0	$31,857	Out	NA
21-1006	Decommissioning	7	0	0	0	0	0	0	0	$31,857	Out	NA
21-1007	Decommissioning	7	0	0	0	0	0	0	0	$31,857	Out	NA

DP Road Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-1008	Decommissioning	7	0	0	0	0	0	0	0	$31,657	Out	NA
21-1009	Decommissioning	7	0	0	0	0	0	0	0	$31,857	Out	NA
21-1010	Decommissioning	7	0	0	0	0	0	0	0	$31,857	Out	NA

Total Number of Structures in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
10	1894	4	0	0	0	0	0	330	$17,911,531

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
16-1414	Decommissioning	9	0	0	0	0	0	0	0	$50,512	Out	FY 05
21-0001	Decommissioning	197	0	0	0	0	0	0	24	$443,174	Decommissioning In	FY 05
21-0002	Decommissioning	4476	100	1394	0	60	0	0	200	$11,713,548	Decommissioning In	FY 01
21-0003	Decommissioning	0	0	0	0	0	0	0	0	$0	Out	FY 96
21-0004	Decommissioning	0	0	0	0	0	0	0	0	$0	Out	FY 98
21-0005	Decommissioning	6045	0	1938	0	170	0	0	254	$14,328,981	Decommissioning In	FY 00
21-0014	Decommissioning	556	3	0	0	0	0	0	37	$1,195,034	Decommissioning In	FY 00

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0018	Decommissioning	215	0	160	0	5	0	0	11	$1,191,910	Decommissioning In	FY 04
21-0021	Decommissioning	1601	5	32	0	5	0	0	14	$3,233,448	Decommissioning In	FY 02
21-0030	Decommissioning	246	10	0	0	0	0	0	10	$534,504	Decommissioning In	FY 00
21-0031	Decommissioning	1763	30	0	0	0	0	0	73	$2,150,500	Decommissioning In	FY 01
21-0042	Decommissioning	6	1	0	0	0	0	0	0	$20,930	Decommissioning In	FY 05
21-0046	Decommissioning	367	20	0	0	0	0	0	18	$799,772	Decommissioning In	FY 00
21-0057	Decommissioning	115	5	0	0	0	0	0	0	$392,364	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0059	Decommissioning	19	5	1	0	0	0	0	0	$65,968	Out	FY 03
21-0061	Decommissioning	252	0	30	0	20	20	0	0	$1,187,061	Out	FY 03
21-0065	Decommissioning	43	0	1	0	5	0	0	0	$149,950	Out	FY 03
21-0066	Decommissioning	19	0	1	0	5	0	0	0	$72,277	Out	FY 03
21-0069	Decommissioning	1	0	0	0	0	0	0	0	$6,817	Decommissioning In	FY 00
21-0075	Decommissioning	7	0	0	0	1	0	0	0	$10,300	Out	FY 05
21-0077	Decommissioning	7	0	0	0	1	0	0	0	$10,300	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0080	Decommissioning	2	0	0	0	2	0	0	0	$12,159	Decommissioning In	FY 05
21-0081	Decommissioning	1	0	0	0	0	0	0	0	$7,788	Out	FY 05
21-0082	Decommissioning	1	0	0	0	0	0	0	0	$7,783	Out	FY 05
21-0085	Decommissioning	2	0	0	0	2	0	0	0	$17,483	Decommissioning In	FY 05
21-0087	Decommissioning	1	0	0	0	0	0	0	0	$7,788	Out	FY 05
21-0088	Decommissioning	1	0	0	0	0	0	0	0	$7,783	Out	FY 05
21-0089	Decommissioning	2	0	0	0	2	0	0	0	$17,483	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0110	Decommissioning	63	0	19	0	2	0	0	0	$390,992	Decommissioning In	FY 05
21-0111	Decommissioning	63	0	19	0	2	0	0	0	$390,992	Decommissioning In	FY 05
21-0112	Decommissioning	63	0	19	0	2	0	0	0	$390,992	Decommissioning In	FY 05
21-0113	Decommissioning	63	0	19	0	2	0	0	0	$390,992	Decommissioning In	FY 05
21-0116	Decommissioning	310	0	156	0	0	0	0	23	$1,859,378	Decommissioning In	FY 02
21-0144	Decommissioning	22	0	24	0	0	0	0	17	$61,663	Decommissioning In	FY 03
21-0148	Decommissioning	7	0	0	0	0	1	0	0	$22,993	Decommissioning In	FY 04

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0149	Decommissioning	456	0	278	0	10	0	0	29	$2,903,483	Decommissioning In	FY 03
21-0150	Decommissioning	4973	10	3	0	50	0	0	157	$11,092,847	Decommissioning In	FY 02
21-0152	Decommissioning	764	0	300	0	2	0	0	138	$11,562,160	Out	FY 06
21-0155	Decommissioning	820	0	300	0	2	0	0	148	$12,383,659	Out	FY 06
21-0160	Decommissioning	15	0	0	0	0	0	0	0	$82,713	Out	FY 06
21-0164	Decommissioning	6	0	0	0	0	0	0	0	$31,571	Decommissioning In	FY 06
21-0166	Decommissioning	48	0	10	0	1	0	0	9	$708,681	Out	FY 06

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0167	Decommissioning	49	0	10	0	1	0	0	9	$722,399	Out	FY 06
21-0183	Decommissioning	28	0	0	0	0	0	0	0	$159,114	Out	FY 06
21-0193	Decommissioning	7	0	0	0	0	1	0	0	$23,614	Decommissioning In	FY 05
21-0209	Decommissioning	1328	0	10	0	2	0	0	239	$19,316,372	Out	FY 06
21-0210	Decommissioning	6950	1	0	0	1	0	0	218	$9,225,937	Decommissioning In	FY 04
21-0212	Decommissioning	79	1	4	0	1	0	0	5	$328,797	Decommissioning In	FY 01
21-0213	Decommissioning	96	0	0	0	1	0	0	17	$795,276	Out	FY 06

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0216	Decommissioning	1	0	0	0	0	0	0	0	$7,893	Out	FY 06
21-0218	Decommissioning	1	0	0	0	0	0	0	0	$7,893	Out	FY 06
21-0220	Decommissioning	25	0	10	0	2	0	0	0	$383,194	Out	FY 06
21-0222	Decommissioning	1	0	0	0	0	0	0	0	$7,893	Out	FY 06
21-0223	Decommissioning	3	0	0	0	0	0	0	0	$15,154	Out	FY 06
21-0227	Decommissioning	25	0	0	0	0	0	0	0	$266,002	Out	FY 06
21-0228	Decommissioning	1711	10	4	0	50	0	0	0	$1,950,423	Decommissioning In	FY 03

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0229	Decommissioning	12	0	0	0	0	0	0	0	$135,407	Out	FY 06
21-0230	Decommissioning	70	0	0	0	2	0	0	0	$601,087	Out	FY 06
21-0254	Decommissioning	40	0	0	0	0	0	0	2	$79,513	Decommissioning In	FY 00
21-0257	Decommissioning	1566	0	556	0	50	0	0	42	$4,222,008	Decommissioning In	FY 04
21-0258	Decommissioning	474	0	0	0	0	0	0	0	$998,910	Decommissioning In	FY 05
21-0259	Decommissioning	1	0	0	0	0	0	0	0	$7,788	Out	FY 05
21-0260	Decommissioning	7	0	0	0	1	0	0	0	$9,015	Decommissioning In	FY 00

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0261	Decommissioning	7	0	0	0	1	0	0	0	$10,300	Decommissioning In	FY 05
21-0286	Decommissioning	682	0	111	0	5	0	0	7	$2,229,823	Decommissioning In	FY 01
21-0300	Decommissioning	2	0	0	0	0	0	0	0	$1,558	Out	FY 05
21-0303	Decommissioning	7	0	0	0	0	1	0	0	$23,614	Decommissioning In	FY 05
21-0307	Decommissioning	7	0	0	0	0	1	0	0	$23,614	Decommissioning In	FY 05
21-0308	Decommissioning	7	0	0	0	0	1	0	0	$23,614	Decommissioning In	FY 05
21-0309	Decommissioning	7	0	0	0	0	1	0	0	$23,614	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0310	Decommissioning	2	0	0	0	0	0	0	0	$1,558	Decommissioning In	FY 05
21-0311	Decommissioning	2	0	0	0	0	0	0	0	$1,558	Decommissioning In	FY 05
21-0312	Decommissioning	251	0	234	0	10	0	0	14	$1,413,302	Decommissioning In	FY 02
21-0313	Decommissioning	1425	0	506	0	50	0	0	51	$4,410,817	Decommissioning In	FY 03
21-0314	Decommissioning	1303	0	442	0	50	0	0	25	$4,290,654	Decommissioning In	FY 04
21-0315	Decommissioning	1012	0	345	0	25	0	0	24	$3,330,730	Decommissioning In	FY 04
21-0316	Decommissioning	2	0	0	0	0	0	0	0	$1,558	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0320	Decommissioning	2	0	0	0	0	0	0	0	$1,558	Decommissioning In	FY 05
21-0322	Decommissioning	5	0	0	0	0	0	0	0	$62,009	Out	FY 06
21-0323	Decommissioning	6	0	0	0	0	0	0	0	$62,642	Out	FY 06
21-0328	Decommissioning	44	5	0	0	0	0	0	3	$100,608	Decommissioning In	FY 04
21-0334	Decommissioning	8	0	0	0	0	0	0	0	$18,067	Decommissioning In	FY 05
21-0335	Decommissioning	14	0	19	0	1	0	0	0	$78,445	Decommissioning In	FY 01
21-0338	Decommissioning	7	0	0	0	0	1	0	0	$23,614	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0342	Decommissioning	474	0	0	0	0	0	0	0	$593,910	Decommissioning In	FY 05
21-0346	Decommissioning	40	0	0	0	0	0	0	0	$330,801	Out	FY 06
21-0353	Decommissioning	109	0	0	0	0	0	0	0	$91,892	Out	FY 05
21-0355	Decommissioning	183	0	19	0	20	0	0	4	$387,747	Decommissioning In	FY 05
21-0357	Decommissioning	1578	20	0	0	0	0	0	8	$3,458,915	Decommissioning In	FY 05
21-0359	Decommissioning	43	1	0	0	0	0	0	4	$127,715	Decommissioning In	FY 00
21-0361	Decommissioning	155	0	0	0	0	0	0	18	$521,765	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0365	Decommissioning	161	0	0	0	0	0	0	16	$541,870	Decommissioning In	FY 05
21-0369	Decommissioning	46	0	0	0	0	0	0	8	$263,102	Out	FY 06
21-0370	Decommissioning	30	0	10	0	1	0	0	0	$456,418	Out	FY 06
21-0387	Decommissioning	4	0	0	0	0	0	0	0	$20,520	Out	FY 06
21-0388	Decommissioning	14	0	0	0	0	0	0	0	$161,984	Out	FY 06
21-0402	Decommissioning	176	0	0	0	0	0	0	0	$394,977	Decommissioning In	FY 05
21-0414	Decommissioning	127	5	0	0	0	0	0	0	$58,108	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0427	Decommissioning	3	1	0	0	0	0	0	0	$10,412	Decommissioning In	FY 00
21-0428	Decommissioning	21.4	5	0	0	0	0	0	0	$65,969	Decommissioning In	FY 00
21-0443	Decommissioning	43	1	0	0	0	0	0	3	$142,642	Decommissioning In	FY 00
21-0450	Decommissioning	103	5	0	0	0	0	0	0	$70,604	Decommissioning In	FY 00
21-0451	Decommissioning	6	1	0	0	0	0	0	0	$17,775	Decommissioning In	FY 00
21-0452	Decommissioning	33	0	0	0	0	0	0	0	$370,846	Out	FY 05
21-0454	Decommissioning	110	5	0	0	0	0	0	0	$74,694	Decommissioning In	FY 00

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0455	Decommissioning	133	5	0	0	0	0	0	0	$90,235	Decommissioning In	FY 00
21-0456	Decommissioning	106	5	0	0	0	0	0	1	$72,544	Decommissioning In	FY 00
21-0458	Decommissioning	7	0	0	0	0	0	0	0	$21,812	Decommissioning In	FY 00
21-0461	Decommissioning	30	0	0	0	0	0	0	3	$87,505	Decommissioning In	FY 00
21-0462	Decommissioning	30	5	0	0	0	0	0	0	$90,235	Decommissioning In	FY 00
21-0466	Decommissioning	2	0	0	0	0	0	0	0	$17,034	Out	FY 06
21-0550	Decommissioning	27	1	0	0	0	0	0	0	$60,179	Decommissioning In	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
21-0553	Decommissioning	2	0	0	0	0	0	0	0	$1,553	Decommissioning In	FY 05
21-BC	Decommissioning	56	0	37	0	0	0	0	0	$321,259	Out	FY 05
63-0039	Decommissioning	87	0	0	0	0	0	0	0	$56,711	Out	FY 00
Communications	Decommissioning	169	0	0	0	0	0	0	0	$1,222,774	Partial	FY 06
Fire Alarm System	Decommissioning	169	0	0	0	0	0	0	0	$1,222,774	Out	FY 06
Industrial Wastewater	Decommissioning	473	0	244	0	0	0	0	0	$5,579,938	Partial	FY 06
No Structure Number 1	Decommissioning	0	0	0	0	4	0	0	2	$133,315	Out	FY 05

TA-21 Site

Proposed Commercial and Industrial Development Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
No Structure Number 2	Decommissioning	0	0	0	0	0	0	0	1.6	$98,720	Out	FY 05
No Structure Number 3	Decommissioning	0	0	0	0	0	0	0	0.4	$21,594	Out	FY 05
Power	Decommissioning	0	0	0	0	0	0	0	0	$1,518,191	Partial	FY 06
Sanitary Wastewater	Decommissioning	252	0	0	0	0	0	0	0	$1,825,295	Partial	FY 06
Steam	Decommissioning	104	0	0	0	0	0	0	42	$764,443	Partial	FY 06
Supply Water	Decommissioning	426	0	0	0	0	0	0	0	$3,086,760	Partial	FY 06

Total Number of Structures in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
125	45440	266	7265	629	27	0	0	1929	$163,436,499

TA-74 Site

Proposed Preservation Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
74-0003	Decommissioning	30	0	0	0	0	0	0	5	$144,836	Out	NA
74-0004	Decommissioning	2	0	0	0	0	0	0	0	$9,557	Out	NA
74-0005	Decommissioning	45	0	0	0	0	0	0	0	$213,445	Out	NA

Total Number of Structures in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
3	77	0	0	0	0	0	0	5	$367,838

White Rock Site

Proposed Preservation Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
54-0075	Decommissioning	90	0	0	0	0	0	0	15.2	$563,220	Out	NA

Total Number of Structures in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
1	90	0	0	0	0	0	0	16.2	$563,220

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White Rock Y

Proposed Preservation Land Use

Structure Number	Proposed Remedy	Expected Volume of Contaminated Materials (cu. yards)								Estimated Cost	Baseline Scope-FY 99	Schedule for Remediation
		Solid	Hazardous	LLW	TRU	Mixed	PCB	PCB/Mixed	Asbestos			
72-0001	Decommissioning	44	0	0	0	0	0	0	8	$426,281	Out	NA
72-0002	Decommissioning	17	0	0	0	0	0	0	0	$167,076	Out	NA
72-0003	Decommissioning	6	0	0	0	0	0	0	1	$58,614	Out	NA
72-0004	Decommissioning	16	0	0	0	0	0	0	2.9	$149,030	Out	NA
72-0005	Decommissioning	6	0	0	0	0	0	0	1	$51,885	Out	NA
72-0053	Decommissioning	3	0	0	0	0	0	0	0	$25,540	Out	NA

Total Number of Structures in Parcel:	Total Solid	Total Hazardous	Total LLW	Total Mixed	Total PCB	Total PCB/Mixed	Total TRU	Total Asbestos	Total Cost
6	92	0	0	0	0	0	0	12.9	$878,425

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APPENDIX B

ONE-PAGE SUMMARIES OF PRSs

Within

LAND TRANSFER PARCELS AND 50-FOOT BUFFER ZONES

Potential Release Site (PRS) – 21-002(a)

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: This PRS was established to represent any additional unidentified storage/container areas located at TA-21. However, it has been determined that no additional unidentified storage/container areas existed at TA-21 and these sites should not have been listed as a PRS. A permit modification is required to remove the site from the HSWA Permit.

