

Bayo Canyon Aggregate Area, New Mexico, Site Inspection Report

September 2020



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

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Abbreviations

BCAA	Bayo Canyon Aggregate Area
DOE	U.S. Department of Energy
EM	Office of Environmental Management
FUSRAP	Formerly Utilized Sites Remedial Action Program
IA	Interim Action
LANL	Los Alamos National Laboratory
LM	Office of Legacy Management
LMS	Legacy Management Support
NMED	New Mexico Environment Department
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SWMU	solid-waste management unit
TA-10	Technical Area 10

1.0 Introduction

This report presents the results of the 2020 U.S. Department of Energy (DOE) Office of Legacy Management (LM) inspection of the Bayo Canyon Aggregate Area (BCAA), New Mexico, Site. The BCAA site encompasses approximately 350 acres and is a Resource Conservation and Recovery Act (RCRA) site. Within the BCAA site is the 1.5-acre Bayo Canyon, New Mexico, Site, which is a Formerly Utilized Sites Remedial Action Program (FUSRAP) site. This smaller site is referred to herein as the “FUSRAP remediated area.” The inspection found the BCAA site, including the FUSRAP remediated area, to be in excellent condition. The boundary bollards and six site markers around the FUSRAP remediated area remain in good condition, and no visual disturbance of the area was observed. No cause for a follow-up inspection was identified.

LM and the Legacy Management Support (LMS) contractor continued their dialog on planning field activities at the BCAA site in a safe manner during the COVID-19 pandemic. This year’s inspection required an innovative approach in which the LMS contractor, working with the Navarro Research and Engineering, Inc., corporate office, was able to hire a local subcontractor to conduct the 2020 field inspection, thereby mitigating the COVID-19 travel risk.

The local subcontractor, Mr. Pat Kennedy, representing the LMS contractor, inspected the BCAA site on August 23, 2020. The purpose of the inspection was to ensure the site conditions remain protective of human health and the environment, especially in the FUSRAP remediated area.

This document summarizes the information gathered during the August 2020 site inspection. Appendix A is a copy of the Master Access Agreement that was negotiated between LM and the County of Los Alamos and executed on September 6, 2019. It conveys LM responsibilities for conducting program activities on county property in Bayo Canyon. former Technical Area 10 (TA-10).

Section 2.0 provides a brief history of the BCAA site. Section 3.0 includes the results of the 2020 site inspection. Section 4.0 states that no potential long-term stewardship issues were identified. Section 5.0 states that no new site risks were identified during the 2020 site inspection. Appendix B provides the 2020 site inspection photos.

2.0 BCAA Site Brief History

The approximately 350-acre BCAA site was used as a weapons-firing test site from 1943 to 1961. The site at that time was known as Technical Area 10 (TA-10). Structures were constructed to test assemblies that contained conventional high explosives, including some components made from depleted or natural uranium. The principal structures associated with the area at that time were a radiochemistry laboratory, an assembly building, inspection buildings, a personnel building, structures at two detonation-control complexes, and adjacent firing pads. The TA-10 area also included various ancillary facilities associated with waste disposal, particularly for the radiochemistry laboratory. Associated facilities included (1) sewage lines, manholes, septic tanks, and seepage pits for sanitary and radioactive liquid waste; and (2) disposal pits for solid radioactive waste (Mayfield et al. 1979). The site was remediated in 1957 and again from 1960 through 1963. Most of the buildings were burned in place, and the ash and debris was

removed and disposed of at the main disposal area for the Los Alamos complex. More than 550 dump-truck loads of contaminated waste were excavated and removed. The excavations were backfilled, and the site was regraded (Mayfield et al. 1979). After those remediation efforts, the site was transferred via a quitclaim deed to Los Alamos County in 1967.

A Comprehensive Environmental Assessment and Response Program field survey was conducted around the firing sites, in an area now known as Consolidated Unit 10-001(a)-99, that identified the presence of metal cable and small pieces of shrapnel. The shrapnel consisted of aluminum and steel with small amounts of lead, wood, and other shot residue (DOE 1986). During the survey, six survey monuments and associated guard posts were installed in an area that roughly encompasses the old liquid waste disposal complex, the radiochemistry laboratory, and the area of the waste disposal pit. The monuments are marked “Buried radioactive material; No excavation prior to 2142 AD; See county records” (DOE 1986).

In 1993, geomorphic mapping identified various types of radioactively contaminated shrapnel in the TA-10 area (Drake and Inoué 1993). These results prompted an Interim Action (IA) to remove shrapnel from Bayo Canyon (LANL 1997). Shrapnel removal began in September 1994 and was completed by January 1995. More than 19,000 pieces of shrapnel were collected during the surface shrapnel removal operation. A total of 458 pieces (2.4%) were found to emit radioactivity levels that exceeded local background levels.

