

**Fifth Five-Year Review Report
for Monticello Radioactively
Contaminated Properties
Superfund Site
San Juan County
Monticello, Utah**

June 2017



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

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for
Monticello Radioactively Contaminated Properties Superfund Site
San Juan County
Monticello, Utah**

Lwpg 2017

Approved by:



JASON NGUYEN
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Date:

Jason Nguyen
Monticello Site Manager
U.S. Department of Energy, Office of Legacy Management

July 25, 2017

Concurrence Letter Enclosed
U.S. Environmental Protection Agency



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8

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Denver, CO 80202-1129
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JUN 30 2017

Ref: 8EPR-SR

Jason Nguyen
Monticello Site Manager
US Department of Energy, Office of Legacy Management
2597 Legacy Way
Grand Junction, Colorado 81503

Re: Five Year Review Report for Monticello Radioactively Contaminated Properties US DOE Site, San Juan County, Utah

Dear Mr. Nguyen:

Thank you for submitting the Five-Year Review Report for Monticello Radioactively Contaminated Properties (also known as Monticello Vicinity Properties - MVP) US DOE Site, San Juan County, Utah. The U.S. Environmental Protection Agency in consultation with the State of Utah concurs with your assessment that the remedy at this site is protective of human health and the environment. This information will be included in the EPA's annual Superfund Five-Year Review Report to Congress.

No issues or recommendations relating to this Five-Year Review are being tracked in the EPA's Superfund Environmental Management System, (SEMS). The environmental indicator for this site is "current human exposure is controlled and a protective remedy is in place."

The due date for the next five-year review report will be June 30, 2022.

Sincerely,

A handwritten signature in blue ink that reads "Betsy Smidinger".

Betsy Smidinger
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

cc: Michael Storck, UDEQ

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Attachment 2	2017 CERCLA Five-Year Review Announcements
Attachment 3	2017 CERCLA Five-Year Review Interviews

Plate

Plate 1	Location Map of Monticello Vicinity Properties Operable Units
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Abbreviations

ARAR	applicable or relevant and appropriate requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	<i>Code of Federal Regulations</i>
cm	centimeter
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ESD	Explanation of Significant Difference
FFA	Federal Facility Agreement
ICs	institutional controls
LM	Office of Legacy Management
LTS&M	long-term surveillance and maintenance
LTS&M Plan	Long-Term Surveillance and Maintenance Plan for the Monticello NPL Sites
MMTS	Monticello Mill Tailings Site
MOU	memorandum of understanding
mrem/yr	millirem per year
MVP	Monticello Vicinity Properties
NPL	National Priorities List
OU	operable unit
pCi/g	picocuries per gram
²¹⁴ Po	polonium-214
²¹⁸ Po	polonium-218
²²⁶ Ra	radium-226
RI/FS	remedial investigation and feasibility study
²²² Rn	radon-222
ROD	Record of Decision
SFMP	Surplus Facilities Management Program
TEDE	total effective dose equivalent
²³⁰ Th	thorium-230
TSF	temporary storage facility
UDEQ	Utah Department of Environmental Quality
UDOT	Utah Department of Transportation
UMTRCA	Uranium Mill Tailings Radiation Control Act of 1978
UU/UE	unlimited use and unrestricted exposure
VMTE	Victims of Mill Tailings Exposure
WL	working level

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Executive Summary

This report documents the fifth Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Five-Year Review for the U.S. Department of Energy's (DOE) Monticello Radioactively Contaminated Properties site, also known as the Monticello Vicinity Properties (MVP) in Monticello, Utah. The MVP was placed on the U.S. Environmental Protection Agency (EPA) National Priorities List (NPL) on June 10, 1986. The MVP is composed of eight operable units (OUs), designated OU A through OU H, that were contaminated with mill tailings from the former mill. Each OU is distinct and includes multiple individual properties. Contamination resulted primarily from the use of mill tailings as a construction material.

A Record of Decision (ROD) was issued in 1989. A Federal Facility Agreement between the EPA, the Utah Department of Environmental Quality (UDEQ), and DOE, signed in December 1988, provides the regulatory framework for implementing the ROD through a consultative process between the parties. DOE is the lead agency for remediation, with oversight provided by EPA and UDEQ. A CERCLA remedial investigation and feasibility study (RI/FS) was not conducted for the MVP; however, as stated in the ROD, EPA and UDEQ agreed that DOE had complied with CERCLA by performing the functional equivalent of an RI/FS, upon which the ROD was based.

Five-Year Reviews are conducted for the MVP, as mandated by CERCLA Section 121 (c) and Title 40 *Code of Federal Regulations* Part 300.430(f)(4)(ii) [40 CFR 300.430(f)(4)(ii)], because contamination remains in place that prevents unlimited use and unrestricted exposure (UU/UE) at OU H. The review was conducted to determine if the selected remedy remains protective of human health and the environment. The period for this review, conducted in accordance with EPA guidance, is October 10, 2016, through June 20, 2017, and evaluates the period of June 20, 2012, through March 29, 2017 (date comments were received from EPA and UDEQ). This review was conducted by DOE as the CERCLA lead agency under Executive Order 12580, with assistance from EPA and UDEQ.

MVP Remedy Description

The ROD was based on surveys initiated by the U.S. Atomic Energy Commission in 1971 to identify the nature and extent of radiological contamination associated with the waste byproducts from uranium- and vanadium-ore processing at the Monticello mill from 1941 to 1960. These surveys identified 424 properties that comprise OU A through OU H in the residential and commercial area of Monticello where contamination exceeded applicable protection standards.

Pursuant to the ROD, the selected remedy for OU A through OU H was excavation of tailings, ore, and related byproduct material from vicinity properties; temporary storage of contaminated material on the mill site; final disposal of contaminated material in the repository constructed and operated under the Monticello Mill Tailings Site (MMTS) remedy; and restoration of the affected properties using uncontaminated soil and construction materials. The MMTS is a companion NPL site associated with the former uranium-ore mill itself and is subject to separate but concurrent Five-Year Reviews.