Current Regulatory Status: This PRS is on the HSWA Permit.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: None.

References: "*TA-21 Operable Unit RFI Work Plan for Environmental Restoration*," May 1991, LA-UR-91-962.

Potential Release Site (PRS) – 21-002(b)

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS 21-002 (b) is an inactive container storage area. The RFI conducted in 1994 identified lead above the screening action level in a localized area.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk, alone. The Department of Energy (DOE) has not yet concurred with this recommendation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional confirmation sampling to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: "*TA-21 Operable Unit RFI Work Plan for Environmental Restoration,*"May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-003 and 21-013(f)

Location: TA-21 Site

Category: Surface Units

Ten-Year Plan Description: Surface Units

History: PRS 21-003 is Building TA-21-61. Building TA-21-61 was built in 1950 to support the ROVER project (Nuclear Rocket Program). The operations included the use of an electric furnace to coat reactor parts (including fuel rods). The building was also used as a metal fabrication shop in the late 1960s and early 1970s. Building TA-21-61 was then used as a storage area for PCB-bearing equipment and PCB-contaminated waste, oils, solvents and trash. PCB management operations stopped in 1989. PRS 21-013(f) is defined as a surface disposal area based on aerial photos from 1949. Mounds (assumed to be dirt) were located in the same area as the current location of Building TA-21-61. The RFI started in 1994. The area was sampled and results indicated that the soil at the site is contaminated with radionuclides, PCBs, and F-listed solvents. The entire PRS is located within the bounds of known PCB contaminants.

Current Regulatory Status: PRS 21-003 is on the HSWA Permit; PRS 21-013(f) is not on the HSWA Permit. Both sites are under investigation.

Proposed Remedy: In situ treatment, if necessary.

Future Actions Required: Implement the sampling and analysis plan and support the Corrective Measures Study/Corrective Measures Implementation (CMS/CMI) process. The CMS/CMI process will evaluate alternatives that include in situ treatment options and confirmatory sampling to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) – 21-004(a)

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: This PRS includes an aboveground tank and a drain line located north of building TA 21-21 (the plutonium storage vault). The tank replaced an outfall (21-024[l]) that was connected to floor drains in TA 21-021. The tank was opened, and swipe samples were taken in 1994. The results indicate that no removable radioactivity is present in the tank.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The Department of Energy (DOE) has not yet concurred with this recommendation.

Proposed Remedy: Aggregated with D&D of associated structure.

Future Actions Required: Coordinate confirmation sampling activities with D&D activities to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) – 21-004(b and c)

Location: TA-21 Site

Category: Surface Units

Ten-Year Plan Description: Surface Units

History: PRS 21-004 (b) and PRS 21-004 (c) are aboveground tanks connected to sump TA-21-223. The tanks replaced outfall 21-004(d). Sump TA-21-223 received industrial waste from DP East and pumped the waste to treatment facilities located at DP West. There are no known releases from the tanks.

Current Regulatory Status: PRSs 21-004 (b and c) are on the HSWA Permit and were proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Coordinate confirmation sampling activities with D&D activities to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1B TA-21 Operable Unit RFI Operable Unit Wide Surface Soil, Deposition Layer and Filter Building Investigation,"* January 1994, LA-UR-93-4390. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-004(d)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-004(d) is a drain line and outfall that discharged overflow from sump TA-21-223 that carried waste from DP East to DP West for treatment at the liquid radioactive waste treatment facility. The drain line discharged into DP Canyon up to 1979 when overflow collection tanks were installed. The sump was not equipped with an overflow alarm; no discharges were documented. The PRS was investigated in 1992. Tritium was found at above background levels.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The Department of Energy (DOE) has not yet concurred with this recommendation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional characterization and confirmatory samples (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Concurrence in No further Action Recommendations,"* memo from T. Taylor, Program Manager Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Project Manager Environmental Restoration Program, University of California, Los Alamos National Laboratory, November 1995.

Potential Release Site (PRS) - 21-005

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-005 was a concrete sump used as an acid pit to dissolve classified documents by digesting the paper in concentrated acid. The pit and contents were removed in 1967. There were no known releases and no radiological constituents.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct characterization sampling and confirmatory sampling (as necessary) to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-006(a)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-006(a) is an unmarked, underground seepage pit, located between buildings TA-21-2 and TA-21-3. The pit was used to dispose of liquids used to decontaminate radioactive materials containers. The liquids contained ethylene glycol, phosphoric acid, and plutonium. It is not known if the seepage pit is located on the north or south side of the corridor connecting the buildings. If it is on the south side of the corridor, the pit may be the same as PRS 21-006(c) and (d). If it is on the north side, it may be the same as PRS 21-023(d). This PRS will be combined with the D&D investigations and activities for buildings TA-21-2 and TA-21-3.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structure and residual contamination, if any.

Future Actions Required: Coordinate characterization sampling, removal of structures and residual contamination, and confirmation sampling with D&D activities to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-006(b)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-006(b) was an ether seepage pit, drain line, and outfall that discharged ether extraction waste from building TA-21-2. The system routed ether waste from the plutonium processing building to an unlined seepage pit, then to an outfall location near the edge of Los Alamos Canyon. Since the operation producing the ether waste was a component of the plutonium purification process, the system discharged ether waste that potentially carried radionuclides. The outfall location was investigated in 1988 and 1992, and elevated levels of americium, cesium, and plutonium isotopes were found.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct characterization sampling and removal remaining structures and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"TA-21 OU RFI Phase Report 1C,"* February 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Sites (PRSs) - 21-006(c) and (d)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Units

History: PRSs 21-006(c and d) are thought to be the same PRS, based on uncertainties stated in the TA-21 RFI Workplan. The site is an underground seepage pit located outside of room 322 in building TA-21-3. The pit was used to dispose of liquids used to decontaminate radioactive materials containers from a drain in room 322. The liquids contained ethylene glycol, phosphoric acid, and plutonium. Because of additions to building TA-21-3, the location of pit is under rooms 3133 and 3131 of the addition.

Current Regulatory Status: These PRSs are on the HSWA Permit and are under investigation.

Proposed Remedy: Removal of structures (if present) and residual contamination, if any.

Future Actions Required: Coordinate characterization sampling, removal of structures and residual contamination (if any), and confirmatory sampling with D&D activities to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-006(e) and (f)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-006 (e) is located south of Building 4 in TA-21. The waste discharged to this pit is unknown, and its exact location has not been determined. PRS 21-006 (f) was a seepage pit adjacent to Building 4 and received fluorine waste contaminated with plutonium. This pit (if present) has been paved over. It is likely that these PRSs are duplicates of the same site. Visual inspections of building TA-21-4 both prior to and after demolition did not indicate any lines or foundation penetrations in the vicinity where the PRSs are described to have existed. These PRSs will be combined with the D&D investigations and activities for building TA-21-4.

Current Regulatory Status: PRS 21-006(e) is on the HSWA Permit while PRS 21-006(f) is not on the HSWA Permit. Both PRSs are under investigation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Coordinate characterization sampling, removal of structures and residual contamination (if any), and confirmatory sampling with D&D activities to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-007

Location: TA-21 Site

Category: Incinerator

Ten-Year Plan Description: Incinerator

History: Mobile salamander incinerators were used at MDA T to incinerate waste oils and organics contaminated with radionuclides to reduce their volumes and to convert them to a form which would mix with cement. These units were mobile and have been removed. Studies on the use of salamanders and components of their emissions found that no contamination of the ground surrounding the burner occurred. Soot in the stack and burner ash contained plutonium. The ash was sent to radioactive burial pits.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: "*TA-21 Operable Unit RFI Work Plan for Environmental Restoration,*"May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-008

Location: TA-21 Site

Category: Incinerator

Ten-Year Plan Description: Incinerator

History: PRS 21-008 were incinerators in buildings TA-21-2 and TA-21-3 that burned scrap and rags. Exhaust from these incinerators was part of the group of stack emission sources for airborne releases from TA-21 operations. Plutonium and uranium isotopes were discharged from these incinerators.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. NFA concurrence has been received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct a radiological survey and confirmatory sampling (as necessary) to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1B TA-21 RFI Operable Unit-Wide Surface Soil, Deposition Layer and Filter Building Investigation,"* January 1994, LA-UR-93-4390. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360. *"Concurrence in No further Action Recommendations,"* memo from T. Taylor, Program Manager Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Project Manager Environmental Restoration Program, University of California, Los Alamos National Laboratory, November 1995.

Potential Release Site (PRS) - 21-009

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS 21-009 was the old waste treatment laboratory located in building TA-21-33. The building was transported to TA-54 and burned. The piles were disposed of at surface disposal area 21-013(b) and (g).

Current Regulatory Status: This PRS is not on the HSWA Permit and is under investigation.

Proposed Remedy: In Situ containment, if necessary.

Future Actions Required: Conduct characterization sampling and prepare and implement plans to contain site inplace (as part of the adjacent MDA cap design) to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-011(a) and (d-j)

Location: TA-21 Site

Category: Surface Units

Ten-Year Plan Description: Surface Units

History: This is an aggregate of eight PRSs associated with the wastewater treatment plant at TA-21. The releases are in close proximity to MDA T (PRS 21-016(a)). The treatment facility began operations in 1967, replacing the old treatment facility (aggregate PRS 21-010) at building TA-21-35. The facility used precipitation and flocculation treatment processes. Some pH adjustments were performed to optimize treatment. The plant is still operational; however, its waste streams have significantly reduced since DP West operations have been relocated. The current operations include pretreatment and pumping to the LANL waste treatment facility located at TA-50.

PRS 21-011(a) was the waste treatment plant TA-21-257 put into operation in 1967 after the previous plant TA-21-35 ceased operations. The plant treated liquid waste from plutonium processing operations associated with DP site. The plant was used to treat and prepare waste for disposal at MDA T and discharge through an outfall (21-011k) to DP Canyon. The plant contained a clarifier/flocculator, storage tanks, and pumps. A cement silo also existed at the treatment plant.

PRS 21-011(d) was an acid holding tank (TA-21-110) located near building TA-21-257. The tank was a 13,500 gal. aboveground tank that received acid waste from DP East.

PRS 21-011(e) was an acid holding tank (TA-21-111) located near building TA-21-257. This tank was a 13,500 gal. aboveground tank that received acid waste from DP West and from tanks known as the "General's Tanks" (two 50,000 gallon tanks used to store highly enriched plutonium solutions), which are buried at MDA A. The years this tank received waste are not known.

PRS 21-011(f) was an effluent holding tank (TA-21-112) located near building TA-21-257. The tank was a 12,700 gal. aboveground tank that received effluent waste originally from TA-21-35, then after 1967, from TA-21-257. The treated effluent was retained in the tank for three to five days, then discharged to DP Canyon at outfall 21-011(k). After 1982 the effluent was pumped to TA-50 for additional treatment prior to discharge.

PRS 21-011(g) was an effluent holding tank (TA-21-113) located near building TA-21-257. The tank was a 12,700 gal. aboveground tank that received effluent waste originally from TA-21-35, then after 1967, from TA-21-257. The treated effluent was retained in the tank for three to five days, then discharged to DP Canyon at outfall 21-011(k). After 1982 the effluent was pumped to TA-50 for additional treatment prior to discharge.

PRS 21-011(h) was an acid storage tank (TA-21-256) located near building TA-21-257. The tank was a 2,000 gal. aboveground acid storage tank that was known as the Pug Mill Tank. The tank was removed in 1986.

PRS 21-011(i) was a sodium hydroxide storage tank (TA-21-288) located near building TA-21-257. The tank was a 1,000 gal. aboveground storage tank that was installed in 1967.

PRS 21-011(j) was an americium raffinate storage tank (TA-21-289) located near building TA-21-257. This tank was installed in 1967 and has a 1,600 gal. holding capacity. The surrounding area was not originally paved with asphalt, and spills were reported to have occurred during tanker truck transfer operations. The exact date the tank was taken out of operation is not known.

Current Regulatory Status: PRSs 21-011(a, d-g, i, and j) are on the HSWA Permit while PRS 21-011(h) is not on the HSWA Permit. All of these PRSs are under investigation.

Proposed Remedy: No remedial action is anticipated to be necessary (addressed by MDA T remedy).

Future Actions Required: After structure removal by D&D, conduct characterization sampling as part of Corrective Measures Study/Corrective Measures Implementation (CMS/CMI) process for MDA T to support a recommendation for an integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-011(b)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-011(b) was a sump (TA-21-223) that transported waste from DP East to the waste treatment plant TA-21-257. It transports waste from buildings TA-21-152, TA-21-155, and TA-21-209 to the treatment facility via a 6-in. cast iron line. The sump may have discharged to DP Canyon on occasion through a drain pipe before two holding tanks (TA-21-346, PRSs 21-004[b and c]) were installed.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: After D&D removes structures/equipment, conduct characterization sampling, remove residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-011(k)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-011(k) was an outfall that received effluent from operations at the waste treatment facility, TA-21-257. The outfall routed industrial waste water from the facility through tanks TA-21-112 and TA-21-113 with the discharge located on the south side of DP Canyon. The plant treated liquid wastes from the plutonium purification process. The liquid wastes contained a variety of radioactive and chemical constituents remaining after the plutonium extraction process. Various field investigations from 1983 to 1993 have indicated the presence of uranium, plutonium, thorium, americium, strontium, cesium, and protactinium isotopes. In addition, arsenic, lead, silver, zinc, cadmium, copper, and nickel have been detected above background levels. Interim actions performed in1996 and 1997 removed approximately 390 cubic yards of material and established storm water control measures.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of residual contamination.

Future Actions Required: Remove residual contamination and conduct confirmatory sampling to support a recommendation of NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106 RCRA Facility Investigation,"* January 1995, LA-UR-94-4360. *"Interim Action Report for Potential Release Site 21-011(k),"* April 1997, LA-UR-96-1609.

Potential Release Site (PRS) - 21-012(a)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-012(a) was originally identified as a dry well inside the steam plant (TA-21-357); however, site visits have verified that there is not a dry well associated with this steam plant. Therefore, it was recommended for NFA in the TA-21 work plan.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA). The New Mexico Environmental Department (NMED) has concurred with this recommendation.