In 1994, surface and subsurface sampling was conducted in accordance with a Phase I RCRA Facility Investigation (RFI), to determine if residual RCRA chemicals—particularly barium, beryllium, or lead—existed in surficial deposits near the firing pads (i.e., at Solid Waste Management Units [SWMUs] 10-001(a)–(d)) and to confirm no human health or ecological risks were associated with the radiological constituents identified in previous investigations (LANL 1995). The objective of the RFI was “to characterize the nature, concentration, and lateral and vertical extent of potential subsurface contamination related to historic activities at the site” (LANL 1996a). Radionuclides were retained as contaminants of potential concern at SWMUs 10-003(a)–(o), 10-007, and 10-002(b), and an IA was recommended to remove chamisa plants containing elevated levels of strontium-90 (LANL 1996b). To control access to the area, a fenced exclusion zone was constructed, and the area was posted as a radiation control area. Storm-water control measures, including silt fences and straw wattles, were put in place along the northern and eastern parts of the site to capture runoff. Straw bales were placed along the edge of a channel that emerges from a culvert along the western part of the site to prevent run-on (LANL 1997). After a final inspection on July 5, 2001, the Los Alamos National Laboratory’s (LANL’s) Water Quality and Hydrology Group determined the area was stabilized, and no further inspections were necessary (Veenis 2005).

On March 1, 2005, LANL, the DOE Office of Environmental Management (EM), and the New Mexico Environment Department (NMED) entered into an Order of Consent to remediate LANL (25,600 acres), which includes the BCAA site (NMED 2005). In 2007, an RFI was conducted to (1) address specific requirements for Bayo Canyon contained in the Section IV.C.5.c, “Technical Area 10 Investigation,” in the Order of Consent; and (2) complete the characterization of the site as specified in the approved *Bayo Canyon Aggregate Area Investigation Work Plan* (LANL 2005).

On January 31, 2017, NMED issued a Certificate of Completion for the BCAA site, since all areas were determined to meet applicable standards and could be released for recreational or residential use. Today, the BCAA site, owned by Los Alamos County, is open to the public for recreational activities such as hiking, mountain biking, and horseback riding.

In September 2019, EM transferred long-term stewardship responsibilities for the BCAA site from EM to LM. LM's responsibilities consist of conducting site inspections, performing minor maintenance (erosion control and signage), managing site records, and responding to stakeholder inquiries.

In addition to the LM stewardship responsibilities listed above, LANL, EM, and NMED continue to remediate LANL (25,600 acres). EM conducts storm-water monitoring across the LANL complex, including the BCAA site as per NPDES permit number NM0030759, issued 9/30/2010. When EM issues monitoring reports that include the BCAA site and posts them to the LANL library site, LM will obtain an electronic copy for their records.

3.0 BCAA Site Inspection Results

The BCAA site is approximately 350 acres and continues to be a pine forest setting that is open to the public for recreational use. The site provides ample recreational venues for bike riding, walking on trails, and horseback riding. The FUSRAP remediated area is in the central portion of the BCAA site and was the focus area for the inspection (refer to Attachment 1 "Bayo Canyon, New Mexico, Site Map").

Before the site inspection, an August 18 conference call was held between BCAA Site Manager Mrs. Darina Castillo, LMS Site Lead Ms. Michele Miller and Los Alamos County Manager Mr. Harry Burgess. The three objectives for the call were (1) to formally notify Mr. Burgess of the planned August 2020 site inspection as required by the Master Access Agreement (refer to Appendix A); (2) to discuss LM's stewardship activities underway in Los Alamos County, including (a) continued communication between LM, EM, and the National Nuclear Security Administration as remediation progresses across the LANL complex, and (b) potential for future engagement with local community stakeholders; and (3) to identify any Los Alamos County needs or development plans for Bayo Canyon. Mr. Burgess stated there are no new near-term plans for the site envisioned by Los Alamos County, and that their focus for the area remains recreational use.

The LMS representative inspected this 1.5-acre FUSRAP remediated area and the surrounding area in the BCAA site, and the following observations were made:

- Access to the BCAA site continues to be controlled at the main entrance gate. There are several signs posted throughout Bayo Canyon, including the entrance sign indicating the public park is open from dawn to dusk (see Photo 1 in Appendix B).
- Los Alamos County, as the property owner, continues to maintain the approximately 250 acre site for public use even during the COVID-19 pandemic (see photos in Appendix B).

- There was no visual evidence of soil disturbance in the FUSRAP remediated area. The site was found to be in excellent condition (refer to Attachment 2, “2020 Annual Inspection Checklist”).
- Overall, the six sets of three bollards and the six markers installed in 1982 were found to be in good condition. However, one bollard that protects a marker near the downgradient edge of the site had been adversely affected by an ephemeral stream eroding the soil around its base (see photos in Appendix B). LMS personnel observed this condition in 2019 and will continue to monitor the stability of this bollard. No maintenance action is required at this time.