Remediation of the MVP was initiated by DOE in 1984 and was completed in July 1999. The MVP was deleted from the NPL in February 2000. For each property in the MVP, a Remedial Action Design was prepared that showed areas requiring remediation and the remedial plan. Completion reports for each property document the specific actions taken at the property and certify compliant remediation. Properties were restored to their original condition to the extent possible.

Cleanup levels achieved for OU A through OU G, as promulgated in 40 CFR 192.12(a) and 40 CFR 192.12(b) pursuant to the Uranium Mill Tailings Radiation Control Act of 1978, allow UU/UE. This Five-Year Review focuses on OU H, which contains contamination that does not allow for UU/UE.

OU H consists of (1) a single, private residential property with residual windblown contamination, “property MS-00176,” (2) Monticello “City Streets and Utility Corridors” and (3) Utah Department of Transportation (UDOT) rights-of-way, “UDOT Highways 191 and 491 Rights-of-Way.” Contaminated soils were used as construction backfill in the corridors and rights-of-way. Forested portions of the residential property were not remediated because low levels of residual contamination present in the forest did not warrant the adverse ecological impacts of remediation. Alternative cleanup standards (supplemental standards as described in 40 CFR 192.22) were applied to the residential property, city streets and utility corridors, and in highway rights-of-way. In conjunction with DOE-implemented institutional controls, the alternative standards minimize exposure and prevent dispersal of contamination under current land use. Remedy protectiveness at OU H is implemented through a zoning restriction for the private property, a cooperative agreement between DOE and the City of Monticello, a memorandum of understanding with UDOT, and through DOE long-term maintenance and surveillance activities to ensure that residual radiological contamination is appropriately managed.

MVP Remedy Protectiveness

The remedy at OU H is protective of human health and the environment. Contaminated soil was removed or contained, ICs are in place to prevent additional exposure where contaminated soils remain, and management plans are in place which contain or remove remaining contamination which may become exposed. Routine surveillance and monitoring is conducted to ensure that the ICs remain effective. Because the remedial actions at OU H of the MVP are protective, and other OUs at this site are suitable for UU/UE, the site is protective of human health and the environment.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site Name: Monticello Radioactively Contaminated Properties (also known as Monticello Vicinity Properties [MVP] site).		
EPA ID: UTD980667208		
Region: 8	State: Utah	City/County: Monticello/San Juan
SITE STATUS		
NPL Status: Deleted		
<p>Multiple OUs? Yes. Operable Unit (OU) A through OU G are not subject to Five-Year Review because they have been remediated to allow unlimited use and unrestricted exposure (UU/UE).</p> <p>OU H is subject to Five-Year Review because it was not remediated to allow UU/UE.</p>	<p>Has the site achieved construction completion? Yes; July 14, 1999</p>	
REVIEW STATUS		
<p>Lead agency: Other Federal Agency If "Other Federal Agency" was selected above, enter Agency name: U.S. Department of Energy (DOE)</p>		
Author name (Federal or State Project Manager): Jason Nguyen		
Author affiliation: DOE		
Review period: October 10, 2016 through June 20, 2017		
Date of site inspection: September 12 and 13, 2016		
Type of review: Statutory		
Review number: Five		
Triggering action date: June 20, 2012 (end of fourth MVP five-year review period)		
Due date (five years after triggering action date): June 20, 2017		

Five-Year Review Summary Form (continued)

Issues/Recommendations

OU(s) without Issues/Recommendations Identified in the Five-Year Review:

OU A through OU H

Issues and Recommendations Identified in the Five-Year Review:

OU(s): None	Issue Category: Not applicable			
	Issue: Not applicable			
	Recommendation: Not applicable			
Affect Current Protectiveness	Affect Future Protectiveness	Implementing Party	Oversight Party	Milestone Date
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Protectiveness Statement(s)

The remedy at OU H is protective of human health and the environment. Contaminated soil was removed or contained, ICs are in place to prevent additional exposure where contaminated soils remain, and management plans are in place which contain or remove remaining contamination which may become exposed. Routine surveillance and monitoring is conducted to ensure that the ICs remain effective.

Sitewide Protectiveness Statement (if applicable)

Because the remedial actions at OU H of the MVP are protective, and other OUs at this site are suitable for UU/UE, the site is protective of human health and the environment.

1.0 Introduction

1.1 Purpose

This report documents the fifth Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Five-Year Review for the U.S. Department of Energy's (DOE) Monticello Radioactively Contaminated Properties site, otherwise known as the Monticello Vicinity Properties (MVP), in Monticello, Utah. The review was conducted to determine if the selected remedy remains protective of human health and the environment. This report describes the period from June 20, 2012, through June 20, 2017.

Five-Year Reviews are conducted for the MVP site, as mandated by CERCLA, because contamination remains in place that prevents unlimited use and unrestricted exposure (UU/UE) for portions of the site. Properties that allow for UU/UE are not included in this review. CERCLA Section 121 (c) states the following:

If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each 5 years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.

The U.S. Environmental Protection Agency (EPA) interpreted this requirement further in the National Contingency Plan (Title 40 *Code of Federal Regulations* [CFR] Part 300.430[f][4][ii]), which states:

If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after initiation of the selected remedial action.

As the CERCLA lead agency under Executive Order 12580, DOE conducted this review with oversight from EPA and the Utah Department of Environmental Quality (UDEQ) using guidance provided by EPA.¹

The DOE Office of Legacy Management (LM) conducted the review with the assistance of the LM contractor. A separate but concurrent Five-Year Review was conducted for the Monticello Mill Tailings Site (MMTS), the companion National Priorities List (NPL) site in Monticello. The

¹ *Comprehensive Five-Year Review Guidance* (EPA 2001), *Recommended Evaluation of Institutional Controls: Supplement to the Comprehensive Five-Year Review Guidance* (EPA 2011a), and the *Five-Year Review Summary Form* (EPA 2011b). The *Five-Year Review Recommended Template* (EPA 2016a) was considered in preparing this review; however, that document remains under EPA review for potential application to federal facilities sites subject to EPA oversight.

site inspection for this Five-Year Review, conducted on September 12–13, 2016, corresponds to the most recent of the annual site inspections that are performed by DOE.