Proposed Remedy: No action.

Future Actions Required: None.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Proposal to Approve: No further Action for 99 Solid Waste management Units (SWMUs) at Los Alamos National Laboratory,"* letter from E. Kelley, Director, Water and Waste Management Division, New Mexico Environment Department, to D. Gurule, Area Manager, Department of Energy Los Alamos Area Office, and J. Browne, Director, Los Alamos National Laboratory, October 1998.

Potential Release Site (PRS) - 21-012(b)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-012 (b) is a dry well associated with the old steam plant. This building has been removed. The dry well received blow down water from the steam plant.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct characterization sampling and confirmatory sampling (as necessary) to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) – 21-013(a)

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS 21-013 (a) is a small disposal area consisting of sand from the drying beds of the sanitary waste treatment plant. The area is inactive. The RFI was started in 1994, but field inspections could not identify the sand disposal area. A grid was applied to the area where the sand had been identified; the area was surveyed with radiological screening instruments and sampled.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health, alone. The New Mexico Environment Department has not yet approved this recommendation.

Proposed Remedy: After sampling and analysis, no further action is anticipated.

Future Actions Required: Conduct additional characterization sampling and confirmatory sampling (as necessary) to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"RFI Report for PRSs 21-013(a) and 21-026(a-c),"* August 1997, LA-UR-97-589.

Potential Release Sites (PRSs) – 21-013(c-e)

Location: TA-21 Site

Category: Surface Units

Ten-Year Plan Description: Surface Units

History: PRSs 21-013 (c,d,e) are surface disposal areas. PRS 21-013 (d) was referred to as the "cold dump". PRSs 21-013 (c,d) were locations where building debris such as excess concrete, demolished foundations, etc., were disposed. Each of the PRSs was investigated in the 1994 RFI. In 1995, corrective action activities were conducted at each of the sites.

Current Regulatory Status: These PRSs are on the HSWA Permit and were proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional characterization sampling and confirmatory sampling (as necessary) to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1B TA-21 Operable Unit RFI, Operable Unit-Wide Surface Soil, Deposition Layer and Filter Building Investigation,"* January 1994, LA-UR-93-4390. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-014

Location: TA-21 Site

Category: Material Disposal Unit

Ten-Year Plan Description: Material Disposal Unit

History: MDA A covers a surface area of 1.8 acres and contains two underground tanks, two pits on the east side, and a large central pit. The area was used between 1945 to 1949 and 1969 to 1977. The area was used for radioactively-contaminated solid waste and D&D debris disposal. MDA A was decommissioned in 1978. Prior to decommissioning, remediation of the site cover was conducted. The surface was stabilized again in 1985 and 1987.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: In Situ containment.

Future Actions Required: Conduct additional characterization sampling and support the Corrective Measures Study/Corrective Measures Implementation (CMS/CMI) process. The CMS/CMI process includes characterizing migration pathways, geologic and hydrologic conditions, and extent of migration. The CMS/CMI process will evaluate alternatives involving slope stabilization, in situ stabilization, and design and installation of a landfill cap to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-015

Location: TA-21 Site

Category: Material Disposal Unit

Ten-Year Plan Description: Material Disposal Unit

History: MDA B is a solid waste material disposal area, which operated from 1945 to 1947. The surface area is 6.03 acres, of which the western 2/3 was paved in 1966. The eastern 1/3 has been used for trench cover studies since 1982. The southern portion of the eastern 1/3 of the MDA was used for chemical waste disposal. The western 2/3 was used for disposal of solid materials, and the northern portion of the eastern 1/3 of the site was used for disposal of equipment, vehicles, and other solid waste, etc. The main constituents of concern include radiological wastes such as plutonium and tritium and various hazardous and non-hazardous wastes.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: In Situ Containment

Future Actions Required: Conduct additional characterization sampling and support the Corrective Measures Study/Corrective Measures Implementation (CMS/CMI) process. Three CMS/CMI process includes characterizing migration pathways, geologic and hydrologic conditions, and extent of migration. The CMS/CMI process will evaluate alternatives involving slope stabilization, in situ stabilization, and design and installation of a landfill cap to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-017(a-c)

Location: TA-21 Site

Category: Material Disposal Unit

Ten-Year Plan Description: Material Disposal Unit

History: MDA U consists of two absorption beds and an associated sump. The beds were used for subsurface disposal of liquid radioactive contaminated wastes. The surface area of the absorption beds is approximately 2 acres. Historical records are poor with some records indicating the beds were not built to handle the amount of liquids discharged into the units, resulting in poor performance. There is documentation that waste liquids overflowed the beds, flowing into DP Canyon to the north. Surface stabilization activities occurred in 1990.

Current Regulatory Status: These PRSs are on the HSWA Permit and are under investigation.

Proposed Remedy: In Situ Containment

Future Actions Required: Conduct additional characterization sampling and support the Corrective Measures Study/Corrective Measures Implementation (CMS/CMI) process. The CMS/CMI process includes characterizing migration pathways, geologic and hydrologic conditions, and extent of migration. The CMS/CMI process will evaluate alternatives involving slope stabilization, in situ stabilization, and design and installation of a landfill cap to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-019(a-m)

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: The exhaust from these exhaust stacks were part of a group of stack emission sources for airborne releases from TA-21 operations. Plutonium, uranium, and tritium isotopes were the major constituents, but some isotopes discharged from certain stacks were not known. The area influenced by these stack emissions were sampled as part of a 1992 RFI. The PRSs, the associated buildings, and the identified emissions are summarized below:

PRS	Building	Emissions
21-019(a)	TA-21-3	uranium isotopes
21-019(b)	TA-21-4	Plutonium isotopes
21-019(c)	TA-21-146	Unknown
21-019(d)	TA-21-150	Plutonium isotopes
21-019(e)	TA-21-155	Tritium
21-019(f)	TA-21-209	Tritium
21-019(g)	TA-21-257	Plutonium isotopes
21-019(h)	TA-21-313	Plutonium and uranium isotopes
21-019(i)	TA-21-314	Plutonium isotopes
21-019(j)	TA-21-315	Plutonium isotopes
21-019(k)	TA-21-322	Unknown
21-019(l)	TA-21-323	Unknown
21-019(m)	TA-21-324	Plutonium isotopes

Current Regulatory Status: These PRSs are not on the HSWA Permit and were proposed for no further action (NFA) on the basis on human health risk, alone. NFA concurrence has been received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: These PRSs are consolidated with PRS 21-021.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1B TA-21 Operable Unit RFI Operable Unit Wide Surface Soil, Deposition Layer and Filter Building Investigation,"* January 1994, LA-UR-93-4390. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360. *"Concurrence in No further Action Recommendations,"* memo from T. Taylor, Program Manager Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Project Manager Environmental Restoration Program, University of California, Los Alamos National Laboratory, November 1995.

Potential Release Site (PRS) - 21-020(a)

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS 21-020(a) was a filter house (TA-21-12) that served DP West. Exhaust from this unit was part of the group of stack emission sources for airborne releases from TA-21 operations. Plutonium isotopes were discharged from this filter house. TA-21-12 was decommissioned in 1973.

Current Regulatory Status: This PRS is not on the HSWA Permit and the air emission portion of it was proposed for no further action (NFA) on the basis on human health risk, alone. NFA concurrence has been received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct characterization sampling and confirmatory sampling (as necessary) within the footprint of the building to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1B TA-21 Operable Unit RFI Operable Unit Wide Surface Soil, Deposition Layer and Filter Building Investigation,"* January 1994, LA-UR-93-4390. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360. *"Concurrence in No further Action Recommendations,"* memo from T. Taylor, Program Manager Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Project Manager Environmental Restoration Program, University of California, Los Alamos National Laboratory, November 1995.

Potential Release Site (PRS) - 21-020(b)

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS 21-020(b) was a filter house (TA-21-153) that served DP East. Exhaust from this unit was part of the group of stack emission sources for airborne releases from TA-21 operations. Actinium and tritium isotopes were discharged from this filter house. TA-21-153 was decommissioned in 1978.

Current Regulatory Status: This PRS is not on the HSWA Permit and the air emission portion of it was recommended for no further action (NFA) on the basis on human health risk, alone. NFA concurrence has been received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional characterization sampling and confirmatory sampling (as necessary) to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1B TA-21 Operable Unit RFI Operable Unit Wide Surface Soil, Deposition Layer and Filter Building Investigation,"* January 1994, LA-UR-93-4390. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360. *"Concurrence in No further Action Recommendations,"* memo from T. Taylor, Program Manager Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Project Manager Environmental Restoration Program, University of California, Los Alamos National Laboratory, November 1995.

Potential Release Site (PRS) - 21-021

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS 21-021 consists of all air stack releases and particulates of plutonium, strontium, and possible chemical constituents at TA-21, which is a nominal 300,000 square meters. Stack emissions PRSs 21-019(a-m) and 21-020(a and b) will be deferred to PRS 21-021.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct site-wide characterization and baseline sampling and confirmatory sampling (as necessary) to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1B TA-21 Operable Unit RFI Operable Unit Wide Surface Soil, Deposition Layer and Filter Building Investigation,"* January 1994, LA-UR-93-4390. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-022(a)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: This sump was connected to the floor drain of the plutonium storage vault in building TA-21-21. The sump was constructed in 1946, but it is unknown when its operation stopped.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove related structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: "*TA-21 Operable Unit RFI Work Plan for Environmental Restoration,*"May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-022(b-e) and (g)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Units

History: These five PRSs are associated with sumps that were constructed on the north side of buildings TA-21-2, 3, 4, 5, and 150. These sumps received raw acid waste prior to the start-up of MDA T and subsequent waste disposal facilities. The sumps were removed in 1979 and 1980. After removal of soil to a depth of 15 ft, approximately 48,000 pCi/g of total activity remained. No information related to hazardous constituents is available. In addition, this aggregate includes the disposal lines that connected the sumps to disposal operations.

Current Regulatory Status: These PRSs are on the HSWA Permit and are under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment (in coordination with D&D) and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-022(f)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-022 (f) was part of an acid line system running from Building TA-21-152 to MDA U.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment (in coordination with D&D) and residual contamination, and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: "*TA-21 Operable Unit RFI Work Plan for Environmental Restoration,*"May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-022(h-j)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Units

History: These three PRSs are sumps that were associated with equipment rooms in the south ends of buildings TA-21-2, 3, and 4. The PRSs 21-022(h and i) sumps were removed previously.

Current Regulatory Status: These PRSs are on the HSWA Permit and are under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment (in coordination with D&D) and residual contamination, and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-023(a, b, d)

Location: TA-21 Site

Category: Subsurface Units

Ten-Year Plan Description: Subsurface Units

History: These PRSs are decommissioned septic tanks under the footprint of buildings to be decommissioned by D&D.

Current Regulatory Status: These PRSs are on the HSWA Permit and are under investigation.

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional characterization sampling and confirmatory sampling (as necessary) to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-024(a)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(a) was a septic system that routed sewage from building TA-21-9, the old steam plant, through septic tank TA-21-53 to the surface near the edge of Los Alamos Canyon. The concrete septic tank was abandoned in place in 1966. Investigations in 1992 indicated the presence of several constituents (strontium-90, total uranium, calcium, cadmium, copper, chromium, iron, lead, nickel, and zinc) above UTLs for background, but below SALs in the outfall drainage channel. Investigations in 1993 (borehole down gradient) confirmed the absence of contamination associated with the septic tank.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(b)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(b) was a septic system that routed sewage from building TA-21-17 through a concrete septic tank, TA-21-55, to a surface discharge point south of building TA-21-5. The outfall consists of a cast iron pipe that discharges to the surface near the edge of Los Alamos Canyon. Reconnaissance sampling in 1988 and investigations in 1992 indicated amounts of americium-241, plutonium-239, tritium, and total uranium that exceeded background levels. Plutonium concentrations exceeded the SAL in the outfall and were detected above the SAL in a borehole drilled next to tank TA-21-55. Selenium, arsenic, chromium, nickel, and zinc were found to be above UTLs but below SALs. Low levels of oil and grease were also reported.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(c)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(c) was a septic system that routed sewage from former building TA-21-54 and existing building TA-21-61 through a concrete septic tank, TA-21-56, to a surface discharge on the edge of Los Alamos Canyon. Reconnaissance sampling in 1988 and RFI sampling occurred in 1992 and 1993.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(d)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(d) was a septic system that routed sewage from former building TA-21-1 through a concrete septic tank, TA-21-106, to a surface discharge on the edge of Los Alamos Canyon. Reconnaissance sampling in 1988 and investigations in 1992 indicated mercury, silver, copper, lead, and zinc levels that exceeded background. Americium-241 and tritium were found above background levels, and the plutonium-239 concentration exceeded the SAL in both the surface drainage samples and the septic tank borehole. Low levels of organic analytes (oil and grease) were also detected. The contents of the tank were removed during VCA activities in 1995, and the tank was abandoned in place.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360. *"Voluntary Corrective Action Completion Report for PRS 21-024(d) TA-21 Septic Tank,"* February 1996, LA-UR-96-258.

Potential Release Site (PRS) - 21-024(e)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(e) was a septic system that routed sewage from former building TA-21-20 through a 1,000 gal. concrete septic tank, TA-21-123, to a surface discharge on the edge of Los Alamos Canyon. Reconnaissance sampling in 1988 and investigations in 1992 indicated cadmium, lead, selenium, and zinc levels that exceeded background. Americium-241 and tritium were also found above background, and the plutonium-239 concentration exceeded the SAL. The contents of the tank were removed during VCA activities in 1995, and the tank was abandoned in place.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360. *"Voluntary Corrective Action Completion Report for PRS 21-024(d) TA-21 Septic Tank,"* February 1996, LA-UR-96-258.

Potential Release Site (PRS) - 21-024(f)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(f) received sewage from building TA-21-45, (the safety training building) through septic tank TA-21-124. The liquid then discharged into a shallow pit approximately 3 ft x 3 ft x 2 ft on the south edge of DP Mesa. Reconnaissance sampling in 1988 and investigations in 1992 indicated the presence of several constituents (cesium-137, tritium, plutonium-239, americium-241, strontium-90, mercury, and cadmium) above background levels but below SALs in the outfall drainage channel. Investigations in 1992 and 1993 (boreholes at septic tank and shallow pit) showed concentrations for radionuclides and inorganic analytes below UTLs. No organic analytes were detected.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(g)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(g) received sanitary sewage from buildings TA-21-71, (warehouse) and TA-21-31 (electronics shop) through concrete septic tank TA-21-125. The liquid then discharged to the surface on the south edge of DP Mesa. The septic tank was abandoned in place in the early 1960s. Reconnaissance sampling in 1988 and investigations in 1992 indicated the presence of several constituents (tritium, americium-241, strontium-90, total uranium, mercury, copper, lead, zinc selenium, and cadmium) above background levels at the surface discharge area. Plutonium-239 was detected above the SAL. Tetrachloroethane and oil and grease were reported above their detection limits. Investigations in 1993 (at a borehole down gradient from the septic tank) showed concentrations of radionuclides below SALs and concentrations of inorganic analytes below UTLs. No organic analytes were detected.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(h)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: This PRS was a septic system that routed sewage from building TA-21-155 through a septic tank to the surface. The outfall is very small and was at or near the mesa edge. The RFI was conducted in 1992. In 1995 a VCA was conducted at the site by removing all material from the tank and filling with inert material. The outfall was surveyed for radioactivity, but none was detected at levels greater than human health concerns.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(l)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: This PRS was a septic system that routed sewage from building TA-21-152 through a septic tank to the surface. The outfall was at or near the mesa edge. The RFI began in 1992. A RFI was submitted to the EPA. NMED has commented on the report, but their comments have not been resolved. In 1997 an additional phase of the RFI began. After assessing the additional data, it was clear that a source term removal was appropriate as an interim measure in the mesa top portion of the PRS. In 1998 an interim action removed contaminated soil from the mesa top.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(j)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(j) consists of septic tank TA-21-194 and associated drain lines. The septic tank received sewage from building TA-21-155, which was a warehouse/laboratory. The reinforced concrete tank is located off the southwest corner of TA-21-155 near the south edge of the perimeter road. In 1966 the septic tank was abandoned after it was pumped out and filled with earth. Based on the results of a 1992 and 1993 Phase I RFI, no contaminants of concern were identified.