4.0 Long-Term Stewardship Impacts

There are no new issues identified that could affect the long-term stewardship of the BCAA site.

5.0 BCAA Site Risk Inputs

Based on the August 2020 site inspection, there were no new risks observed that warranted new inputs in the life-cycle baseline Risk Register for the BCAA site.

6.0 References

DOE (U.S. Department of Energy), 1986. *Phase I: Installation Assessment, Los Alamos National Laboratory*, Volume 1 of 2, Comprehensive Environmental Assessment and Response Program, Environment and Health Division, Environmental Programs Branch, Albuquerque Operations Office, Albuquerque, New Mexico, October.

Drake, P., and C. Inoué, 1993. *Geomorphic Characterization of Operable Unit 1079 (OU-1079), Formerly Technical Area 10, Los Alamos National Laboratory, New Mexico*, report prepared for Los Alamos National Laboratory by Glorieta Geoscience Inc., Santa Fe, New Mexico, September.

LANL (Los Alamos National Laboratory), 1995. *RFI Report for Solid Waste Management Units 10-001(a-d)*, Los Alamos National Laboratory, Los Alamos, New Mexico, September 5.

LANL (Los Alamos National Laboratory), 1996a. *Radiological Addendum to the RFI Report for Potential Release Sites 10-002(a,b), 10-003(a-o), 10-004(a,b), 10-005, 10-007, TA-10 Subsurface*, Los Alamos National Laboratory document LA-UR-96-1748, Los Alamos, New Mexico, June.

LANL (Los Alamos National Laboratory), 1996b. *RFI Report for Potential Release Sites 10-002(a-b), 10-003(a-o), 10-004(a-b), 10-005, 10-007*, Los Alamos National Laboratory document LA-UR-96-1284, Los Alamos, New Mexico, April.

LANL (Los Alamos National Laboratory), 1997. *Interim Action Report for Potential Release Sites 10-002(a,b), 10-003(a-o), 10-004(a,b), and 10-007*, Los Alamos National Laboratory, Los Alamos, New Mexico, April.

LANL (Los Alamos National Laboratory), 2005. *Historical Investigation Report for Technical Area 10*, Los Alamos National Laboratory document LA-UR-05-3955, Los Alamos, New Mexico, July.

Mayfield, D.L., A.K. Stoker, and A.J. Ahlquist, 1979. *Formerly Utilized MED/AEC Sites, Remedial Action Program: Radiological Survey of the Bayo Canyon, Los Alamos, New Mexico*, U.S. Department of Energy Report No. DOE/EV-0005/15, Los Alamos, New Mexico, June.

NMED (New Mexico Environment Department), 2005. *Compliance Order on Consent*, Los Alamos National Laboratory, Los Alamos County, New Mexico, March 5 (revised June 18, 2008).

Veenis, S., 2005. Bayo Canyon BMPs and attachment, LANL email communication to D. Stevens (Terranear PMC), Los Alamos, New Mexico, June 24.

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Appendix A

Master Access Agreement

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MASTER ACCESS AGREEMENT

BETWEEN

LOS ALAMOS COUNTY, NEW MEXICO

AND

THE U.S. DEPARTMENT OF ENERGY

Office of Legacy Management

**FOR THE BAYO CANYON AGGREGATE AREA,
A PROPERTY CONTAINED WITHIN:**

The Counties of Los Alamos and Santa Fe:

Property Description:

Former Technical Area 10 Site

**Contained within the Counties of Los Alamos
and Santa Fe: Lying and situated within and near
County Property in Bayo Canyon,
Los Alamos, New Mexico
(See Exhibit B)**

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ACCESS AGREEMENT

This Master Access Agreement (“Agreement”) is entered into between the County of Los Alamos (hereinafter, the “Grantor”) and the UNITED STATES OF AMERICA, acting by and through the U.S. Department of Energy, Office of Legacy Management, (hereinafter, the “Grantee”), pursuant to the authority of the Resource Conservation and Recovery Act (RCRA) (Title 42 *United States Code*, ch. 82 Section 6901 [42 6901], et seq.) and Formerly Utilized Sites Remedial Action Program (FUSRAP) is hereby stated as follows:

Background and Purpose.

The purpose of this Agreement is to allow Grantee and their authorized representatives to enter and perform project activities on the Grantor’s property (hereinafter, the “Property”) related to; inspections, sample gathering, erosion control measures, surface water monitoring, site maintenance, and installation of markers or signs. (the “Work”). The interest granted herein shall be a non-exclusive right of use of the Property by Grantee and their authorized representatives for the purposes described herein. Project activities will be provided through the submittal of sequentially numbered amendments to Exhibit A to this Access Agreement. The Exhibit A amendments will provide more specifics for the Grantee’s project activities and schedule that will be performed on the Grantor’s property that is subject to the terms and conditions of this Agreement.