2.0 Site Chronology

The main events leading to the formation and remediation of the MVP site, and significant activities thereafter are summarized chronologically in Table 1.

Table 1. MVP Chronology

Event	Date
Vanadium and uranium milling at the Monticello mill resulted in soil contamination of properties in the vicinity of the mill site and in Monticello.	1941–1960
The U.S. Atomic Energy Commission (a predecessor agency of DOE) began radiological surveys of Monticello properties.	1971
The mill site was accepted into the SFMP to ensure safe caretaking and decommissioning of government facilities that were retired from service, but still contained radioactive contamination. Monticello Remedial Action Project was established. The Monticello Remedial Action Project included vicinity properties within Monticello as well as the mill site and mill site peripheral properties. Documents equivalent to required CERCLA documents (e.g., the RI/FS) were generated under the SFMP.	1980
Removal actions initiated for first two vicinity properties (completed in 1984).	1983
Remedial activities for vicinity properties were separated from the Monticello Remedial Action Project. MVP was established.	1983
Removal actions initiated for additional vicinity properties prior to signing the ROD.	1984
MVP was placed on the NPL.	June 10, 1986
<i>Federal Facility Agreement Pursuant to CERCLA Section 120</i> (DOE 1988) signed by the EPA, Utah Department of Health, and DOE to establish roles and responsibilities for conducting remedial actions at the MMTS.	December 1988
MVP ROD signed.	November 29, 1989
Mill site pre-excitation final design report established an alternate Interim Repository that would be used to store wastes removed from MVP. No ESD required for this action.	1993
ESD issued to address projected cost increases associated with remediation of additional properties.	April 1995
OU A through OU H construction completed.	May 1996 – December 1998
OU A Remedial Action Report issued.	January 1997
First CERCLA Five-Year Review report issued. This report includes all MVP OUs (A through H), as the Five-Year Review occurred before final closeout reports for the properties were issued.	February 13, 1997
Four MVP sites were moved to MMTS to accommodate construction of the repository (MS-01040, MS-01041, MS-01042, and MS-01080).	April 1997
ESD issued to address supplemental standards for MVP and MMTS properties in which contamination was left in place.	February 1999
Cooperative agreement between DOE and City of Monticello signed (the agreement was for managing residual contamination on properties affected by ICs) (DOE 1999f).	June 1999
Remedial Action Reports for OU B through OU H issued.	July 1999
Memorandum of understanding between DOE and UDOT signed (agreement for managing residual contamination on properties affected by ICs).	August 1999
Final closeout reports for OU A through OU H issued.	September 1999
MVP site is deleted from NPL.	February 28, 2000

Table 1. MVP Chronology (continued)

Event	Date
MVP and MMTS transferred to DOE's LTS&M Program.	October 1, 2001
Second CERCLA Five-Year Review report issued. This report and all subsequent Five-Year Reviews include only OU H, as OU A through OU G were remediated for unlimited use and unrestricted exposure.	June 20, 2002
Overlay Zone OL-1 created by City of Monticello, Ordinance 2002-04 (an IC that affects land use at OU H supplemental standards property MS-00176). Amended by City of Monticello Ordinance 2003-2.	July 2002 – April 2003
Property deed restrictions placed on designated OU H UDOT properties MS-00892, MS-00895, MS-01020, and MS-01021 (maintaining IC to manage residual contamination on these properties).	April 2003
After LM is formed, MVP and MMTS transferred to LM for LTS&M.	December 2003
Cooperative agreement between DOE and City of Monticello extended to December 31, 2016.	April 2007
Third CERCLA Five-Year Review report issued.	June 2007
LTS&M Plan re-issued (consolidated from volumes I–IV, April 2002).	June 2007
Fourth CERCLA Five-Year Review report issued.	June 20, 2012
Cooperative agreement between DOE and City of Monticello extended to March 31, 2022.	March 31, 2017
LTS&M Plan revised.	To be determined

Abbreviations:

- ESD = Explanation of Significant Difference
- IC = institutional control
- LTS&M Plan = *Long-Term Surveillance and Maintenance Plan for the Monticello NPL Sites* (DOE 2007)
- OU = operable unit
- RI/FS = Remedial Investigation/Feasibility Study
- ROD = Record of Decision
- SFMP = Surplus Facilities Management Program
- UDOT = Utah Department of Transportation

3.0 Background

Figure 1 shows the location of the MVP site, its boundary, and supplemental standards areas associated with the MVP.

3.1 Physical Characteristics

The MVP site is located in San Juan County, in and near the City of Monticello in southeastern Utah (see Figure 1). The City of Monticello lies on the Great Sage Plain, east of the Abajo Mountains and north of Montezuma Creek. The population of Monticello is about 1970 permanent residents (data provided by the 2010 U.S. Census). The major highway in the Monticello area is U.S. Highway 191, which runs in a north-south direction, connecting Monticello with Moab, Utah, 56 miles to the north and with Blanding, Utah, 22 miles to the south. The City of Monticello is located at an average elevation of 7000 feet above sea level. The climate is semiarid with four distinct seasons.

3.2 Land and Resource Use

Land use within the MVP includes residential neighborhoods, a central commercial district, municipal offices, churches, parks, and schools. Monticello is the seat of San Juan County and is the location of U.S. Bureau of Land Management and U.S. Forest Service offices. Much of the land surrounding Monticello is rural open range or ranchland, or is cultivated for dry-land farming. Natural resource use surrounding the MVP area includes outdoor recreation, ranching and farming, and domestic water supplied from surface and groundwater sources provided by the City of Monticello for local residents and businesses. Some surface water is used for crop irrigation and livestock watering. No mineral, energy, or timber extraction exists within the MVP.