Current Regulatory Status: This PRS is on the HSWA Permit and under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(k)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-024(k) consists of septic tank TA-21-219, associated drain lines, and a leach field. The septic tank received sanitary sewage from building TA-21-209 (high temperature chemistry building). The overflow from the septic tank went to a leach field that was 30 ft x 20 ft x 8 ft 6 in. In 1966 the septic tank was abandoned after being pumped out and filled with earth. Based on the results of a 1992 and 1993 Phase I RFI, no contaminants of concern were identified.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(l)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: The location of this PRS is believed to coincide with the area addressed by PRS 21-004(a). Any investigation an/or remediation in this area will be addressed by the activities for PRS 21-004(a).

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No action (addressed by PRS 21-004(a) remedy).

Future Actions Required: None.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-024(m)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(m) is a vitrified-clay pipe (VCP) drain line that exits building TA-21-209 (high temperature chemistry building) and leads south towards Los Alamos Canyon. The pipe appears to have been removed during the construction of a storm drain. Based on the results of a 1992 Phase I RFI, no contaminants of concern were identified.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA). NFA concurrence has been received from the New Mexico Environment Department (NMED).

Proposed Remedy: No action.

Future Actions Required: None.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360. *"Proposal to Approve: No further Action for 99 Solid Waste management Units (SWMUs) at Los Alamos National Laboratory,"* letter from E. Kelley, Director, Water and Waste Management Division, New Mexico Environment Department, to D. Gurule, Area Manager, Department of Energy Los Alamos Area Office, and J. Browne, Director, Los Alamos National Laboratory, October 1998.

Potential Release Site (PRS) - 21-024(n)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(n) is a drain line that exited building TA-21-155 (warehouse/laboratory) and discharged north into DP Canyon. The drain system consists of CMP exiting a concrete bulkhead and discharging onto a gravel road adjacent to MDA U. The effluent flowed north to a ditch paralleling the road and into DP Canyon. Based on the results of a 1992 Phase I RFI, no contaminants of concern were identified.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action (NFA) This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-024(o)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-024(o) is a drain line that discharged building TA-21-46 (diesel plant/warehouse) floor drains south into Los Alamos Canyon. The drain line consists of a 4 in. VCP. Based on the results of a 1992 Phase I RFI, no contaminants of concern were identified.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures/equipment and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360.

Potential Release Site (PRS) - 21-025(a)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-025(a) is an active off-gas system located in building TA-21-155. This is an active system that is monitored under routine operations at the Tritium Systems Test Assembly (TSTA) facility. The airborne release component of this PRS has been deferred to PRSs 21-019(a-m) while the system component of this PRS (within building TA-21-155) has had no environmental releases.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk. NFA concurrence has been received from the Department of Energy (DOE).

Proposed Remedy: No action.

Future Actions Required: None.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Site (PRS) - 21-025(b)

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS 21-025(b) is an active off-gas system located in building TA-21-155. This is an active system that is monitored under routine operations at the Tritium Systems Test Assembly (TSTA) facility. The airborne release component of this PRS has been deferred to PRSs 21-019(a-m) while the system component of this PRS (within building TA-21-155) has had no environmental releases.

Current Regulatory Status: This PRS is not on the HSWA Permit and was recommended for no further action (NFA) on the basis of human health risk. NFA concurrence has been received from the Department of Energy (DOE).

Proposed Remedy: No action.

Future Actions Required: None.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Site (PRS) - 21-026(d)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: This PRS discharged treated effluent through a drain line from the TA-21 sewage treatment plant. The outfall is at or near the mesa edge into DP Canyon. The RFI samples were collected in 1992.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The Department of Energy (DOE) has not yet concurred with this recommendation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove residual contamination from the outfall (if necessary), and conduct confirmation sampling to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment and ground water or surface water.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) – 21-026(a-c)

Location: TA-21 Site

Category: Surface and Subsurface Units

Ten-Year Plan Description: Surface Units

History: The sewage treatment plant 21-026 (a) treated sanitary waste and non-contact cooling water from TA-21 facilities. Treated effluent was discharged to drying beds (PRS 21-026 (b)). PRS 21-026(c) is a chlorine contact chamber located next to the sewage plant. The RFI was started in 1994 when boreholes were placed under and adjacent to each of these PRSs.

Current Regulatory Status: PRSs 21-026(a and b) are on the HSWA Permit while PRS 21-026(c) is not on the HSWA Permit. All of these PRSs were proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) and the Department of Energy (DOE) have not yet concurred with these recommendations.

Proposed Remedy: Removal of structures

Future Actions Required: Removing the sewage treatment plant, sludge drying beds, and dosing chamber, and conduct confirmatory sampling to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: "*TA-21 Operable Unit RFI Work Plan for Environmental Restoration,*"May 1991, LA-UR-91-962.
RFI Report ref

Potential Release Site (PRS) - 21-027(a)

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Outfall

History: This PRS is a drainage system that routed storm water runoff from the area around building TA-21-3 through culverts to Los Alamos Canyon. The outfall is at or near the mesa edge. The RFI began in 1992 and identified chromium and plutonium at levels of concern.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove structures and residual contamination (if necessary), and conduct confirmation sampling to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: "*TA-21 Operable Unit RFI Work Plan for Environmental Restoration,*" May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 21-027(b)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: PRS 21-027(b) consists of two outfalls in the same drainage channel. The outfalls were NPDES-permitted and served cooling towers TA-21-166, 167, and 152. Based on the results of a 1992 Phase I RFI, no contaminants of concern were identified.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA). NFA concurrence has been received from the New Mexico Environment Department (NMED).

Proposed Remedy: No action.

Future Actions Required: None.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Request for Permit Modification Units Proposed for NFA,"* March 1995, LA-UR-95-767. *"Phase Report 1C TA-21 Operable Unit RFI, Operable Unit Outfalls Investigation,"* January 1994, LA-UR-94-228. *"Phase Report Addendum 1B and 1C Operable Unit 1106,"* January 1995, LA-UR-4360. *"Proposal to Approve: No further Action for 99 Solid Waste management Units (SWMUs) at Los Alamos National Laboratory,"* letter from E. Kelley, Director, Water and Waste Management Division, New Mexico Environment Department, to D. Gurule, Area Manager, Department of Energy Los Alamos Area Office, and J. Browne, Director, Los Alamos National Laboratory, October 1998.

Potential Release Site (PRS) - 21-027(c)

Location: TA-21 Site

Category: Outfall

Ten-Year Plan Description: Outfall

History: This PRS was a drainage line that routed discharge from floor drains in building TA-21-6 to the surface. The outfall was at or near the mesa edge. This PRS was investigated in 1992, and little or no contamination was identified.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove remaining underground structures and residual contamination (if any), and conduct confirmatory sampling to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-028(b-e)

Location: TA-21 Site

Category: Surface Units

Ten-Year Plan Description: Surface Units

History: PRSs TA-21-028 (b, c, d, e) are storage areas that may (or may have) contain both hazardous waste and mixed waste. The individual areas are located as follows:

- 21-028(b) is located in building TA-21-150 (3 areas)
- 21-028(c) is located adjacent to building TA-21-3 (4 areas)
- 21-028(d) is located in and adjacent to building TA-21-209 (1 area)
- 21-028(e) is located in building TA-21-210 (3 areas)

PRS 21-028(b) was proposed for no further action in the workplan, PRSs 21-028(d) and (e) were investigated, and PRS 21-028(c) no longer exists since building TA-21-3 has been decontaminated and decommissioned.

Current Regulatory Status: These PRSs are not on the HSWA Permit. PRSs 21-028(b, d, and e) were proposed for no further action (NFA) on the basis on human health risk, alone. NFA concurrence was received on PRSs 21-028(b and e) from the Department of Energy (DOE). PRS 21-028(c) is under investigation.

Proposed Remedy: Aggregated with D&D of associated structures.

Future Actions Required: Coordinate confirmatory sampling activities (as necessary) with D&D activities to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Sites (PRSs) - C-21-001, C-21-003, C-21-004, C-21-006, C-21-008, C-21-014, and C-21-024 through C-21-026

Location: TA-21 Site

Category: Surface Units

Ten-year Plan Description: Surface Units

History: These PRSs are associated with one-time (i.e. not a waste handling system or systemic release) releases and former structure locations. RFI activities will be coordinated with decontamination and decommission (D&D) activities. These PRSs are summarized as follows:

PRS	Description	Associated Structure
C-21-001	Hydrogen fluorine spill: no documentation of cleanup.	TA-21-17
C-21-003	Possible releases to paved area; area has been repaved.	TA-21-2 TA-21-3
C-21-004	Possible radionuclide and hazardous constituent release to driveways; soil was removed and area was repaved.	TA-21-2
C-21-006	Americium-241 release from leaking trailer; contaminated area paved over. No documentation of cleanup.	TA-21-2
C-21-008	Radioactive material release from a process exhaust line; soil was removed after the release.	TA-21-4
C-21-014	Location of active and operational warehouse.	TA-21-286
C-21-024	Former location of a warehouse; structure demolished and disposed.	TA-21-22
C-21-025	Former location of radioactively-contaminated corridor; structure was demolished and disposed.	TA-21-19
C-21-026	Former location of administrative building with shops; structure was demolished and disposed.	TA-21-51

Current Regulatory Status: These PRSs are not on the HSWA Permit. PRSs C-21-003, C-21-004, C-21-008, C-21-014, C-21-024 through C-21-026 were proposed for no further action (NFA). NFA concurrence was received from the Department of Energy (DOE). PRSs C-21-001 and C-21-006 are under investigation.

Proposed Remedy: Aggregated with D&D of associated structures.

Future Actions Required: Coordinate confirmation sampling activities with D&D activities to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Sites (PRSs) - C-21-028 through C-21-032

Location: TA-21 Site

Category: Surface and Subsurface Units

Ten-year Plan Description: Surface and Subsurface Units

History: These PRSs are associated former structures at TA-21. RFI activities will be coordinated with decontamination and decommission (D&D) activities. These PRSs are summarized as follows:

PRS	Description	Associated Structure
C-21-028	A 12,788-gallon above ground fuel tank that was removed.	TA-21-47
C-21-029	A 3,000-gallon above ground steel oil tank that was removed.	TA-21-60
C-21-030	A 320-gallon propane tank that was removed.	TA-21-64
C-21-031	A 5,200-gallon half-buried stainless steel tank that was removed.	TA-21-325
C-21-032	A standby diesel generator served by a 300-gallon day tank and a 1,000-gallon underground tank, which remains inplace.	TA-21-152

Current Regulatory Status: These PRSs are not on the HSWA Permit. PRSs C-21-028 and C-21-029 were proposed for no further action (NFA). NFA concurrence was received from the Department of Energy (DOE). PRSs C-21-030 through C-21-032 are under investigation.

Proposed Remedy: Aggregated with D&D of associated structures.

Future Actions Required: Coordinate confirmation sampling activities with D&D activities to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Sites (PRSs) - C-21-002, C-21-010, C-21-011, C-21-013, and C-21-016 through C-21-023

Location: TA-21 Site

Category: Surface and Subsurface Units

Ten-Year Plan Description: Surface and Subsurface Units

History: These PRSs are associated with releases and former structure locations. RFI activities will be coordinated with decontamination and decommission (D&D) activities. These PRSs are summarized as follows:

PRS	Description	Associated Structure
C-21-002	Leak of radionuclides from a waste storage tank to the surrounding soil; soil was removed.	TA-21-35
C-21-010	Leak of radionuclides from drums; area was decontaminated.	TA-21-35
C-21-011	Spill of radioactive material resulting from a plugged scrubber on building roof; area was decontaminated.	TA-21-155
C-21-013	Waste storage pit that was never constructed.	TA-21-331
C-21-016 though C-21-021	Storage hutments that were removed in 1954.	TA-21-23 through TA-21-28
C-21-022	Laboratory structure that was removed and disposed.	TA-21-34
C-21-023	Former location of building that was removed and disposed.	TA-21-54

Current Regulatory Status: These PRSs are not on the HSWA Permit and were proposed for no further action (NFA). NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: Aggregated with D&D of associated structures.

Future Actions Required: Coordinate confirmatory sampling activities with D&D activities to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Sites (PRSs) - C-21-005 and C-21-007

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS C-21-005 was a spill between buildings TA-21-5 and TA-21-257, as a result of a fire in a filter in building 5 in 1959. The resulting contamination was cleaned up. PRS C-21-007 was a spill from a tank vent at TA-21-257. The leak contaminated the building roof, wall, and surrounding area with plutonium, americium, and uranium. This spill was reportedly cleaned up.

Current Regulatory Status: These PRSs are not on the HSWA Permit and are under investigation.

Proposed Remedy: Aggregated with D&D of associated structure.

Future Actions Required: Coordinated confirmatory sampling activities with D&D activities to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - C-21-015

Location: TA-21 Site

Category: Subsurface Unit

Ten-Year Plan Description: Subsurface Unit

History: PRS C-21-015 was a structure that has been removed. The building and soil were removed down to tuff. A sump and line have been identified associated with Building TA 21-45 since the TA 21 RFI Workplan was written. This sump and line were installed to support waste stream treatment studies conducted in Building TA-21-33 (PRS 21-009), across the road to the south.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) in the work plan. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: Removal of structures and residual contamination, if any.

Future Actions Required: Conduct additional characterization sampling, remove underground structures and residual contamination (if any), and conduct confirmation sampling to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Site (PRS) - C-21-027

Location: TA-21 Site

Category: Surface Unit

Ten-year Plan Description: Surface Unit

History: PRS C-21-027 is the site of structure TA-21-143, a cooling tower (chilled water recirculator). The cooling tower received water from building TA-21-3, circulated it , and returned it to the building in a closed loop. D&D activities began in 1994 with the removal of the aboveground structures and continued in 1995 with the removal of below ground sections. In 1995, RFI samples were collected from the footprint of the former structure to confirm that D&D activities removed contamination from the site.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis on human health risk, alone. The Department of Energy (DOE) has not yet concurred with this recommendation.

Proposed Remedy: Aggregated with D&D of associated structure.

Future Actions Required: Coordinate confirmatory sampling (as necessary) with D&D activities to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"Voluntary Corrective Action Completion Report for Potential Release Site C-21-027 TA-21 Cooling Tower,"* Revision 1, February 1996, LA-UR-96-247.