Location of the Property: The Property is located in former Technical Area 10 Site contained within the counties of Los Alamos County and Santa Fe: lying and situated within and near Los Alamos County property in Bayo Canyon, New Mexico as shown on Exhibit B (map) which is the limit of the work area and attached hereto and made a part hereof.

On the basis of the considerations stated in this Agreement, the parties agree as follows:

1. **Right of Entry, Inspection, Maintenance, and Sample Gathering.** The Grantor owns and controls portions of the Property contained within the Former Technical Area 10 Site contained within the Counties of Los Alamos and Santa Fe: lying and situated within and near county property in Bayo Canyon, New Mexico and referred to as the “Property” (See Exhibit B). From the date of this agreement to September 5, 2029, DOE LM and their authorized representatives, contractors, and subcontractors shall have the right, at their own cost, expense, liability, and risk, to enter the Property to inspect, monitor, and collect samples, subject to the terms and limitations of this Agreement, unless earlier modified or terminated by Grantor or Grantee (hereinafter, the “Parties”) upon ninety (90) days written notice. Should Grantee abandon and subsequently terminate this Agreement, Grantee’s non-exclusive right of ingress and egress and all other rights set forth herein shall revert to Grantor.
2. **Work to Be Performed.** Grantee and its authorized representatives will implement “the Work” as described herein and approved pursuant to Exhibit A’s, which may be amended from time to time pursuant to Paragraph 13 of this Agreement and will be incorporated into this Agreement. Grantee shall provide all equipment and materials necessary to perform and complete the Work. Grantee shall have sole responsibility for the Work performed and shall be responsible for directing and controlling their employees and subcontractors as to the manner and means of accomplishing the Work.

3. **Non-Confidentiality and Notification of Results.** Grantee will maintain documentation of all Work performed on the Property. Grantee will treat all quality assured, validated data, reports, and information relating to field Work activities as public information. The results of any work performed on Los Alamos County land will be made available to the Grantor upon the Grantor's request. Two copies of all reports generated as a result of the activities performed under this Agreement shall be provided to the Grantor upon their completion on electronic media. Hard copies will be provided upon Grantor's request.
4. **Notice to Grantor.** Grantee shall give reasonable notice to Grantor before entering the Property for the first time to perform Work under an approved Exhibit A. Reasonable notice, post-approval, includes written notice by email at least 2 days before initial entry on the Property. Notice shall reference the applicable Exhibit A, which includes the provision of a detailed plan of work to be performed, a description of any necessary impacts to other uses of the Property, and provides an estimate of the time period necessary to complete the Work. After this initial notification, Grantor and Grantee shall agree whether further notice is required. The Grantor has the right to refuse entry or to be present as Grantee or its contractors enter the Property at any time.
5. **Handling, Transportation, and Disposition of Materials.** Grantee shall perform all activities necessitated by the Work and as otherwise required by any applicable law, regulation, ordinance, or directive from any regulatory agency having the requisite authority. Upon completion of the Work, Grantee shall be solely responsible for any and all materials gathered or collected in Work activities and shall be the owner thereof, unless alternate direction is provided by the Grantor. The Grantee will, as required by any applicable law, regulation, ordinance, or directive, appropriately handle, transport, and dispose of any and all materials related to the Work and any and all equipment and supplies used in conducting the Work.
6. **Applicable Law and Regulations.** Grantee will comply with all applicable health, safety, environmental laws, directives, ordinances, regulations, or statutes applicable to the Work.
7. **Notice of Co-Located Work.** Upon receipt of notice from Grantee in accordance with the provisions of Paragraph 4 above, the Grantor shall give Grantee notice of any work by Los Alamos County staff or other parties for which the Grantor has awareness that are co-located in the subject area during the noticed timeframes. Notice shall include disclosure of any hazards from the co-located work that has the potential to impact Grantee or its authorized representatives. Grantee will similarly disclose to the Grantor any hazards from the co-located work that have the potential to impact Los Alamos County or others. If unsafe conditions are encountered on the Property as the Work is being performed, Grantee shall notify Grantor immediately regarding the nature of the unsafe condition and actions that were taken, or are planned, to render the condition safe. In the event of the identification of an unsafe condition, either static or arising from the co-located workers, Grantor may refuse entry to the Property.
8. **Restoration.** Grantee shall use their best efforts to avoid interfering with the Grantor's use of the Property and shall disturb or remove the Grantor's property only to the extent necessary to perform the Work. Upon completion of any and all activities related to the Work, Grantee shall repair and restore damage to the Property

arising from the Work. Grantee shall further clean up and remove all debris and materials related to the Work at Grantee's sole cost and expense.

9. **Release of Liability.** Grantee shall be responsible for all claims, liabilities, losses, and damages in favor of third parties arising out of Grantees performance of failure to perform their obligations under this Access Agreement. The Grantor shall not be liable for any damage, injury, theft, claim, or other basis for liability to third parties in connection with the Work, except to the extent that such damage, injury, or theft arises from the negligence or willful acts or omissions of the Grantor or those acting at the Grantor's direction.
10. **Sale of Grantor's Property.** In the event that Grantor determines to sell or otherwise transfer Property containing materials, equipment, or structures relating to the Work, Grantor shall notify Grantee a minimum of 30 days prior to transfer.