3.3 History of Contamination

Uranium- and vanadium-ore milling in Monticello began in 1941 with the construction of the Monticello mill on undeveloped land along Montezuma Creek immediately south of the town. The original mill, constructed by the Vanadium Corporation of America with the assistance of the U.S. Atomic Energy Commission, a predecessor agency to DOE, provided vanadium during World War II. The mill extracted vanadium and/or uranium intermittently from 1941 until 1960, when the mill was permanently closed.

Mill tailings are the pulverized remnants of the processed ore and contain potentially hazardous radiological and nonradiological constituents. Tailings were impounded at four locations at the former mill during and after its operation. While the mill operated, some tailings were removed from the mill site by various parties to properties in Monticello for use as fill for open lands; backfill around water, sewer, and electrical utilities; sub-base for driveways, sidewalks, and concrete slabs; backfill against basement foundations; and as sand mix in concrete, plaster, and mortar. The MVP site eventually comprised these affected properties. As much as 135,000 tons of tailings from the Monticello mill may have been used for such purposes until August 1975, when a fence was erected to prevent unauthorized access to the mill site.

Some mill tailings were also dispersed from the mill site by wind and water erosion, contaminating many surrounding and downstream properties (peripheral properties). The MMTS comprises the former mill site (operable unit [OU] I), the peripheral properties (OU II), and contaminated groundwater and surface water (OU III). A Five-Year Review of the MMTS is documented in a companion report, concurrent to this review.

3.4 Initial Response

In response to environmental and health concerns, the U.S. Atomic Energy Commission first conducted radiological surveys in 1971 to identify the nature and extent of contamination associated with mill tailings from the Monticello mill site. These initial surveys identified 98 contaminated properties. Continued surveys ultimately identified 424 contaminated vicinity properties in the residential and commercial areas of Monticello and 34 peripheral properties on rural land adjacent to, and downstream of, the mill site. Peripheral properties were remediated as OU II of the MMTS.