Potential Release Site (PRS) - C-21-033

Location: TA-21 Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS C-21-033 was a spill that occurred in 1982 when radioactive contaminated cement paste leaked while being pumped from TA-21-257 to shafts at MDA T. The exact spill location is not known.

Current Regulatory Status: This PRS is not on the HSWA Permit and is under investigation.

Proposed Remedy: Aggregated with D&D of associated structure.

Future Actions Required: Coordinated confirmatory sampling activities with D&D activities to support a recommendation of integrated no further action (NFA). This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-001, 21-016 (a-c), 21-010 (a-h), 21-011(c), 21-028(a), C-21-009, C-21-012, C-21-034, C-21-035, C-21-036, C-21-037

Location: TA-21 Site

Category: Various

Ten-Year Plan Description: Material Disposal Unit

History: MDA T covers approximately 3.5 surface acres and consists of 4 absorption beds for liquid wastes, a waste storage area, and a series of disposal shafts used to dispose of wastes mixed with cement. The site operated from 1945 until 1983. The surface was stabilized in 1987. The surface of the MDA was sampled in 1993, and subsurface sampling was conducted in 1996/1997. Not all records concerning waste disposal are available; however most waste was plutonium waste-processing waste, which may have contained some hazardous constituents.

The remainder of the PRS aggregate is comprised of PRSs associated with decommissioned waste treatment facilities (21-010 [a through h] and C-21-034 through C-21-037) and various storage areas (21-001 and 21-028[a]) and spills on the MDA surface (C-21-009 and C-21-012). The former waste treatment facility was investigated in 1994. MDA T was investigated in 1996 and 1997.

Current Regulatory Status: PRSs 21-016(a-c), 21-010(a-h), 21-011(c) are on the HSWA Permit. PRSs 21-001, 21-028(a), C-21-009, C-21-012, C-21-034, C-21-035, C-21-036, and C-21-037 are not on the HSWA Permit. All of these PRSs are under investigation.

Proposed Remedy: In Situ containment, if necessary.

Future Actions Required: Conduct additional characterization sampling and support the Corrective Measures Study/Corrective Measures Implementation (CMS/CMI) process. Three CMS/CMI process includes characterizing migration pathways, geologic and hydrologic conditions, and extent of migration. The CMS/CMI process will evaluate alternatives involving slope stabilization, in situ stabilization, and design and installation of a landfill cap to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Sites (PRSs) - 21-018(a and b), 21-013(b and g), 21-023(c), and 21-027(d)

Location: TA-21 Site

Category: Various

Ten-Year Plan Description: Material Disposal Unit

History: MDA V contains three liquid absorption beds (20 ft x 200 ft x ≈ 8 ft) designed to dispose of the outflow from the radioactive laundry facility. These beds were in continuous use from 1945 to 1961. Historic evidence shows the beds were under-designed for the volumes of waste discharged, resulting in overflows into the adjacent drainage and into Los Alamos Canyon.

The RFI was started in 1994. The data from the RFI indicates plutonium is the predominant contaminant in the disposal beds (≈ 5,000 pCi/g). There is also evidence of an area of localized strontium-90 contamination combined with very high levels of inorganic contaminants near the center of Bed #1.

PRS 21-013 (b, g) are surface disposal areas immediately down gradient from the MDA (i.e., where overflows passed). Building debris was pushed over the mesa edge. PRS 21-023(c) and 21-027(d) are outfalls discharging in the drainage immediately west of the MDA.

Current Regulatory Status: PRSs 21-018(a and b), 21-013(b), 21-023(c), and 21-027(d) are on the HSWA Permit. PRS 21-013(g) is not on the HSWA Permit. All of these PRSs are under investigation

Proposed Remedy: In Situ containment.

Future Actions Required: Conduct additional characterization sampling and support the Corrective Measures Study/Corrective Measures Implementation (CMS/CMI) process. Three CMS/CMI process includes characterizing migration pathways, geologic and hydrologic conditions, and extent of migration. The CMS/CMI process will evaluate alternatives involving slope stabilization, in situ stabilization, and design and installation of a landfill cap to support a recommendation of integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water and surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962.

Potential Release Site (PRS) - 00-004

Location: DP Road Site

Category: Surface Unit

Ten-year Plan Description: Aboveground Material/Waste

History: PRS 00-004 is a container storage area located inside the Sixth Street Warehouses 3 and 4. The area was primarily used to store solvents; however, other chemicals that may have been stored at this site by the Zia Company include asphalt, lubricants, pesticides, and herbicides. The containers and storage areas were regularly inspected. Two spills were documented in the warehouses; one spill consisted of an undocumented quantity of methyl ethyl ketone peroxide, and one consisted of an unspecified crystallized solvent. It is assumed that in both incidences, the areas were washed down with water, which was then discharged to an unlined storm water drainage ditch and outfall leading into Los Alamos Canyon. RFI samples were collected in 1995.

Current Regulatory Status: This PRS is not on the HSWA Permit and has been proposed for no further action (NFA) on the basis of human health risk alone. The Department of Energy (DOE) has not yet concurred with this recommendation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Remove residual contamination (as necessary) and conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810; *"RFI Report for PRSs 0-004, 0-010(b), 0-030(b), 0-033(b),"* May 1996, (LA-UR-96-1749).

Potential Release Site (PRS) - 00-010(a)

Location: DP Road Site

Category: *Subsurface Unit*

Ten-Year Description: Surface/Subsurface Material/Waste

History: PRS 0-010(a) is a surface disposal site located on a small mesa southwest of MDA B, along DP Road near TA-21. It was first identified as a SWMU based on preliminary review of aerial photographs taken in the mid 1940s which seemed to indicate a drum storage area and several trenches. Photometric analysis of the evidence indicated that the items thought to be drums were in fact rows of stockpiled supplies, not waste awaiting disposal. In addition, an interview with a former Zia Co. employee who had worked in the area identified the stored material as canisters of roofing asphalt and roofing coal tar pitch. It is believed that the site was used for stockpiling and storage only.

Current Regulatory Status: PRS 00-010(a) is not on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: No additional remedial action is anticipated to be required.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for Operable Unit 1071,"* May 1992, LA-UR-92-810. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Site (PRS) - 00-010(b)

Location: DP Road Site

Category: Subsurface Unit

Ten-year Plan Description: Surface/Subsurface Material/Waste

History: PRS 00-010(b) was described in the Work Plan as an excavation east of Sixth Street Warehouses 1 through 4 that was based on aerial photographs taken in 1946. It was assumed that if an excavation existed adjacent to a warehouse building, it might have been used for some sort of waste disposal activity. However, upon re-examination of the 1946 photographs, no evidence of a waste disposal pit was apparent. Additionally, no records or data exist suggesting that such an excavation existed or was used for waste disposal purposes. A visual survey of the area also revealed no clues as to the existence of a former excavation. It is likely that this excavation did not exist; therefore, no RFI sampling activities were conducted.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) based on human health risk alone. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be required.

Future Actions Required: Conduct characterization sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071"*, Environmental Restoration Project, May 1992, LA-UR-92-810; *"RFI Report for PRSs 0-004, 0-010(b), 0-030(b), 0-033(b),"* May 1996, (LA-UR-96-1749).

Potential Release Site (PRS) - 00-027

Location: DP Road Site

Category: Surface Unit

Ten-Year Description: Surface/Subsurface Material/Waste

History: PRS 0-027, DP Road Storage Area, is located at the intersection of Trinity Drive and DP Road, which is the current location of the Knights of Columbus Hall. This site was used as a fuel tank farm beginning in 1946 and was converted to a product drum storage area in mid-1948. The storage capacity of PRS 0-027 was approximately 600 to 700 55-gal. Drums. The drum storage area consisted of six compartments, each approximately 38 ft wide. The compartments were separated by 2-ft high earthen dikes around the northern perimeter, and a concrete berm at the southern perimeter. The floor of each compartment was sloped to the north and covered by 2 in. of gravel. Archival information originally indicated that an iron drainline was present below each compartment. However, an interview with the former site supervisor suggested that none of these drainlines were ever installed.

In 1996, geodetic, geophysical, and soil vapor surveys were conducted at this site. In addition surface and subsurface (boreholes up to 60 ft.) samples were collected from this PRS. Air samples were also collected from the interior of the Knights of Columbus building in the fall of 1997.

Because the soil is believed to contain a mixture of chemicals of partially unknown identity, it is difficult to predict potential toxicological effects of exposure. Therefore, a corrective measures study is intended for this site which will contain the RFI report in entirety.

Current Regulatory Status: PRS 00-027 is not on the HSWA Permit and is under investigation.

Proposed Remedy: In Situ containment.

Future Actions Required: Conduct additional characterization sampling (as necessary) and prepare and implement plans to contain site inplace to support a recommendation for integrated NFA. This requires demonstrating that a site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for Operable Unit 1071,"* Chapter 5.7, May 1992, LA-UR-92-810. *"Draft RFI Report for PRS 0-027, DP Road Storage Area,"* in preparation.

Potential Release Site (PRS) - 00-030(b)

Location: DP Road Site

Category: Surface Unit

Ten-year Plan Description: Buildings/Equipment

History: PRS 00-030(b), also known as Septic System #1, is located east of the Sixth Street warehouses. The septic system is composed of four tanks that served Sixth Street Warehouses 1 through 4, an office building, a cold storage plant, and the eastern portion of TA-1. Several 6-in. drain lines routed sanitary waste from the buildings and warehouses to a main 8-in. drain line that discharged to the septic tanks. The septic tanks discharged to a leach field located east of the Sixth Street warehouses and ultimately to an outfall to Los Alamos Canyon. In 1995, RFI samples were collected from within and below each component of the septic system, and then all four septic tanks were closed in place. In 1996, VCA activities included removing a small volume of contaminated soil associated with the distribution box.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: In Situ containment (which was accomplished when the tanks were closed in place).

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that a site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071"*, Environmental Restoration Project, May 1992, LA-UR-92-810; *"RFI Report for PRSs 0-004, 0-010(b), 0-030(b), 0-033(b),"* May 1996, (LA-UR-96-1749). *"Voluntary Corrective Action Completion Report for PRSs 0-030(b), and 0-033(b),"* September 1996 (LA-UR-96-2278).

Potential Release Site (PRS) - 00-030(l)

Location: DP Road Site

Category: Surface Unit

Ten-year Plan Description: Buildings/Equipment

History: PRS 00-030(l) consisted of a 1,000 gal. concrete septic tank and 6-in. vitrified-clay pipe (VCP) drain lines that served 6th Street Warehouses 3 and 4. This septic system reportedly handled sanitary wastes and discharge from a blow-down tank used to release pressure from a boiler. Chemicals used to de-scale the boiler may have been released to the septic tank through the blow-down tank. No information exists regarding the nature or use of these chemicals. The outlet line from the septic tank discharged to Los Alamos Canyon. RFI samples were collected from within and below each component of the septic system. Based on the results and the relatively inexpensive cost estimate for removal, VCA activities were conducted to remove the tank and approximately 40 ft of inlet drain line, collect confirmation samples, and backfill and restore the site.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No additional remedial action is anticipated to be required.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that a site does not impact human health, the environment, and ground water or surface water quality.

References: "*RFI Work Plan for OU 1071*", Environmental Restoration Project, May 1992, LA-UR-92-810; *Voluntary Corrective Action Completion Report for SWMUs 0-030(l), 0-030(m), 0-033(a)*, August 1996, LA-UR-96-2901.

Potential Release Site (PRS) - 00-030(m)

Location: DP Road Site

Category: Surface Unit

Ten-year Plan Description: Buildings/Equipment

History: PRS 00-030(m) consisted of a 10 ft x 6 ft x 6 ft wood septic tank and 6-in. vitrified-clay pipe (VCP) drain lines that served an incinerator building where residential garbage was burned. Prior to incinerating the garbage, excess liquids of unknown chemical content were allowed to drain off and were supposedly piped into the septic tank. This system also handled sanitary wastes from the incinerator building. The outlet line ran east along the edge of the mesa for approximately 400 ft before connecting to the outlet drain line from PRS 00-030(b), which discharged to Los Alamos Canyon. RFI samples were collected from within and below each component of the septic system in 1995. Based on the results, VCA activities were conducted to remove the tank, inlet drain line, and surrounding soil/tuff; collect confirmation samples; and backfill and restore the site.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No additional remedial action is anticipated to be necessary.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that a site does not impact human health, the environment, and ground water or surface water quality.

References: "*RFI Work Plan for OU 1071*", Environmental Restoration Project, May 1992, LA-UR-92-810. "*Voluntary Corrective Action Completion Report for SWMUs 0-030(l), 0-030(m), 0-033(a),*" August 1996, LA-UR-96-2901.

Potential Release Site (PRS) - 00-033(a)

Location: DP Road Site

Category: Surface Unit

Ten-Year Description: Surface/Subsurface Material/Waste

History: PRS 0-033(a), is a 5,000 gallon abandoned, underground storage tank (UST) containing diesel fuel which served a generator in Warehouse #3 at the Sixth Street Warehouse. The Sixth Street Warehouse is located within TA-0, now TA-21, south of the intersection of Sixth Street and DP Road. In 1995 a VCA for this site was conducted. The contents of the UST were removed (3,200 gallons of water and diesel fuel), then the steel tank was excavated with a trackhoe. Following removal of the UST, the contaminated fill material and the tuff below the tank was excavated to a depth of approximately 10 feet. Five confirmatory boreholes were drilled and sampled to determine extent of contamination.

Current Regulatory Status: PRS 00-033(a), an UST, is on the HSWA Permit (as PRS 0-033) and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Remove residual contamination (as necessary) and conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that a site does not impact human health, the environment, and ground water or surface water quality.

References: History: *"RFI Work Plan for Operable Unit 1071,"* May 1992, LA-UR-92-810. *"Voluntary Corrective Action Completion Report for SWMUs 0-030(l), 0-030(m), 0-033(a),"* August 1996, LA-UR-96-2901

Potential Release Site (PRS) - 00-033(b)

Location: DP Road Site

Category: Surface Unit

Ten-year Plan Description: Buildings/Equipment

History: PRS 00-033(b) consists of potential soil contamination related to operations associated with the materials testing laboratory at the Sixth Street warehouses. The materials testing laboratory was constructed south of Warehouses 3 and 4 in 1948; operations involved the use of solvents, asphalt leaching, destructive testing of concrete cylinders, and sieve tests of aggregates for roadwork. Potential environmental concerns at this PRS include three floor drains and two drain lines, which discharged to an outfall in Los Alamos Canyon. RFI samples were collected from within and below the drain lines in 1995; the storm sewers, blow-off tank, and floor drains that drained to the unlined ditch were sampled as part of PRS 00-004. In 1996, VCA activities were conducted.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The Department of Energy (DOE) has not yet concurred with this recommendation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Remove residual contamination (as necessary) and conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that a site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071"*, Environmental Restoration Project, May 1992, LA-UR-92-810; "RFI Report for PRSs 0-004, 0-010(b), 0-030(b), 0-033(b)," May 1996, (LA-UR-96-1749). *"Voluntary Corrective Action Completion Report for PRSs 0-030(b), and 0-033(b),"* September 30, 1996 (LA-UR-96-2278).