11. **Notices.**

- a. Notice to Grantor and Designee. Any notice from Grantee to Grantor shall be given to:

County Manager
Los Alamos County
1000 Central Avenue, Suite 350
Los Alamos, New Mexico 87544
Telephone: (505) 663-1750
Email: lacmanager@lacnm.us

- b. Notice to Grantee. Any notice from Grantor to Grantee shall be given to:

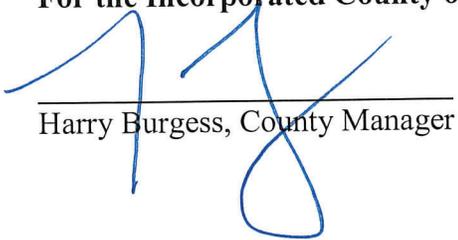
Realty Officer
U.S. Department of Energy
2597 Legacy Way
Grand Junction, CO 81503
Telephone: (303) 410-4827
Email: LMrealproperty@lm.doe.gov

12. **Entire Understanding.** This Agreement sets forth the entire understanding between the Parties with respect to the subject matter of this Agreement and supersedes all prior negotiations and dealings pertaining to this Agreement.
13. **Modification.** No change in, addition to, or waiver of any of the provisions of this Agreement shall be binding upon any party unless in writing and signed by each Party.
14. **Agreement Headings.** All headings of the Articles of this Agreement have been inserted for convenience of reference only, are not to be considered a part of this Agreement, and shall in no way affect the interpretation of any of the provisions of this Agreement.
15. **Effective Date.** The effective date of this agreement shall be the date of execution by the Grantee, or the Grantor, whichever is latest.

16. **Term of the Agreement.** The term of this Agreement shall commence on the effective date and continue until September 5, 2029, unless earlier modified or terminated by Grantor or Grantee upon ninety (90) days written notice.

17. Executed this 6th day of September, 2019.

For the Incorporated County of Los Alamos:



Harry Burgess, County Manager

9/16/19

Date

For the U.S. Department of Energy, Office of Legacy Management:

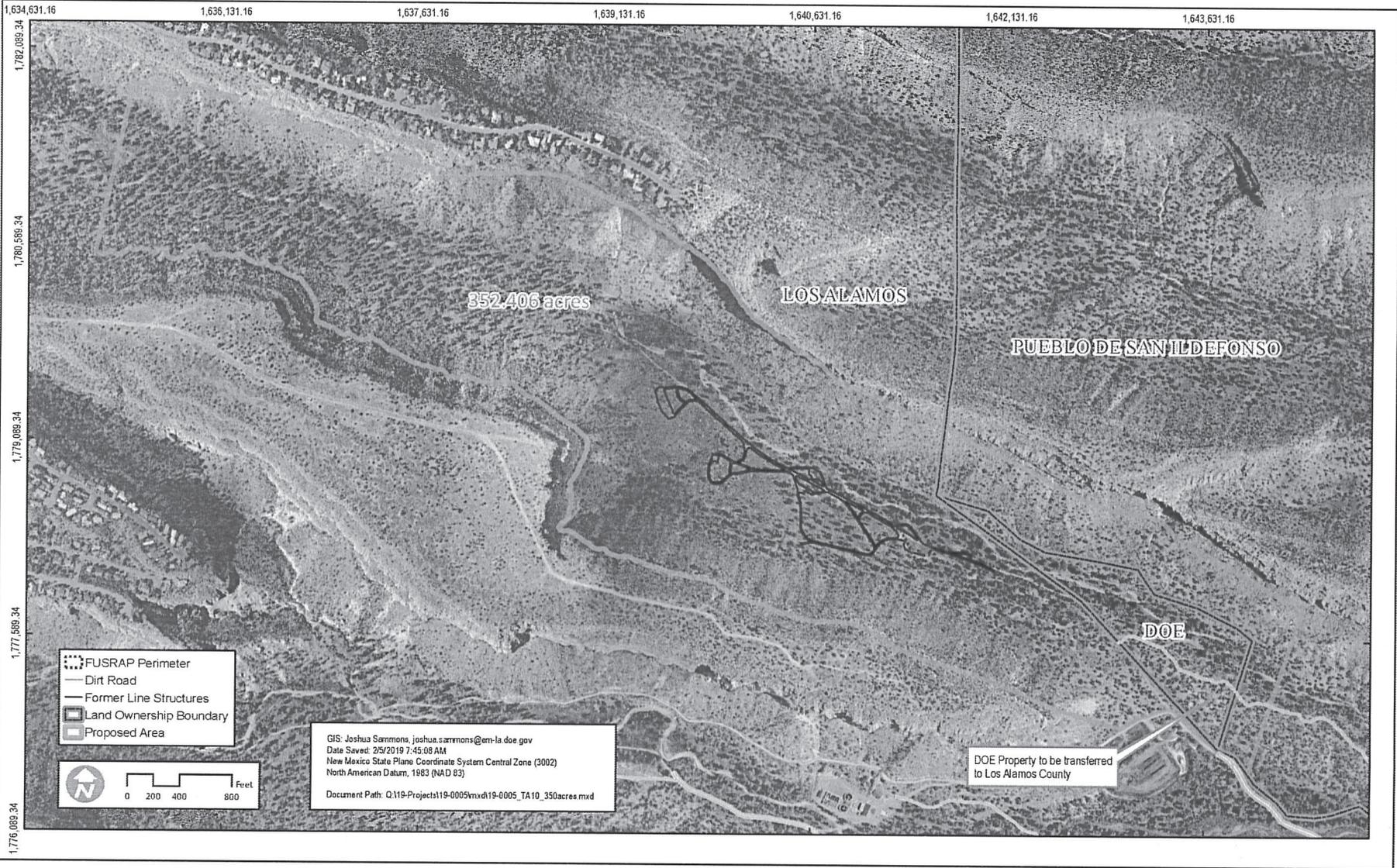
 Digitally signed by David P. McNeil
Date: 2019.09.06 12:09:15 -06'00'