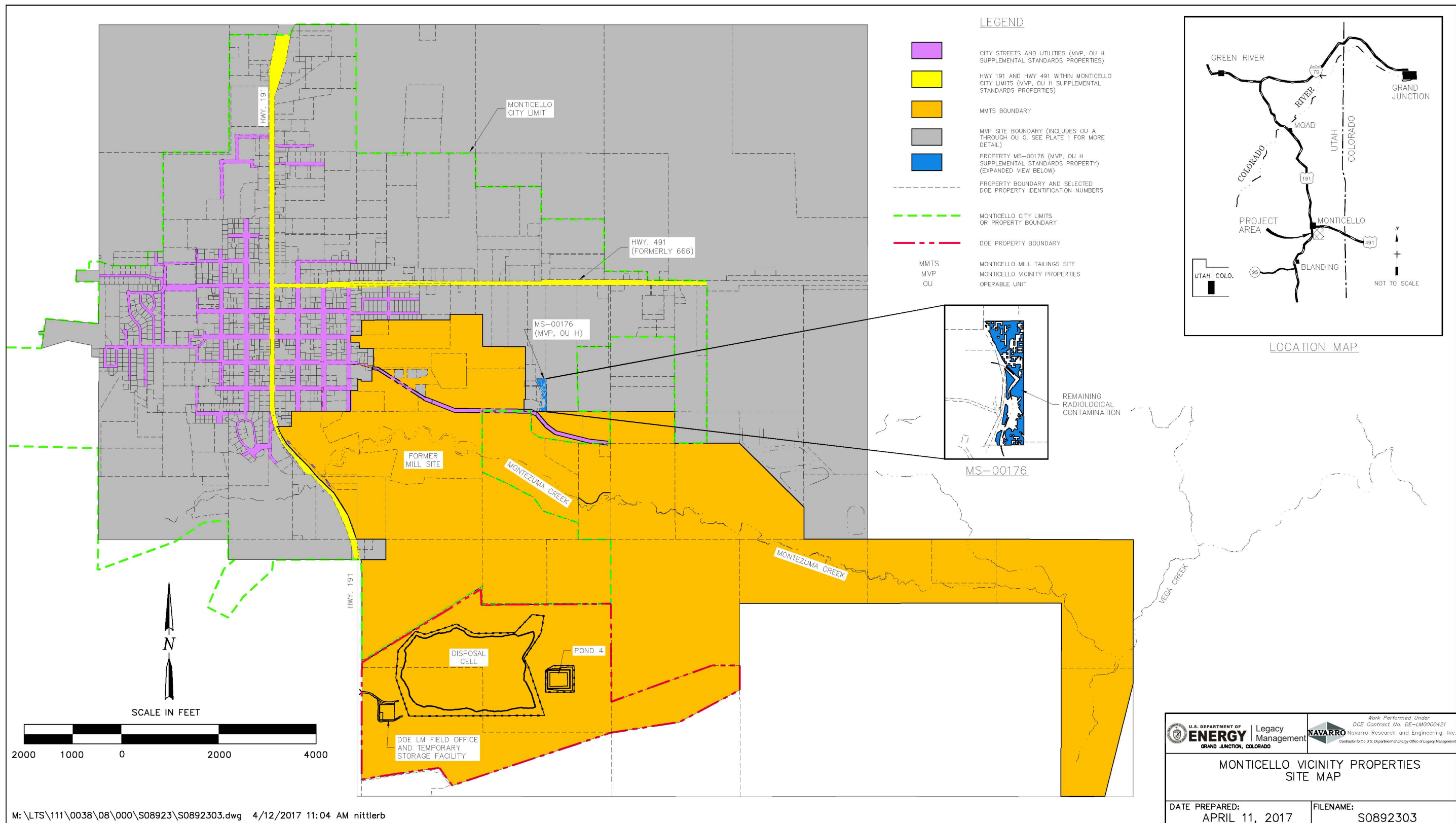


Figure 1. Monticello Vicinity Properties Site Map

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In 1978, DOE created the Surplus Facilities Management Program (SFMP) under the authority of the Atomic Energy Act of 1954 to ensure safe caretaking and decommissioning of retired government facilities that still contained radioactive contamination.² Because the former mill site, peripheral properties, and vicinity properties did not meet the legislative requirements for cleanup under the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA), DOE included them in the SFMP. In 1980, the Monticello Remedial Action Project was established to conduct those remedial actions. In 1983, the Monticello Remedial Action Project was separated into the MVP (vicinity properties) and the MMTS (former mill site and peripheral properties). The first two vicinity property removal actions were initiated in 1983 by EPA at the Randall House (MS-00096-RS, OU A) and the Montgomery Ward catalog store (MS-00059-CS, OU A) and were completed in 1984.

3.5 Basis for Remedial Action

The basis for remedial action of the MVP was to reduce human exposure to ionizing radiation from byproduct material of the Monticello mill to acceptable levels. The primary ore- and tailings-borne contaminants at the MVP are radionuclides in the uranium decay series, particularly thorium-230 (^{230}Th), radium-226 (^{226}Ra), radon-222 (^{222}Rn), and daughters of ^{222}Rn (particularly polonium-214 [^{214}Po] and polonium-218 [^{218}Po]). Significant exposure pathways affecting human health include:

- Inhalation of ^{222}Rn and its daughters, which emit alpha radiation
- External whole-body exposure to radionuclides (such as ^{226}Ra) that emit gamma radiation
- Inhalation and ingestion of dust containing ^{230}Th and ^{226}Ra , which emit alpha and gamma radiation

Risk to ecological receptors from exposure to mill tailings at the MVP was not identified in the MVP Record of Decision (ROD) or in supporting documentation. This is because contamination by mill tailings within the MVP mainly resided in construction materials (for example, concrete, mortar, buried pipe bedding) where no risk to ecological receptors should be expected.

4.0 Remedial Actions

Eight OUs constitute the MVP (OU A through OU H). “Construction complete” status for all MVP OUs was achieved in July 1999; the MVP was deleted from the NPL in February 2000. OU A through OU G were remediated to levels that allow for UU/UE (Table 2). Only OU H includes properties where contamination above levels that allow for UU/UE was left in place. Plate 1 (attached) depicts the locations of the MVP OUs (Plate 1 is attached as it appears in the MVP closeout report [DOE 1999a]).

² The SFMP is one of several remedial action programs established by DOE to clean up radioactive contamination at facilities and sites previously used by the U.S. Government in national atomic energy programs.

Table 2. Monticello Vicinity Properties OUs and Evaluations

Monticello Vicinity Properties OUs and Evaluations			
EPA OU	DOE Designation	Description	Evaluation
OU1	OU A	Original properties	UU/UE, review not required
OU2	OU B	Inclusion properties	UU/UE, review not required
OU3	OU C	Disputed properties	UU/UE, review not required
OU4	OU D	Nonradiological waste	UU/UE, review not required
OU5	OU E	Hall's ditch properties	UU/UE, review not required
OU6	OU F	Refusal properties	UU/UE, review not required
OU7	OU G	Site boundary property	UU/UE, review not required
OU8	OU H	Supplemental standards	Included in this Five-Year Review

4.1 Remedy Selection

The MVP was remediated pursuant to the *Monticello Vicinity Properties Project, Declaration for the Record of Decision and Record of Decision Summary* (DOE 1989). A CERCLA Remedial Investigation/Feasibility Study (RI/FS) was not conducted for the MVP; however, as stated in the ROD, EPA and UDEQ agreed that DOE complied with CERCLA by performing the functional equivalent of an RI/FS, upon which the ROD was based. Documentation is in the *Monticello Remedial Action Project, Monticello Vicinity Properties Equivalency of Documentation* (DOE 1982–1987).

The selected remedy for cleanup of the MVP site was excavation of tailings, ore, and related byproduct material from vicinity properties; temporary storage on the mill site; and final disposal in the repository constructed and operated under the MMTS remedy. The only other alternative considered in the ROD was “no action.”

For radionuclides in byproduct material (as defined in the Atomic Energy Act), the cleanup standards for uranium mill tailings promulgated in 40 CFR 192 pursuant to UMTRCA were determined relevant and appropriate to the MVP. In accordance with 40 CFR 192.12(a), these standards require that ^{226}Ra concentrations in soil, averaged over 100 square meters, not exceed the background level by more than 5 picocuries per gram (pCi/g) on the surface to a depth of 15 centimeters (cm), or by more than 15 pCi/g, averaged over 15 cm thick layers, more than 15 cm below the surface. If these cleanup standards are met, the property concerned can be released for UU/UE.

The relevant and appropriate standard for an occupied or habitable building located on the MVP properties requires that average concentration of radon decay products (daughters) in air not exceed 0.02 working level (WL) to the extent practicable and in no case to exceed 0.03 WL, and that exposure rates to gamma radiation not exceed background by more than 20 microrentgens per hour (40 CFR 192(b)). A habitable building can be released for UU/UE if these standards are achieved. A WL is a specific amount of alpha energy (1.3×10^5 mega electron volts) associated with the decay of radon daughters in air. The energy associated with a concentration of 4 picocuries per liter of radon in air is equivalent to 0.02 WL. According to EPA, exposure to 4 picocuries per liter of radon over a lifetime would result in a risk level of about 7×10^{-4} (EPA 2016b).