Potential Release Site (PRS) - 21-029

Location: DP Road Site

Category: Surface Unit

Ten-Year Plan Description: Surface Unit

History: PRS 21-029, the DP Tank Farm, is the former location of 15 fuel storage tanks and two fill stations located on the north side and at the far west end of DP Road. All tanks and structures were decommissioned and removed in 1988. Sample analysis results indicate little potential for significant environmental contamination. All tanks appear to have stored petroleum hydrocarbon products. Of the 15 tanks, only one was found to have leaked. As a result, approximately 4 cubic yards of soil contaminated with diesel fuel was removed. Initial results from the 1994 RFI indicated that a release at one of the fill stations had not been fully addressed in 1988. The TPH levels did not exceed UST clean-up levels; however, a clean-up was performed as a best management practice. In addition, a small area of TPH contamination was identified in the adjacent canyon bottom. It is not known whether this contamination originated at PRS 21-029 or elsewhere. In June 1998, the New Mexico Environment Department (NMED) issued a compliance order requiring preparation of a workplan to further investigate the site; this workplan was drafted and submitted in October 1998.

Current Regulatory Status: This PRS is on the HSWA Permit and is under investigation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Complete site investigation by implementing the workplan, remove residual contamination (as necessary), and conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that a site does not impact human health, the environment, and ground water or surface water quality.

References: *"TA-21 Operable Unit RFI Work Plan for Environmental Restoration,"* May 1991, LA-UR-91-962. *"RFI Report for Potential Release Site 21-029,"* June 1996, LA-UR-95-3693. *"VCA Corrective Action Report for Potential Release Site 21-029, DP Tank Farm,"* July 1996, LA-UR-96-2408. *"RCRA Facility Investigation Work Plan, Volume II, DP Tank Farm,"* October 1998, LA-UR-98-4169.

Potential Release Site (PRS) - 00-003

Location: DOE LAAO Site

Category: Surface Unit

Ten-Year Plan Description: Above Ground Material/Waste

History: PRS 00-003 was a product storage area of approximately 100 sq. ft located directly east of the Western Steam Plant. The storage area was used to store 55-gallon drums of chemicals used for boiler water treatment. The storage area was decommissioned in 1987. There were known spills; however, the frequency and volumes were not documented. In 1997, RFI samples were collected from the storage area.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action on the basis of human health risk, alone. The New Mexico Environment department (NMED) has not yet approved this recommendation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Remove residual contamination (as necessary) and conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Report for Potential Release Sites 0-003 and 0-012,"* September 1997, LA-UR-97-3828.

Potential Release Site (PRS) - 00-012

Location: DOE LAAO Site

Category: Subsurface Unit

Ten-Year Plan Description: Tanks (Underground Storage)

History: PRS 00-012 consists of an underground filtration tank (blow-off tank) and floor drains associated with the Western Steam Plant. The tank received blow down steam and water from the boilers at the plant. The floor drains were found to be routed directly to the existing sanitary system. The tank was sampled during a Phase I RFI performed in 1997.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action on the basis of human health risk, alone. The New Mexico Environment Department (NMED) has not yet approved this recommendation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Remove residual contamination(as necessary) and conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810. *"RFI Report for Potential Release Sites 0-003 and 0-012,"* September 1997, LA-UR-97-3828.

Potential Release Site (PRS) - 00-030(i)

Location: DOE LAAO Site

Category: Outfall

Ten-Year Plan Description: Buildings/Equipment

History: PRS 00-030(i) was a septic system consisting of a tank and associated inlet and outlet lines leading to an outfall. It is believed to have served a mess hall, dormitories, barracks, a military post office, a post exchange, and the Sundt apartments along Finch Street and south of Trinity Drive. The tank was approximately 16 ft long x 8 ft wide x 8 ft deep. The vitrified-clay pipe(VCP) outlet drainline discharged to an outfall within a drainage channel located approximately 100 ft southwest of the septic tank. In 1995, RFI samples were collected from within and below each component of the septic system, and then the associated piping was removed and the remaining lines were grouted in place. The septic tank was removed during VCA activities in April 1996.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action on the basis of human health risk, alone. The Department of Energy (DOE) has not yet approved this recommendation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Remove residual contamination (as necessary) and conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"VCA Report for PRSs 0-030(h,i,n,o,p)"* September 1996, LA-UR-96-3351.

Potential Release Site (PRS) - 00-034(a)

Location: Airport Site

Category: Surface Unit

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 00-034(a) is included in SWMU Group 0-5 of former OU 1071 and is located northwest of Nambe Place in the Eastern Area, a residential area west of the Los Alamos Airport. It was mistakenly identified from a 1946 aerial photograph as a trench. However, a former site worker has identified the trench-like image on the photograph as part of the Zia Company's operation for making concrete blocks and small batches of concrete. No field investigations were conducted because the site was used only for the production of cement/concrete material, and no RCRA solid or hazardous wastes or constituents or other CERCLA hazardous substances were managed at the site.

Current Regulatory Status: This PRS is on the HSWA Permit and is currently under investigation.

Proposed Remedy: In Situ containment of residual contamination, if necessary.

Future Actions Required: Conduct confirmatory sampling (as appropriate) and prepare and implement plans to contain residual contamination inplace (if necessary) to support a recommendation for integrated no further action (NFA), which requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810.

Potential Release Site (PRS) - 73-001(a)

Location: Airport Site

Category: Subsurface Unit

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 73-001(a) is a former burning area/landfill situated north of the airport runway. Initially the main landfill consisted of a natural, hanging valley into which municipal waste was disposed. As more capacity was required, trenches were excavated into the tuff. Laboratory use of the disposal area probably began in 1943, and Los Alamos County operated the landfill from 1965 until 1973. Garbage was collected from the Laboratory and townsite and was burned. Uranium metal was reportedly disposed of in the landfill on two occasions; however, efforts were made at the time to recover as much as possible. Intentional burning at the landfill ceased in 1965. Heavy equipment was used to remove burned residues and ash from the burn area on a monthly basis and move it to the trenches. Landfill volume is estimated to be 489,500 cubic yards. From 1993 to 1997, extensive RFI activities were conducted, including a surface radiological survey, geophysical survey, geomorphological mapping, infrared photography survey, soil gas survey, surface and drainage channel sampling, drilling and sampling, flux chamber testing, and cone penetrometer testing. Analytical results from the sampling activities are typical of those expected for a municipal landfill.

Current Regulatory Status: This PRS is on the HSWA Permit and is currently under investigation.

Proposed Remedy: In Situ containment.

Future Actions Required: Prepare and implement plans to contain site in place to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Report for Airport Landfill Areas Potential Release Sites 73-001(a), 73-001(b), 73-001(c), 73-001(d), 73-004(d),"* September 1998, LA-UR 98-3824.

Potential Release Site (PRS) - 73-001(b)

Location: Airport Site

Category: Subsurface Unit

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 73-001(b) is a waste oil pit approximately 100 ft x 25 ft with an unknown depth that was located northeast of the original end of the runway. The period of operation is estimated to have been from 1947 to 1974. Used oil from the motor pool and other operations are known to have been disposed at this PRS. No releases were reported during its operation. The Zia Company reportedly closed the waste oil pit by filling it with clean sand to solidify its contents. Recent RFI results indicate that the closed waste oil pit was incorporated into 73-001(d) when the disposal trenches were excavated.

Current Regulatory Status: This PRS is on the HSWA Permit and is currently under investigation.

Proposed Remedy: In Situ containment of residual contamination, if necessary.

Future Actions Required: Conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Report for Airport Landfill Areas Potential Release Sites 73-001(a), 73-001(b), 73-001(c), 73-001(d), 73-004(d),"* September 1998, LA-UR 98-3824.

Potential Release Site (PRS) - 73-001(c)

Location: Airport Site

Category: Subsurface Unit

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 73-001(c) is a landfill containing debris from the demolition of four high explosive (HE) storage bunkers that were constructed of concrete in 1947, along the north canyon rim east of the original runway. The bunkers were demolished in 1974. The rubble from the bunkers was placed in two large pits adjacent to the bunker sites in a small trench at the northeast corner of the runway and beneath the 1974 runway extension. Recent RFI results indicate that the disposal pits adjacent to the bunker sites were incorporated into 73-001(d) when the disposal trenches were excavated.

Current Regulatory Status: This PRS is on the HSWA Permit and is currently under investigation.

Proposed Remedy: In Situ containment of residual contamination, if necessary.

Future Actions Required: Conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Report for Airport Landfill Areas Potential Release Sites 73-001(a), 73-001(b), 73-001(c), 73-001(d), 73-004(d),"* September 1998, LA-UR 98-3824.

Potential Release Site (PRS) - 73-001(d)

Location: Airport Site

Category: Subsurface Unit

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 73-001(d) is a debris disposal area consisting of two roughly parallel, unlined trenches with a depth of approximately 35 feet. To the west, the trenches extend to within approximately 150 feet of the windsock; and to the east, they extend approximately 800 feet beyond the end of the runway. The north and south boundaries extend to within approximately 50 feet of the security fence and the asphalt runway, respectively. In 1984 the site was used to bury debris excavated from the western portion of 73-001(a) and the excavation of PRSs 73-001(b) and 73-001(c). The trenches are estimated to contain 126,000 cubic yards. In 1986 the landfill debris disposal areas were covered with soil and re-vegetated.

Current Regulatory Status: This PRS is on the HSWA Permit and is currently under investigation.

Proposed Remedy: In Situ containment.

Future Actions Required: Prepare and implement plans to contain site in place to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Report for Airport Landfill Areas Potential Release Sites 73-001(a), 73-001(b), 73-001(c), 73-001(d), 73-004(d),"* September 1998, LA-UR 98-3824.

Potential Release Site (PRS) - 73-002

Location: Airport Site

Category: Surface Unit

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 73-002 was an incinerator located west of the Los Alamos Airport Terminal and on the south rim of Pueblo Canyon. The incinerator was originally used to destroy classified documents from the Laboratory; however, this was discontinued after a short period due to incomplete combustion. It was then used to burn trash and debris until it was dismantled. The incinerator building remains in place. However, the incinerator equipment and stack have been removed. This PRS also includes a surface disposal area extending from the building over the rim of canyon. The surface disposal area contains ashes and rusty cans, presumably end products of the incineration operation. Recent RFI results indicate that elevated levels of organics and inorganics are present and the ash pile will require removal.

Current Regulatory Status: This PRS is on the HSWA Permit and is currently under investigation.

Proposed Remedy: Removal of ash pile.

Future Actions Required: Remove contaminated ash pile (as necessary) and conduct confirmatory sampling to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810.

Potential Release Site (PRS) - 73-003

Location: Airport Site

Category: Surface Unit

Ten-Year Plan Description: Buildings/Equipment

History: PRS 73-003 was a steam cleaning plant for garbage trucks, cans, and dumpsters that were used for the collection of municipal waste. It was located approximately 30 feet south of the incinerator. The wash water was discharged into a septic tank (PRS 73-004(b)) located to the west of the plant. The plant was used from 1949 until October 1970 and was demolished in 1971. The area is currently paved and is used as a parking lot.

Current Regulatory Status: This PRS is not on the HSWA Permit and is currently under investigation.

Proposed Remedy: In Situ containment of residual contamination, if necessary.

Future Actions Required: Implement sampling and analysis plan, prepare and implement plans to contain residual contamination inplace (if necessary), and conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"Voluntary Corrective Action Completion Report for Potential Release Sites 73-004(a,b), 73-007, and C-73-005(a-f),"* September 1996, LA-UR-96-3350. *"Sampling and Analysis Plan for SWMU Group 73-2, PRSs 73-003, 73-004(a), 73-004(b), 73-005, 73-006, 73-007 and C-73-005(a-f),"* November 1998, LA-UR-98-4076.

Potential Release Site (PRS) - 73-004(a)

Location: Airport Site

Category: Outfall

Ten-Year Plan Description: Tanks (Septic, Above Ground)

History: PRS 73-004(a) was a septic tank that received sanitary waste from toilets and shower facilities located in the adjacent incinerator building. The tank was concrete and discharged through a 6 in. vitrified-clay pipe (VCP) to an outfall to Pueblo Canyon. The tank and associated piping were removed during VCA activities in 1996.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: In Situ containment of residual contamination, if any.

Future Actions Required: Implement sampling and analysis plan, prepare and implement plans to contain residual contamination inplace (if necessary), and conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"Voluntary Corrective Action Completion Report for Potential Release Sites 73-004(a,b), 73-007, and C-73-005(a-f),"* September 1996, LA-UR-96-3350. *"Sampling and Analysis Plan for SWMU Group 73-2, PRSs 73-003, 73-004(a), 73-004(b), 73-005, 73-006, 73-007 and C-73-005(a-f),"* November 1998, LA-UR-98-4076.

Potential Release Site (PRS) - 73-004(b)

Location: Airport Site

Category: Outfall

Ten-Year Plan Description: Tanks (Septic, Above Ground)

History: PRS 73-004(b) was a septic tank that received wash water from a former steam cleaning plant that was used to clean out garbage trucks, cans, and dumpsters that contained municipal waste. The tank was concrete and discharged through a 6 in. vitrified-clay pipe (VCP) to an outfall to Pueblo Canyon. The tank and associated piping were removed during VCA activities in 1996.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: In Situ containment of residual contamination, if any.

Future Actions Required: Implement sampling and analysis plan, prepare and implement plans to contain residual contamination inplace (if necessary), and conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"Voluntary Corrective Action Completion Report for Potential Release Sites 73-004(a,b), 73-007, and C-73-005(a-f),"* September 1996, LA-UR-96-3350. *"Sampling and Analysis Plan for SWMU Group 73-2, PRSs 73-003, 73-004(a), 73-004(b), 73-005, 73-006, 73-007 and C-73-005(a-f),"* November 1998, LA-UR-98-4076.

Potential Release Site (PRS) - 73-004(c)

Location: Airport Site

Category: Outfall

Ten-Year Plan Description: Tanks (Septic, Above Ground)

History: PRS 73-004(c) is a septic system that served the former airport terminal. A 4-in. diameter vitrified-clay pipe (VCP) connected the building toilets to the septic tank. Investigation into the tank location has been unsuccessful; however, it is believed the tank was removed prior to or during the 1984 airport expansion. The area of the former terminal building and septic tank was capped with 9-in. thick concrete pavement as part of the 1984 Los Alamos Airport Improvement Project.

Current Regulatory Status: This PRS is on the HSWA Permit and has been proposed for no further action on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No remedial action is anticipated to be required.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810. *"NFA Report for Potential Release Sites at 0-034(a), 0-034(b), 73-001(b), 73-004(c), 73-04(d),"* September 1997, LA-UR 97-3864.

Potential Release Site (PRS) - 73-004(d)

Location: Airport Site

Category: Outfall

Ten-Year Plan Description: Tanks (Septic, Above Ground)

History: PRS 73-004(d) is a septic system that served the landfill office located east of the present airport terminal building and within the footprint of PRS 73-001(a). A 4 in. diameter vitrified-clay pipe (VCP) connected the building's toilet to the septic tank located about 20 ft northeast of the building. The building and septic tank were removed as part of the decommissioning operation in the early 1970s.