David P. McNeil, Senior Realty Officer

Date

Former TA-10 Site

Exhibit B
Agreement Number DE-RO01-19LM70224



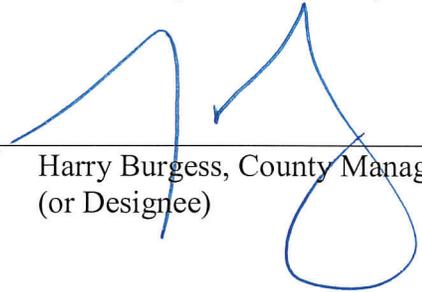
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**Access Agreement
with the County of Los Alamos for
Conducting Program Activities at the Sites on
County Property in Bayo Canyon,
Former Technical Area 10 Site contained within
the Counties of Los Alamos and Santa Fe: Lying and situated
Within and near County Property in Bayo Canyon,
Los Alamos, New Mexico 87544**

EXHIBIT A, NUMBER 1

For the Incorporated County of Los Alamos:

Approved



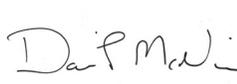
Harry Burgess, County Manager
(or Designee)

9/16/19

Date

For the U.S. Department of Energy, Office of Legacy Management:

Approved



David P. McNeil, Senior Realty Officer

Digitally signed by David P.
McNeil
Date: 2019.09.06 12:06:32
-06'00'

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EXHIBIT A, NUMBER 1

**Access Agreement
with the County of Los Alamos for
Conducting Program Activities at the Sites on
County Property in Bayo Canyon,
Former Technical Area 10 Site, within the Counties of
Los Alamos and Santa Fe,
Los Alamos, New Mexico 87544**

PROJECT AND PROPERTY-SPECIFIC WORK PLAN SUMMARY

DOE LM Program: DOE LM Office of Site Operations,
CERCLA, RCRA, FUSRAP Team

DOE Team Member: Darina Castillo (720) 377-3824

Contractor Team Member: Michele Miller, (513) 648-7544

Property Description: Former Technical Area 10 Site contained within the Counties of Los Alamos and Santa Fe: Lying and situated within and near County Property in Bayo Canyon, Los Alamos, New Mexico (See Exhibit B)

Property Owner: Los Alamos County

**Termination Date
of this Agreement:** December 9, 2019

Planned Work:

Planned work for this access agreement will be performed by the U.S. Department of Energy, Office of Legacy Management contractor, Navarro Research and Engineering, Inc., and Navarro's subcontractors beginning on September 9, 2019.

General Description of Work Site:

The area of work is limited to the 1.5-acre +/- FUSRAP remediated area outlined in Figure 1 accessed through any part of the Bayo Canyon Aggregate Area necessary to safely complete the task. Figure 1 is made a part of this (Exhibit A, Number 1) to further identify the work site.

The Grantee requires access to the general FUSRAP area on the Los Alamos County property for the purpose of site maintenance in the form of fence and debris removal.

Scheduling and Coordination:

The site lead (or designee) for LM's Contractor, Navarro Research and Engineering, shall provide the Los Alamos County representative with a monitoring/work schedule for any activities planned that are located on Los Alamos County property. These schedules shall be provided before the start of any activities. Additionally, written notice shall be provided 2 days before the start of any above-mentioned activities.

Fieldwork to be performed:

The objective of the proposed fence removal and site maintenance is to remove the fence and perform site maintenance in the form of debris removal on the Bayo Canyon FUSRAP Site.