As allowed in 40 CFR 192.21 and 40 CFR 192.22, at some locations on the properties comprising OU H, contamination was left in place. Supplemental standards were applied to those properties because remediation would:

- Directly produce excessive health and environmental harm compared to the health and environmental benefits *or*
- Have an unreasonably high cost relative to the long-term benefits for radioactive materials that did not pose a clear present or future hazard

Two Explanations of Significant Difference (ESDs) were issued for the MVP. The first, issued in April 1995, explained that the increase in the cost of the project was a result of an increase in the number of contaminated properties that would be remediated. The second was issued in February 1999 to clarify the application of supplemental standards to OU H.

4.2 Remedy Implementation

Because mill tailings from the Monticello mill site were used locally for construction of residential buildings, the cleanup activities for the MVP required excavation of contaminated materials and, in some cases, demolition of sidewalks, patios, sheds, and other improvements. To the extent feasible, all excavations, affected structures, and other improvements were reconstructed to their condition before the remedial action, using uncontaminated backfill and construction materials. All contaminated material was removed and transferred to the former Monticello mill site and temporarily stored apart from the mill tailings impoundment areas. With concurrence of EPA and UDEQ, the location of the interim storage area differed from what was specified in the MVP ROD. Approximately 152,000 cubic yards of contaminated material was removed from the vicinity properties during the remedial action.

The attainment of indoor air and outdoor soil cleanup standards or exposure levels was verified by radiologic monitoring at each property. Completion reports were prepared for each property to document the specific actions taken at the property and to certify compliant remediation. Remediation of the MVP site was completed in 1999. The Remedial Action Report for OU A, documenting construction complete status and attainment of cleanup goals, was signed into effect in January 1997. Remedial Action Reports for OU B through OU H were signed into effect in July 1999. Deletion of the MVP (OU A through OU H) from the NPL became effective February 28, 2000.

4.2.1 Operable Unit H

OU H consists of five properties where supplemental standards have been applied and rights-of-way that are not associated with designated property numbers. Based on risk calculations that assume a residential exposure scenario (Appendix C-1, “Development of Supplemental Standard Alternative Cleanup Levels for Piñon and Juniper Peripheral and Vicinity Properties” [DOE 1999b]), areas that exceeded 16 pCi/g ²²⁶Ra and one area defined by the landowner as a site where a residence would be built (“residential envelope”) were remediated to the cleanup standards specified by 40 CFR 192 (DOE 1999c). Remediation of areas with contamination less than or equal to 16 pCi/g ²²⁶Ra was not required. If other portions of the property are proposed as future building sites, institutional controls (ICs) will ensure that those areas are also cleaned up to meet the 40 CFR 192 surface standards before building commences.

The Utah Department of Transportation (UDOT) owns the remaining four properties. These properties (MS-00892, MS-00895, MS-01020, and MS-01021) are in the Highway 191 rights-of-way along the former DOE-owned mill site and peripheral properties (Figure 1).

In addition to the five noted individual properties, OU H also contains supplemental standards properties without designated property numbers including UDOT rights-of-way along Highways 191 and 491 and to streets and utilities in the City of Monticello rights-of-way (Figure 1).

ICs (see Section 4.4) were implemented as part of the OU H remedy to manage and control contamination as it is encountered during maintenance and construction activities. The ICs associated with OU H were implemented in concurrence with EPA and UDEQ under applications for supplemental standards, *Monticello Vicinity Properties, Application for Supplemental Standards, Highways 191 and 666 Rights-of-Way Within the City Limits of Monticello* (DOE 1999d), *Monticello Vicinity Properties, Application for Supplemental Standards for City of Monticello Streets and Utilities* (DOE 1999e), and *Application for Supplemental Standards for DOE ID No. MS-00176-VL* (DOE 1999b).

Compliance with the administrative controls over these supplemental standards properties is ensured through *Cooperative Agreement DE-FC13-99GJ79485 between the City of Monticello and the U.S. Department of Energy* (DOE 1999f), initiated in June 1999 and current through March 31, 2022, and *U.S. Department of Energy Memorandum of Understanding between U.S. DOE and the Utah Department of Transportation* (DOE 1999g), which does not expire.

4.3 Operation and Maintenance

Long-term surveillance and maintenance (LTS&M) activities encompass CERCLA operation and maintenance activities to ensure that MVP remedy remains protective of human health and the environment. LTS&M activities at the Monticello sites began October 1, 2001, under the DOE LTS&M Program. In December 2003, activities formerly conducted under the LTS&M Program were transferred to the newly established DOE LM. LTS&M activities are conducted according to requirements in LM's *Long-Term Surveillance and Maintenance Plan for the Monticello NPL Sites* (DOE 2007) (LTS&M Plan) to ensure that ICs remain relevant and effective in preventing exposure to contamination and that changing site conditions do not compromise remedy protectiveness.

The major LTS&M activities conducted during this five-year review period were:

- Responding to public and municipal inquiries.
- Routine surveillance of the supplemental standards properties.
- Providing radiological control³ for excavations or eroded areas at supplemental standards locations and managing any waste material from these properties to permanent disposal.
- Documenting, keeping records for, and reporting LTS&M activities.

³ Radiological control and management refers to DOE's established procedures for identifying and handling radioactive materials (DOE 2007).

The projected LTS&M budget for fiscal year 2017 (October 1, 2016, through September 30, 2017), including the MVP and MMTS, is approximately \$1.3 million. Similar annual funding is anticipated through calendar year 2022, when the next Five-Year Review will occur.

4.4 Institutional Controls

DOE administers ICs on MVP properties comprising OU H. Those properties are known as “City Streets and Utilities,” “UDOT Highways 191 and 491 Rights-of-Way,” and residential property MS-00176 (Figure 1). These ICs are described in the following subsections.

4.4.1 Radiological Control at City Streets and Utilities Supplemental Standards Areas

The supplemental standards properties known as “City Streets and Utilities” are managed under a cooperative agreement with the City of Monticello (DOE 1999f). Under that agreement, the LM contractor conducts radiological surveys of excavated materials, and any material containing more than $^{226}\text{Ra} \geq 5$ pCi/g above background is removed. Contaminated material is transferred to the temporary storage facility (TSF) located at the DOE repository south of the Monticello city limits (see Figure 1) by the LM contractor or qualified city workers using city equipment. The TSF contents are managed by LM through ultimate disposal at the LM Grand Junction, Colorado, Disposal Site.