Current Regulatory Status: This PRS is on the HSWA Permit and has been proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: In Situ containment of residual contamination, if necessary.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Report for Airport Landfill Areas Potential Release Sites 73-001(a), 73-001(b), 73-001(c), 73-001(d), 73-004(d),"* September 1998, LA-UR 98-3824.

Potential Release Site (PRS) - 73-005

Location: Airport Site

Category: Surface Unit

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 73-005 is a surface disposal area located south of State Road 502 consisting of mounds of concrete and other debris. The debris is apparently the remains of small, temporary office and storage buildings erected and used by construction contractors in the middle to late 1940s. The area was referred to as "contractors' row". No Laboratory operations were conducted at this site.

Current Regulatory Status: This PRS is on the HSWA Permit and is currently under investigation.

Proposed Remedy: Removal of residual debris.

Future Actions Required: Implement sampling and analysis plan, remove residual debris (as necessary), and conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"Voluntary Corrective Action Completion Report for Potential Release Sites 73-004(a,b), 73-007, and C-73-005(a-f),"* September 1996, LA-UR-96-3350. *"Sampling and Analysis Plan for SWMU Group 73-2, PRSs 73-003, 73-004(a), 73-004(b), 73-005, 73-006, 73-007 and C-73-005(a-f),"* November 1998, LA-UR-98-4076.

Potential Release Site (PRS) - 73-006

Location: Airport Site

Category: Outfall

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 73-006 contains the outfalls associated with two drain lines that discharged through separate lines to Pueblo Canyon from the incinerator building. One drain line that originated at a floor drain in the stoking room was constructed of 6 in. vitrified-clay pipe (VCP) and extended approximately 18 ft from the north side of building to the canyon rim. A second VCP drain line is reported to have exited the northeast side of the building and then extended approximately 21 ft from the building to the canyon rim. These drains are presumed to have handled wash water and been in operation concurrent with the incinerator.

Current Regulatory Status: This PRS is on the HSWA Permit and is currently under investigation.

Proposed Remedy: In Situ containment of residual contamination, if any.

Future Actions Required: Implement sampling and analysis plan, prepare and implement plans to contain residual contamination inplace (if necessary), and conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"Sampling and Analysis Plan for SWMU Group 73-2, PRSs 73-003, 73-004(a), 73-004(b), 73-005, 73-006, 73-007 and C-73-005(a-f),"* November 1998, LA-UR-98-4076.

Potential Release Site (PRS) - 73-007

Location: Airport Site

Category: Outfall

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRS 73-007, located south of State Road 502, was a steel septic tank that received sanitary waste from an unknown facility within the former contractors' row during the middle to late 1940s. The tank was removed and drain lines were abandoned in place during VCA activities in 1996.

Current Regulatory Status: This PRS is not on the HSWA Permit and is currently under investigation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Implement sampling and analysis plan, remove residual contamination (if necessary), and conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"Voluntary Corrective Action Completion Report for Potential Release Sites 73-004(a,b), 73-007, and C-73-005(a-f),"* September 1996, LA-UR-96-3350. *"Sampling and Analysis Plan for SWMU Group 73-2, PRSs 73-003, 73-004(a), 73-004(b), 73-005, 73-006, 73-007 and C-73-005(a-f),"* November 1998, LA-UR-98-4076.

Potential Release Site (PRS) - C-31-001

Location: Airport Site

Category: Surface Unit

Ten-Year Plan Description: Buildings/Equipment

History: PRS C-31-001 consists of the soil beneath former structure locations and the paved parking area. The structures included several warehouses, a loading dock, and an oil drum storage site. No chemicals were routinely stored at the site during its operation. The only liquid storage documented was oil products. The storage yard was paved, which protected soils from liquid spills. Any possible contamination would have been removed during decommissioning (exact date unknown).

Current Regulatory Status: This PRS is not on the HSWA Permit and was recommended for no further action (NFA) on the basis of human health risk alone. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810.

Potential Release Site (PRS) - C-73-001

Location: Airport Site

Category: Subsurface Unit

Ten-Year Plan Description: Tanks (Underground Storage)

History: PRS C-73-001 was a 2,000 gal. underground storage tank owned by the Los Alamos Pilots Association used to store aviation fuel for Los Alamos Airport. The tanks were removed in May 1992 and replaced by new double walled tanks.

Current Regulatory Status: This PRS is not on the HSWA Permit and was recommended for no further action (NFA) on the basis of human health risk alone. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810.

Potential Release Site (PRS) - C-73-002

Location: Airport Site

Category: Subsurface Unit

Ten-Year Plan Description: Tanks (Underground Storage)

History: PRS C-73-002 was a 6,000 gal. underground storage tank owned by the Los Alamos Pilots Association used to store aviation fuel for Los Alamos Airport. The tanks were removed in May 1992 and replaced by new double walled tanks.

Current Regulatory Status: This PRS is not on the HSWA Permit and was recommended for no further action (NFA) on the basis of human health risk alone. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810.

Potential Release Site (PRS) - C-73-003

Location: Airport Site

Category: Subsurface Unit

Ten-Year Plan Description: Tanks (Underground Storage)

History: PRS C-73-003 was a 4,000 gal. underground storage tank owned by the Los Alamos Pilots Association used to store aviation fuel for Los Alamos Airport. The tanks were removed in May 1992 and replaced by new double-walled tanks.

Current Regulatory Status: This PRS is not on the HSWA Permit and was recommended for no further action (NFA) on the basis of human health risk alone. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810.

Potential Release Site (PRS) - C-73-004

Location: Airport Site

Category: Subsurface Unit

Ten-Year Plan Description: Tanks (Underground Storage)

History: PRS C-73-004 was 6,000 gallon underground storage tank owned by the Los Alamos Pilots Association used to store aviation fuel for Los Alamos Airport. The tanks were removed in May 1992 and replaced by new double walled tanks.

Current Regulatory Status: This PRS is not on the HSWA Permit and was recommended for no further action (NFA) on the basis of human health risk alone. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: No remedial action is anticipated to be necessary.

Future Actions Required: Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810.

Potential Release Sites (PRSs) - C-73-005(a-f)

Location: Airport Site

Category: Material Disposal Units

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: PRSs C-73-005(a-f) are six unlined pits of various dimensions ranging from 3 to 6 ft x 5 to 12 ft x 2.5 to 6 ft that were discovered on Department of Energy (DOE) property on East Mesa south of State Road 502, between the road and the north edge of DP Canyon. It is likely these pits received sanitary waste from facilities within former Contractor's Row during the period from 1947 to 1951. However, there are no records of pit construction or operation and no engineering drawings or other historical information that illustrate the location of a former facility or septic pit within this area. These pits were all excavated directly into tuff, with excavated material piled next to each pit. C-73-005(a) was constructed with a 4-in. vitrified-clay pipe (VCP) inlet drain line that was connected to the edge of the mesa by a shallow trench that may have contained an outlet drain line at one time or may have acted directly as a open drainage ditch. C-73-005(b) was constructed with a VCP outlet drain line, but no visible inlet drain line. The other four pits contained no visible inlet or outlet lines or trenches. When discovered in 1996, the pits contained fill material ranging from 1 to approximately 3.8 ft thick, consisting of natural soil and tuff fragments as well as organic debris, glass, metal, and charred wood. All pits have since been backfilled to eliminate any physical hazard. RFI samples associated with PRSs C-73-005(a-f) were collected in 1996; additional samples are proposed to complete the RFI by determining the extent of contaminants of potential concern (COPCs).

Current Regulatory Status: These PRSs are not on the HSWA Permit and are currently under investigation.

Proposed Remedy: Removal of residual contamination, if any.

Future Actions Required: Implement sampling and analysis plan, remove residual contamination (if necessary), and conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"Voluntary Corrective Action Completion Report for Potential Release Sites 73-004(a,b), 73-007, and C-73-005(a-f),"* September 1996, LA-UR-96-3350. *"Sampling and Analysis Plan for SWMU Group 73-2, PRSs 73-003, 73-004(a), 73-004(b), 73-005, 73-006, 73-007 and C-73-005(a-f),"* November 1998, LA-UR-98-4076.

Potential Release Site (PRS) - 00-015

Location: Rendija Canyon

Category: Surface Unit

Ten-Year Plan Description: Firing Ranges/Ordnance

History: PRS 00-015 is an active firing range located in Rendija Canyon and consists of several small arms ranges operated by the Los Alamos Sportsman's Club, under lease from the Department of Energy (DOE). Currently there are no plans to change the use of this land. In LANL's Work Plan it was recommended that no further action be taken until it ceases to be used as a firing range and the land is dedicated to some other use.

Current Regulatory Status: This PRS is not on the HSWA Permit and was recommended for no further action (NFA) on the basis of its continuing operation, alone. NFA concurrence was received from the Department of Energy (DOE).

Proposed Remedy: Removal of residual contamination/ordnance as appropriate, if the firing range does not remain in operation after the parcel is transferred.

Future Actions Required: Remove residual contamination/ordnance and conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"NFA Permit Modification,"* memo from T. Taylor, Program Manager, Environmental Restoration Program, Department of Energy Los Alamos Area Office, to J. Jansen, Program Manager, Environment Restoration Project, University of California, October 1995.

Potential Release Site (PRS) - 00-011(e)

Location: Rendija Canyon

Category: Surface Unit

Ten-Year Plan Description: Firing Ranges/Ordnance

History: PRS 00-011(e) was an ordnance impact area northeast of the Sportsman's Club firing range in Thirty Seven Millimeter Canyon, a tributary of Rendija Canyon. During RFI investigations in 1993, materials were recovered including 20 mm rounds, 102 mm armor piercing rounds, and fragments of 37 mm high explosive (HE) rounds. In addition 350 pieces of fragments and expended bullets were removed.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No additional remedial action is anticipated to be necessary under the "preservation" land use scenario. Under the residential land use scenario, removal of residual contamination/ordnance is expected to be required.

Future Actions Required: Remove residual contamination/ordnance, if necessary. Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Phase Report, Operable Unit 1071, SWMU Aggregate O-D, Ordnance Impact Areas,"* March 1994.

Potential Release Site (PRS): 0-011(c)

Location: Rendija Canyon

Category: Surface Unit

Ten-Year Plan Description: Firing Ranges/Ordnance

History: PRS 0-011(c) was a suspected ordnance impact area located northwest of the Sportsman's Club firing range in Cabra Canyon, a tributary to Rendija Canyon. During RFI investigations in 1993 extensive ordnance surveys did not locate any ordnance or high explosive (HE) fragments.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No additional remedial action is anticipated to be necessary under the "preservation" land use scenario. Under the residential land use scenario, removal of residual contamination/ordnance (if any) is expected to be required.

Future Actions Required: Remove residual contamination/ordnance, if necessary. Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071, Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Phase Report, Operable Unit 1071, SWMU Aggregate O-D, Ordnance Impact Areas,"* March 1994.

Potential Release Site (PRS): 00-011(a)

Location: Rendija Canyon

Category: Surface Unit

Ten-Year Plan Description: Firing Ranges/Ordnance

History: PRS 0-011(a) was an ordnance impact area containing approximately 28.5 acres located about 0.4 miles east of the Sportsman's Club firing range in Rendija Canyon. During the 1993, live high explosive (HE) mortar rounds with live fuses were removed. In addition approximately 2,400 pieces of ordnance fragments were removed.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No additional remedial action is anticipated to be necessary under the "preservation" land use scenario. Under the residential land use scenario, removal of residual contamination/ordnance (if any) is expected to be required.

Future Actions Required: Remove residual contamination/ordnance, if necessary. Conduct confirmatory sampling (as necessary) to support a recommendation for integrated NFA. This requires demonstrating that the site does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071Environmental Restoration Project,"* May 1992, LA-UR-92-810. *"RFI Phase Report, Operable Unit 1071, SWMU Aggregate O-D, Ordnance Impact Areas,"* March 1994.

Potential Release Site (PRS) - 19-001

Location: TA-74 Site

Category: Outfall

Ten-Year Plan Description: Buildings/Equipment

History: Several structures, including the retreat building, were located at TA-19, which was also known as East Gate Laboratory. PRS 19-001 was a septic system that served a TA-19 structure (retreat building). The septic system consisted of a septic tank and associated inlet and outlet lines. The septic tank and its contents were removed in July 1997. The associated lines of orangeburg (asphaltic fiber) and standpipe were also removed at this time.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No additional remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional characterization sampling to support a recommendation for integrated NFA. This requires demonstrating that a PRS does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810. *"RFI Report TA-19, PRSs 19-001, 19-003, and C-19-001,"* September 1997, LA-UR-97-3791.

Potential Release Site (PRS) - 19-002

Location: TA-74 Site

Category: Subsurface Unit

Ten-Year Plan Description: Surface/Subsurface Material/Waste

History: Several structures, including a battery building, were located at TA-19, which was also known as East Gate Laboratory. PRS 19-002 was a surface disposal site consisting of numerous carbon type dry cell batteries and concrete debris from decommissioned TA-19 structures. Lead, cadmium, copper, manganese, mercury, selenium, and zinc were detected above background levels in surface samples, however the levels detected were all below their respective SALs. In June 1995 the concrete debris and batteries were removed during VCA activities.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with the recommendation.

Proposed Remedy: No additional remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional characterization sampling to support a recommendation for integrated NFA. This requires demonstrating that a PRS does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810. *"Voluntary Correction Action Completion Report for Potential Release Site 19-002,"* February 1996, LA-UR-96-433.

Potential Release Site (PRS) - 19-003

Location: TA-74 Site

Category: Outfall

Ten-Year Plan Description: Tanks (Septic, Above Ground)

History: PRS 19-003 was a drain line for the latrine that served the TA-19 Laboratory Building. The drain line handled sanitary waste from the laboratory building latrine, and the waste was then discharged to an outfall in Pueblo Canyon. The laboratory was in operation from 1944 to 1966, at which time the building was transferred to the Zia Company for civil defense purposes. The drain line, made of orangeburg pipe (asphaltic fiber), was removed in 1997.

Current Regulatory Status: This PRS is on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk, alone. The New Mexico Environment Department (NMED) has not yet concurred with this recommendation.

Proposed Remedy: No additional remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional characterization sampling to support a recommendation for integrated NFA. This requires demonstrating that a PRS does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810. *"RFI Report TA-19, PRSs 19-001, 19-003, and C-19-001,"* September 1997, LA-UR-97-3791.

Potential Release Site (PRS) - C-19-001

Location: TA-74 Site

Category: Surface Unit

Ten-Year Plan Description: Spills and Leaks

History: PRS C-19-001 is associated with possible contaminated soil beneath the former structures at TA-19 (East Gate Laboratory). The structures included the laboratory building, retreat building, latrine and guard house. Surface samples were collected during a RFI conducted in March 1997.

Current Regulatory Status: This PRS is not on the HSWA Permit and was proposed for no further action (NFA) on the basis of human health risk, alone. The Department of Energy (DOE) has not yet concurred with this recommendation.

Proposed Remedy: No additional remedial action is anticipated to be necessary.

Future Actions Required: Conduct additional characterization sampling to support a recommendation for integrated NFA. This requires demonstrating that a PRS does not impact human health, the environment, and ground water or surface water quality.

References: *"RFI Work Plan for OU 1071,"* Environmental Restoration Project, May 1992, LA-UR-92-810. *"RFI Report TA-19, PRSs 19-001, 19-003, and C-19-001,"* September 1997, LA-UR-97-3791.