Fence removal and site maintenance activities shall include:

1. Removal and stacking of the temporary fence panels surrounding the Bayo Canyon Site landfill area for recycle/reuse or disposal.
2. Removal of fence panel support posts and stacking for recycle/reuse or disposal.
3. Collecting and gathering various construction and miscellaneous debris within the fenced area considered disposable, including loose pieces of barbed wire, metal containers, wood pallet, erosion control materials, and other miscellaneous items.
4. Conducting a radiological survey to release the fence, post and debris for recycle/reuse or disposal.
5. Hauling released material (clean material as determined by radiological survey) via truck for transfer to 18ft flatbed trailer staged at entrance road (near transportation building). If radiological survey results find contamination on any item listed above for removal, item(s) to remain in place/onsite pending Low Level Waste (LLW) shipping arrangement (1 to 3 month process). Any materials required to remain onsite shall be neatly stacked and arranged in the same location where the fence existed until removed and shipped.

Site Access:

The Grantee shall have access to the FUSRAP remediated area (Figure 1) from necessary portions of the site (See Master Agreement - Exhibit B) to perform necessary activities. Vehicles will be used to access the site using the existing Bayo Canyon unpaved access road. The vehicles shall be used to transport equipment and materials necessary to perform the planned work to and from the site and shall include a standard sized pickup, and support vehicles used to transport contractor and subcontractor personnel.

Reporting

A 2019 Inspection Report shall be issued within 45 days of completion of field activities and a copy provided to LAC. The report will include the results from the radiation survey and daily Construction Field Inspection Log (CFIL) for the removal work.

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Appendix B

Site Condition Photographs

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Photo 1. Entrance Gate into the BCAA Site



Photo 2. BCAA Entry into the FUSRAP Remediated Area



Photo 3. FUSRAP Site Marker 1



Photo 4. Bollards Surrounding FUSRAP Site Marker 1



Photo 5. FUSRAP Site Marker 2



Photo 6. Bollards Surrounding FUSRAP Site Marker 2



Photo 7. FUSRAP Site Marker 3



Photo 8. Bollards Surrounding FUSRAP Site Marker 3



Photo 9. FUSRAP Site Marker 4



Photo 10. Bollards Surrounding FUSRAP Site Marker 4



Photo 11. FUSRAP Site Marker 5



Photo 12. Bollards Surrounding FUSRAP Site Marker 5



Photo 13. FUSRAP Site Marker 6



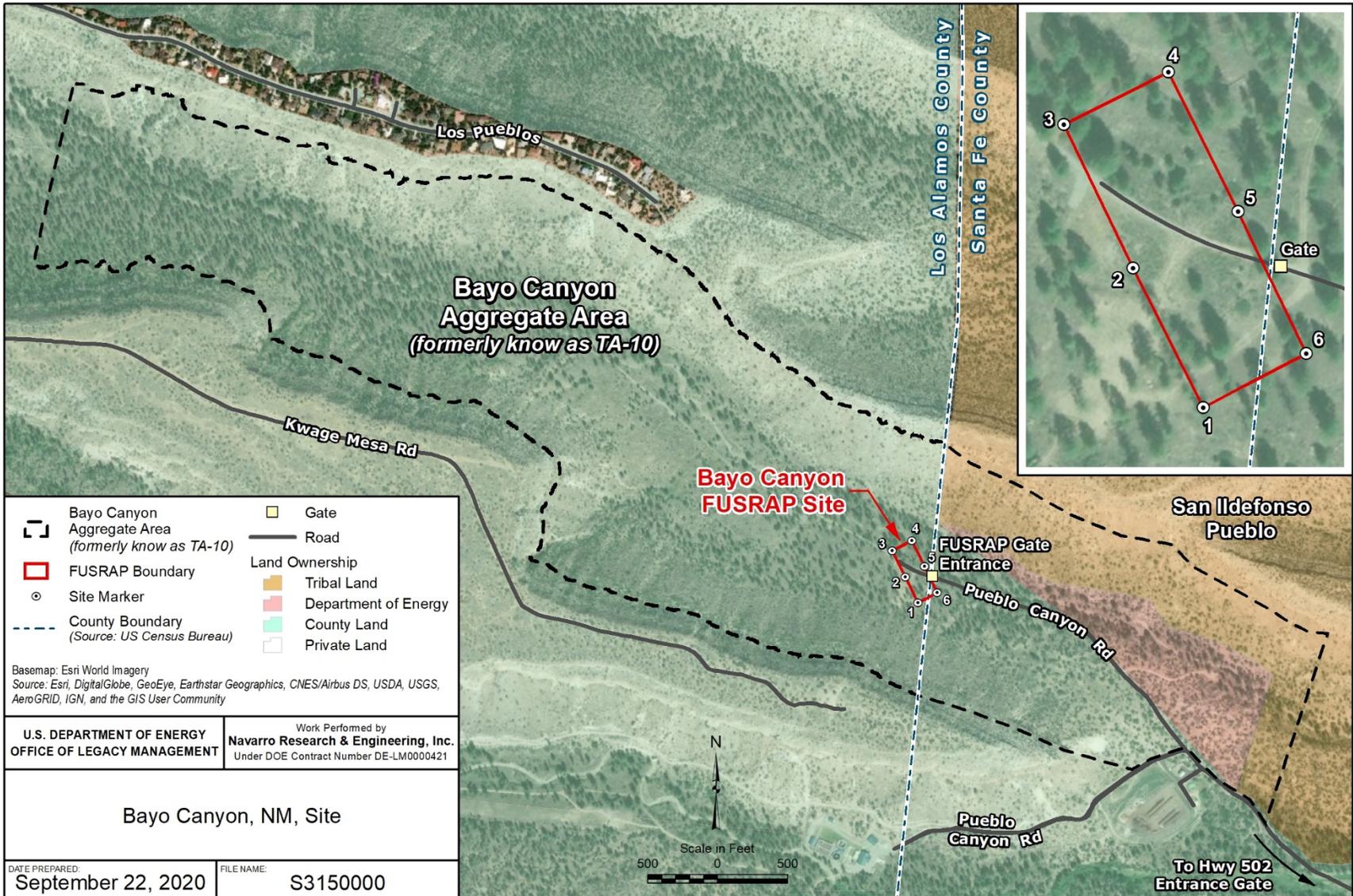
Photo 14. Bollards Hidden by Brush Surrounding FUSRAP Site Marker 6