4.4.2 Radiological Control at UDOT Highways 191 and 491 Supplemental Standards Areas

The properties known as “UDOT Highways 191 and 491 Rights-of-Way” are managed by monitoring for and containing or removing residual contamination encountered during UDOT excavations within Monticello city limits, or, in the event of excavation or significant erosion of the Highway 191 embankment at Montezuma Creek. Any radiologically contaminated material ($^{226}\text{Ra} \geq 5$ pCi/g above background levels) encountered in an excavation is removed and transferred to the TSF by the LM contractor or qualified city workers using city equipment. Alternatively, at the discretion of UDOT, through a memorandum of understanding (MOU) between DOE and UDOT, radiologically contaminated material may be returned to the UDOT excavation as fill. Soils that erode from the Highway 191 embankment at Montezuma Creek are monitored by the LM contractor following significant rainfall events. If any contaminated materials are observed, they are managed by containment or removal.

4.4.3 Radiological Control at Property MS-00176

As part of the supplemental standards application for MS-00176, DOE requested that the City of Monticello rezone the property as an IC. Accordingly, the city established Overlay Zone OL-1 through Zoning Ordinances 2002-4 and 2003-2, which states that the City of Monticello will not issue a building permit until the excavated foundation of any new permanent, habitable structure meets cleanup levels specified in 40 CFR Part 192.12 (as determined by a DOE representative). In addition to establishing Overlay Zone OL-1, the property deed was annotated to identify the supplemental standards used to remediate the property and the location of remaining radiological contamination. There have been no residential construction activities on this property since the last Five-Year Review.

5.0 Progress Since the Last Five-Year Review

There were no issues or recommendations identified in the previous Five-Year Review that warranted follow-up action. There are no new activities or programs pertinent to the MVP remedy that were implemented since the last Five-Year Review and require progress evaluation. Operation and maintenance activities (Section 4.2) continue to be performed.

6.0 Five-Year Review Process

The Five-Year Review process includes administrative planning (e.g., identifying the review team, developing a schedule), community notification, document and data review, a site inspection, and interviews. Administrative planning activities were completed by September 2016. The following subsections contain findings from the remaining activities.

6.1 Community Notification

The announcement concerning the CERCLA Five-Year Review was published the week of October 10, 2016, in the *San Juan Record*. The *San Juan Record* is the local weekly newspaper. The announcement described the CERCLA Five-Year Review process and objectives, and informed the public how to contact DOE and onsite LM contractor representatives for additional information or to provide comments. Copies of the announcements are provided in Attachment 2.

DOE received no public comment regarding the MVP remedy other than that solicited in interviews with stakeholders (see Section 6.4). In June or July 2017, DOE will place the final outcome of the Five-Year Review, as determined in Sections 7.0 through 10.0 of this report, in the *San Juan Record*, along with DOE contact information and the locations where copies of the final reports can be viewed.

6.2 Document and Data Review

Project documents and data were reviewed to form the basis of the technical assessment of remedy protectiveness, which compares actual site conditions to the protectiveness requirements set forth in the decision, design, and implementation phases of the project.

In addition to documents cited in Section 12, documents and data examined in this Five-Year Review were:

- Annotated deeds for the supplemental standards properties.
- Field books and associated drawings in which Monticello onsite LM contractor representatives record/document MVP LTS&M activities. These are listed in the annual inspection report checklist (Attachment 1).
- MMTS/MVP annual inspection reports since 2012.

- City of Monticello Ordinances 2002-4 and 2003-2 creating Overlay Zone OL-1.
- Monticello Site Management Plan (updated annually to address MVP and MMTS project status; primary input is Federal Facility Agreement [FFA] quarterly reports that document current activities and findings of routine LTS&M activities).

6.3 Site Inspection

Under the site’s LTS&M Plan, comprehensive site inspections of the MVP are conducted annually. The 2016 annual site inspection was conducted on September 12 and 13, 2016, by LM and LM contractor personnel. In 2006, DOE, EPA, and UDEQ agreed that the annual site inspection in the year preceding the Five-Year Review would also serve for the CERCLA Five-Year Review. Relevant MVP site inspection observations are summarized in Table 3. No conditions were observed that represent a compromise of remedy protectiveness. Results and details of the inspection are reported in the 2016 annual inspection report (DOE 2016). Attachment 1 contains excerpts from the inspection report.

Table 3. 2016 MVP Annual Inspection Observations

Observation
LTS&M radiological safeguards for City of Monticello and UDOT excavations in Monticello are effective. No unmonitored excavations, planned or unplanned, were observed or reported by onsite LM Contractor employees.
LTS&M radiological safeguards for MS-00176 are effective. No deficiencies were noted. No erosion or construction in affected areas was evident.
Eroded areas of supplemental standards areas of Highway 191 embankment at Montezuma Creek were screened in the field and no above-background levels were measured.
Onsite recordkeeping and documentation of LTS&M activities is adequate.
Communications between onsite LM contractor employees and City of Monticello and UDOT officials are adequate and effective.

6.4 Interviews

As part of the MVP Five-Year Review, the LM contractor public affairs specialist interviewed private property owners, a UDOT supervisor, City of Monticello’s current manager and a former mayor, and a transportation board member to gather information about the site’s effect on the community. For the purpose of this document, stakeholders are defined as “a person or group with a direct interest, involvement, or investment” in MVP and/or MMTS.

The interviews, which also included information related to the MMTS, were conducted in the city of Monticello, Utah, and by telephone, in September 2016.