APPENDIX C

INFORMATION SOURCES & ESTIMATION METHODOLOGIES

INFORMATION SOURCES & ESTIMATION METHODOLOGIES

The information presented in the body of this report was summarized from the ER Conveyance and Transfer (ER-CAT) database (Appendix A), using the data that it contained as of November 25, 1998. The information used to populate this database was taken from the following primary sources:

- The Laboratory's Facility for Information Management, Analysis and Display (FIMAD) data system;
- The Laboratory's Potential Release Site (PRS) database;
- The Laboratory's Environmental Restoration Project's Fiscal Year 1999 baseline budget;
- The Laboratory's D&D Project's Fiscal Year 1999 baseline; and
- The Laboratory's regulatory document and correspondence files.

Each data item from these sources was checked for consistency with other ER Project documents, such as sampling plans, RCRA Facility Investigation (RFI) work plans and reports, voluntary corrective action (VCA) reports, and other reports relevant to the Administrative Authority.

The remainder of Appendix C describes the information contained in the ER-CAT database.

PRS Parcel Report

The PRS parcel report presents data from the following eleven data fields:

1. **Identification Code – PRS Number.** This number identifies the PRS with a unique identification code.
2. **Location – Technical Area.** This field identifies the LANL Technical Area in which the PRS is located.
3. **Location Coordinate Northing.** This field contains the New Mexico State Plane coordinates for the location of the PRS.
4. **Location Coordinate Easting.** This field contains the New Mexico State Plane coordinates for the location of the PRS.
5. **Type.** This field identifies the type of PRS as one of five categories: surface unit (e.g., contaminated soil, aboveground tank, etc.); subsurface area (e.g., underground storage tank, seepage pits, etc.); incinerators (e.g., incinerators, deposition of air pollutants over a large area, etc.); MDAs (e.g., areas of subsurface disposal of refuse or surplus materials); and outfalls (e.g., septic tanks, drain lines, and surface outfalls). Note that "type", as it appears in the ER-CAT database, does not correlate with "type" as defined in the Ten Year Plan. A cross-walk is possible, however, by referring to the one-page PRS summaries (Appendix B), which describe each PRS by ER-CAT type and by Ten Year Plan type.
6. **Areal Extent (sq. ft.).** This field contains the areal extent of the PRS according to the FIMAD database, and is based on available information to date. For a limited number of PRSs (i.e., those for which data has recently become available, and for which FIMAD has not yet been

updated), the information contained in this field is based on such data and/or best professional judgement:

7. **Regulatory Driver.** This field identifies whether or not the PRS is listed in Module VIII of LANL's RCRA permit.
8. **Regulatory Status.** This field describes the regulatory status of the PRS. Four categories were developed to provide standardized information within this field. These categories are:

   (a) **Under Investigation.** This description covers any PRS that requires sampling and investigation. PRSs that are considered "under investigation" include, but are not limited to, sites where administrative research has occurred, sites where sampling has occurred or is occurring, sites that have been initially sampled and are addressed further in a soon-to-be-submitted sampling and analysis plan or RFI report, and sites that must be investigated during D&D.

   (b) **No Further Action (NFA).** This category indicates that the PRS has been proposed by LANL for no further action. The regulatory status is indicated by the following five designations:

      i) **Proposed for NFA Based on Human Health.** This designation indicates that a PRS has been proposed for NFA based on an acceptable risk to human health.

      ii) **Proposed for Integrated NFA.** This designation indicates that that PRS has been proposed for NFA based on an acceptable level of risk to human health and ecosystems and compliance with surface water, groundwater, and underground storage tank requirements, as applicable.

      iii) **NFA Concurrence by DOE.** This designation indicates that a non-HSWA PRS has been proposed for NFA, and DOE – the Administrative Authority for such a PRS – has concurred with the proposal.

      iv) **NFA Concurrence by EPA.** This designation indicates that a HSWA PRS has been proposed for NFA, and EPA has concurred with the proposal. EPA authorized NMED for the RCRA Corrective Action program in 1996. Since receiving that authorization, NMED has been the AA, and they have reserved the right to revisit all PRSs for which they now have authority.

      v) **NFA Concurrence by NMED.** This designation indicates that a HSWA PRS has been proposed for NFA, and NMED has concurred with the proposal.

   (c) **Removed from Permit.** This designation indicates that the PRS has been removed from Module VIII of the RCRA permit.

(d) **Under Reconsideration.** This designation indicates that LANL is reconsidering any previous proposals or designations regarding the regulatory status of the PRS. The fact that a PRS is under reconsideration does not necessarily mean that the previous proposal (for example, a proposal for NFA based on an acceptable risk to human health) will be changed by LANL; the proposal may remain in effect after it has been reconsidered.

10. **Status of Investigation.** There are four possible categories describing the status of the investigation of a PRS.

    (a) **In Progress.** This designation indicates that the PRS is either under investigation, or has been proposed for NFA based on an acceptable risk to human health, regardless of whether it has received concurrence from the Administrative Authority.

    (b) **Completed.** This designation indicates that the PRS has been proposed and/or approved for an integrated NFA.

    (c) **Remediation.** This designation indicates that the PRS has undergone a Voluntary Corrective Action (VCA), and Expedited Cleanup, or any other remedial action prior to the CMS/CMI process.

    (d) **Interim Action.** This designation indicates that an interim action (IA) has been completed and documented at the PRS. IAs, for the purposes of this category, do not include Best management Practices (BMPs).

11. **COPCs – Has Sampling Occurred.** This field indicates whether sampling has occurred at the PRS.

12. **Schedule for Completion.** This field indicates the year by which remediation is expected to be completed as indicated in the Baseline. This information is available only for those PRSs for which the proposed remedy is included in the Baseline. If the PRS is not included in the Baseline, or the proposed remedy for the PRS differs from the remedy contemplated in the Baseline, the schedule for remediation is to be determined (TBD).

<u>Structure Parcel Report</u>

The Structure Parcel Report reports on the following twelve data fields:

1. **Identification Code – Structure Number.** This number identifies the structure with a unique identification code. This field is populated with all existing structures on the ten potential land transfer parcels. Only a subset of these structures is currently slated for D&D, and these are identified in data field 12.

2. **Location – Technical Area.** This field identifies the Technical Area in which the structure is located.

3. **Location Coordinate Northing.** This field contains the New Mexico State Plane coordinates for the location of the structure.

4. **Location Coordinate Easting.** This field contains the New Mexico State Plane coordinates for the location of the structure.

5. **Location – Parcel Sub-area.** If the parcel has been subdivided, this field identifies the sub-area in which the PRS is located. To date, none of the parcels are subdivided.

6. **Type.** This field identifies the type of structure in terms of the costs of D&D per unit measure. There are six such categories: Type I ($150/sq.ft), Type II ($230/sq.ft), Type III ($342/sq.ft), Type IV ($471/sq. ft), Type V ($600/sq.ft), and Type VI ($2000/sq.ft). The cost of D&D for a structure is influenced by the building's construction materials, its accessibility, and the waste materials (e.g., asbestos, PCB contamination, etc.) believed to exist inside the structure.

7. **Areal Extent (sq. ft).** This field contains the areal extent of the structure according to the FIMAD database.

8. **Regulatory Driver.** This field indicates whether the structure is regulated under DOE Order 5400.5, which directs the D&D process. For s structure to fall within this category it must first contain residual contamination, and must also be surplused.

9. **Regulatory Status.** This field describes the regulatory status of the structure. Three categories are used to provide standardized information in this field. They are:

   (a) **No Completion Report.** This description covers any structure that requires some sampling or investigation prior to decommissioning.

   (b) **Completion Report Submitted.** This category indicates that D&D activities are complete.

   (c) **Completion Report Submitted and Approved.** This category indicates that DOE has accepted the determination that D&D activities are complete for a given structure.

10. **Status of Investigation.** There are eight categories describing the status of D&D efforts for each structure.

    (a) **Not on Surplus List.** This designation indicates that a structure is not on LANL's list of surplus buildings.

(b) **In Baseline.** This designation indicates that a structure is slated for D&D by FY 2007. If a structure is in the baseline, it has been surplused and is known to be contaminated.

(c) **Draft Management Plan Complete.** This designation indicates that D&D planning activities have begun.

(d) **Final Management Plan Complete.** This designation indicates that D&D planning activities are complete.

(e) **Characterization in Progress.** This designation indicates that pre-D&D field work is underway.

(f) **D&D in Progress.** This designation indicates that D&D field activities are underway.

(g) **D&D Complete.** This designation indicates that D&D field activities are complete.

(h) **Final Report Approved.** This designation indicates that DOE concurs with the determination that D&D is complete.

11. **COPCs – Has Sampling Occurred.** This field indicates whether sampling has occurred at the structure. Sampling is typically conducted at D&D structures no earlier than the characterization and field work stages.

12. **D&D Facility.** This field indicates whether or not a structure is included in the current D&D baseline.

PRS Reports for Land Use Scenarios

These reports identify the potential land use scenarios for each PRS as identified in the DOE's Conveyance and Transfer (C&T) Environmental Impact Statement (EIS). Although the LANL ER Project has historically based its remedies on a single land use scenario, the EIS requires remediation information for up to two land use scenarios per tract. Where the EIS suggests only one land use scenario for a tract, the second PRS Report for Land Use Scenarios will contain the designation "not applicable" as a heading and the date fields will be empty.

The PRS Land Use Scenario Reports each contain six categories. Each of these categories is discussed in more detail below.

13. **Identification Code – PRS Number.** This number identifies the PRS by its unique identification code.

14. **Proposed Remedy.** This field describes the remedial measure that is proposed for the PRS under the prescribed land use scenario. The five potential remedies are as follows:

(a) **No Action.** This designation indicates that no remedial action is proposed for the PRS. It is likely, however, that characterization sampling and reporting will have to be conducted to support the recommendation for no action.

(b) **Removal.** This designation indicates that the contaminated materials are proposed to be removed from the site.

(c) **In Situ Treatment.** This designation indicates that the contaminated materials are proposed to be treated on site.

(d) **In Situ Containment.** This designation indicates that the contaminated materials are proposed to be contained on site (for example, with an engineered cap).

(e) **Aggregate With Another PRS in Database.** This designation indicates that the PRS has been aggregated with another PRS for the purposes of remediation.

15. **Expected Volume of Contaminated Materials (cu. Yds).** This field provides an estimate of the volume of contaminated materials expected to be removed from the PRS as a result of remediation based on the best available information. This estimate is divided into the following waste treatability groups:

(a) **Solid Waste.** Wastes including the following sub-categories:

(i) **Industrial Waste.** Waste not regulated as hazardous waste or New Mexico Special Waste but material not eligible for consideration as clean fill.

(ii) **New Mexico Special Waste.** Waste regulated by the New Mexico Solid Waste Regulations, Subpart VII, "Special Waste Requirements".

(b) **Hazardous Waste.** Wastes including the following sub-categories:

(i) **RCRA Hazardous Waste (RCRA).** Waste regulated by the Resource Conservation and Recovery Act (RCRA) as defined by 40 CFR 261. Includes wastes that are characteristically hazardous for toxic constituents, and compounds and processes specifically listed in 40 CFR 261.

(ii) **Hazardous/Polychlorinated Biphenyl.** Waste regulated by the Resource Conservation and Recovery Act (RCRA) and containing polychlorinated biphenyls (PCBs) in quantities or from sources regulated by the Toxic Substances Control Act (TSCA).

(c) **Low-Level Radioactive (LLW).** Waste containing added radioactive material, not otherwise defined as TRU or TRU-mixed.

(d) **Mixed Low-Level Radioactive Waste.** Waste containing added radioactive material not otherwise defined as TRU or TRU-mixed, and contains substances regulated by RCRA.

(e) **Polychlorinated Biphenyl (PCB).** Waste containing polychlorinated biphenyls (PCBs) in quantities or from sources regulated by the Toxic Substances Control Act (TSCA).

(f) **Mixed Low-Level Radioactive Waste/Polychlorinated Biphenyl.** Waste containing added radioactive material not otherwise defined as TRU or TRU-mixed, and containing substances regulated by RCRA, and containing polychlorinated biphenyls (PCBs) in quantities or from sources regulated by TSCA.

(g) **Transuranic Radioactive Waste (TRU).** Waste containing radioactive materials with atomic masses greater that uranium, and in concentrations greater than 100 nanocuries per gram (nCi/g). (Note: Transuranic Mixed Radioactive Waste (TRU-mixed) is not anticipated to be found. If information becomes available in the future to suggest that this waste category does exist, then it will be identified separately in the database. Transuranic mixed radioactive waste is defined as waste containing radioactive materials with atomic masses of greater than uranium, and in concentrations greater than 100 nCi/g, and contains substances regulated by RCRA).

(h) **Asbestos Waste.** Waste containing regulated quantities of asbestos as regulated by the Toxic Substances Control Act (TSCA).

16. **Estimated Cost.** This field provides an estimate of the cost associated with the proposed remedy based on the best available information. This estimate may be modified as more and better information becomes available.

17. **Baseline Scope.** This field indicates whether the PRS and/or the proposed remedy for that PRS is included in the FY 99 ER Project baseline. Baseline scope may be described using any of the following three categories:

(a) **PRS/Remedy In.** This designation indicates that both the PRS and the remedy proposed for that PRS are included in the FY 99 Baseline.

(b) **PRS In/Remedy Different.** This designation indicates that although the PRS is included in the FY 99 ER Project Baseline,

the proposed remedy for that PRS either is different from the remedy contemplated in the Baseline or is not included in the Baseline.

(c) **PRS Out.** This designation indicates that the PRS is not included in the baseline.

18. This field indicates whether or not the costs for remediating the PRS have been aggregated with another PRS. If the costs have been aggregated with another PRS, the number of that "primary" PRS is indicated.

Structure Reports for Land Use Scenarios

These reports identify the potential land use scenarios for each parcel as identified in the DOE's Conveyance and Transfer (C&T) Environmental Impact Statement (EIS). The proposed remedy for structures, regardless of land use, is D&D; therefore, the structure reports will be identical, regardless of land use scenario. Where the EIS has identified only one land use scenario for a tract, the Structure Report for Land Use Scenario 2 will contain the designation "Not Applicable" as a heading and the data fields will be empty.

The Structure Report for Land Use Scenarios contains six categories. Each of these categories is discussed in more detail below.

1. **Structure Number.** This number identifies the structure by its unique identification code.

2. **Proposed remedy.** This field describes the remedial measure that is proposed for the structure. There is only one remedial alternative for D&D structures – decommissioning, which is defined as the demolition of a structure. If no remediation is planned (i.e., for structures not currently in the D&D baseline, then the proposed remedy is "none".

3. **Expected Volume of Contaminated Materials (cu. Yds).** This field provides an estimate of the volume of contaminated materials expected to be removed from a structure as a result of D&D, and it is based on the best available information. This estimate is divided into the same waste treatability groups as for PRSs (see above).

4. **Estimated Cost.** This field provides an estimate of the cost associated with D&D based on the best available information. Costs are estimated for all structures, regardless of whether or not they are currently in the D&D Baseline. The estimate may be modified as more or better information becomes available and as the structure goes through the characterization process.

5. **Baseline Scope.** This field indicates whether the D&D of a structure is or is not contained in the Baseline for FY 99 and out years.

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