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Attachment 1

Bayo Canyon, New Mexico, Site Map

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Attachment 2

2020 Annual Inspection Checklist

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2020 ANNUAL INSPECTION CHECKLIST Bayo Canyon Aggregate Area (BCAA) and Bayo Canyon, New Mexico, Sites

Research and remediation were conducted by the U.S. Department of Energy (DOE) Office of Environmental Management (EM) and the U.S. Army Corps of Engineers. The sites require long-term surveillance and maintenance (LTS&M), specifically for residual strontium-90 located in the soil beneath the Bayo Canyon site landfill area and potentially residual radioactive contamination in shrapnel debris in other areas of the BCAA site. The BCAA site LTS&M Plan defines how the DOE Office of Legacy Management (LM) will maintain the institutional controls (ICs) and protective measures. LM uses the checklist below to complete the BCAA site inspections. Any significant actions required will be scheduled for completion prior to or during the next inspection.

No.	ITEM	REQUIREMENTS	ACTION
1	Protocols	Notify the following of the date of the inspection: <ul style="list-style-type: none"> • Los Alamos County 	Notification to Los Alamos County provided. Preliminary notice provided on July 27 for the planned August 3 inspection. COVID-19 delayed the inspection, resulting in a second notice on August 20 for an August 23 inspection. (Site was transferred to LM in 2019; no notification required for EM and LANL.)
2	Access	Access to the site is restricted. The Master Access Agreement between DOE and Los Alamos County is in place and has been in effect since September 6, 2019.	The Master Access Agreement requires LM to conduct site inspections and to provide advance notification to Mr. Harry Burgess, Los Alamos County.
3	LTS&M Plan	Current LTS&M Plan: <ul style="list-style-type: none"> • Manage site records • Respond to stakeholder inquiries • Manage ICs • Perform inspections: annual for first 3 years and on a rolling 5-year schedule thereafter 	<ul style="list-style-type: none"> • Records are maintained. • There have been no new stakeholder inquiries since last site visit in 2019. • ICs are current and effective. • The 2020 site inspection was conducted in August under LM stewardship. <p>Fact sheets and webpage were reviewed and updated in 2020. The six site markers and the 18 bollards around the Formally Utilized Sites Remedial Action Program (FUSRAP) remediated area remain in good condition.</p>

No.	ITEM	REQUIREMENTS	ACTION
4	Inspection of specific site surveillance features	<p><u>Site Area</u> Focus the inspection on the 1.5-acre Bayo Canyon (FUSRAP) site (which contains radioactive contamination at depth) and its surrounding area, within the larger BCAA site. The FUSRAP remediated area has six survey pin locations with site markers that are surrounded by three bollards each.</p>	<p>Performed a walkover of the site area. Looked for any integrity issues (e.g., cracks, ponding water, burrowing animals, etc.).</p> <p>Visually inspected the six site markers and their protective bollards to ensure that they are in good condition:</p> <ul style="list-style-type: none"> • The site markers were present and legible. • One bollard continued to show signs of soil erosion at its base. Bollard was not compromised. <p>Visually evaluate if there is any soil disturbance in the FUSRAP remediated area:</p> <ul style="list-style-type: none"> • Soil was not eroding, the area had not been scraped or excavated, and there were no signs of disturbance.
		<p><u>Site Fence</u> LM removed temporary fencing in 2019.</p>	<p><u>Site Fence</u> Not applicable.</p>