Interviewees and their relationship to the Monticello sites are listed below:

- A former mayor, City of Monticello
- The city manager, City of Monticello
- A Monticello City Council member and representative of the Victims of Mill Tailings Exposure (VMTE) committee
- Two owners of peripheral property

- One former owner of peripheral property
- One highway maintenance supervisor
- A board member of the Transportation Special Service District

Interviews were conducted to evaluate public and municipal perception of the effectiveness of the remedy implemented for MVP in protecting human health and the environment. Interview questions were designed to determine if the roles and responsibilities for maintaining the ICs were clearly defined, and whether the onsite LM contractor representatives provided sufficient response and support in maintaining the ICs.

Specific interview questions and responses are provided in Attachment 3 of this report. Interview responses are summarized as follows:

- The public and municipal perception generally is that the remedial actions and subsequent safeguards are adequate to protect human health. Several residents expressed the opposite view.
- Representatives of the City of Monticello and UDOT expressed no concern about their ability to comply with ICs that restrict land use and groundwater use.
- Because none of the properties owned by interviewees were associated with ICs, the interviewees could not comment knowledgeably on ICs.
- Onsite LM contractor representatives are effective at communicating with private, municipal, and UDOT interests; maintaining radiological control at supplemental standards properties; coordinating activities involving private property; and responding to information requests by citizens and private interests.
- There was a perception that there has been insufficient communication between DOE and the community about past and present site activities. Some criticisms about post-remediation activities that were directed to the DOE are, in fact, City responsibilities. DOE provides adequate information about past and present site activities to the public through such means as the LM website, the publically available Information Repository, the LM public relations program, and LM contractor representatives present at the site. Interviewees were aware of how to contact DOE if they had questions.
- Several criticisms—to the effect that remedial actions were insufficient—may be due to a misunderstanding of the implementation process, including the opportunities for community involvement. DOE provides information to the public about the CERCLA implementation process, the scope of investigations and remedial actions, and community involvement through such means as the LM website, the publically available Information Repository, the LM public relations program, and LM contractor representatives present at the site.

7.0 Technical Assessment

EPA guidance on conducting CERCLA Five-Year Reviews recommends that a technical assessment of remedy protectiveness be based on the answers to the three specific questions posed in Sections 7.1, 7.2, and 7.3.

7.1 Question A: Is the remedy functioning as intended by the decision documents?

The MVP remedy is functioning as intended by the decision documents, and there have been no breaches in the remedy that would compromise protecting human health and the environment. The remedy for all OUs was implemented and completed in accordance with the following decision documents: *Monticello Vicinity Properties Project, Declaration for the Record of Decision and Record of Decision Summary* (DOE 1989); *Application for Supplemental Standards for Highway 191 Rights-of-Way Within the City of Monticello* (DOE 1999c); *Application for Supplemental Standards for City of Monticello Streets and Utilities*, (DOE 1999d); and *Application for Supplemental Standards for DOE ID No. MS-00176-VL* (DOE 1999b).

The MVP remedy included removal of all radiological contamination to meet the appropriate cleanup standards at the affected properties that constitute OU A through OU G. Contaminated material was placed for interim storage at the former mill site and for final placement in the permanent repository. Affected properties were restored to previous conditions following removal actions. The properties constituting OU A through OU G are shown on Plate 1 at the end of this report.

As allowed in 40 CFR 192.21 and 192.22, supplemental standards were approved for certain properties (those comprising OU H), allowing some of the low-level radioactively contaminated soil to remain in place. Most of this material is thought to reside in utility corridors beneath the streets and highways in Monticello and in the embankment where Highway 191 crosses Montezuma Creek and, therefore, is isolated from potential exposure to humans or dispersal to the environment. Contamination left in place at the remaining supplemental standards property (private property MS-00176) is surficial windblown material interspersed among mature piñon and juniper trees. The MVP OU H supplemental standards properties are shown on Figure 1.

ICs have been applied that direct radiological control measures on the supplemental standards properties to minimize future exposure to and dispersal of the contamination. The final component of the MVP remedy was implemented with the enactment of Zoning Ordinances 2002-4 and 2003-2 in 2002 and 2003, which created Overlay Zone OL-1, to complete the remedy for supplemental standards property MS-00176. Overlay Zone OL-1 controls land use on MS-00176 by preventing issuance of a building permit for any new permanent, habitable structure until the foundation footprint for the building meets cleanup levels specified in 40 CFR Part 192.12.

EPA and UDEQ certified the successful implementation of the MVP remedy through approval of Remedial Action Reports (see Table 1). Remedial Action Reports are retained in the site's information repository, which is maintained in hard copy at LM's Monticello Field Office. Remedial Action Reports are also available electronically through LM Records Management Support.

Routine LTS&M activities ensure compliance with the ICs and ensure that any radiologically contaminated material from the supplemental standards properties, if encountered during construction activities or through severe erosion, is properly identified and managed by LM. LTS&M activities associated with the MVP are directed under the LTS&M Plan (DOE 2007), as agreed to by DOE, EPA, and UDEQ. EPA and UDEQ are apprised of MVP conditions in FFA quarterly reports and in annual site inspection reports. These reports are available online at <https://www.lm.doe.gov/Monticello/Sites.aspx>.

7.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of remedy selection still valid?

The exposure assumptions and remedial action objectives used at the time of the remedy remain valid. As discussed below, some toxicity data and recommended cleanup levels have changed, but these are unlikely to affect protectiveness of the remedy as implemented.

The primary purpose of the remedial action for the MVP, as specified in the ROD, was to limit exposure to radioactive material to levels protective of human health and the environment. These levels are specified as the standards for radium, radon and radon daughters, and gamma exposure rates in 40 CFR 192. These cleanup levels have not changed since the ROD was signed. The 40 CFR 192 standards were met for OU A through OU F. Because these standards remain valid, those OUs are still suitable for UU/UE. The numerical soil standards in 40 CFR 192 could not be met for OU H without producing excessive environmental harm compared to the health benefits or without having an unreasonably high cost relative to the long-term benefits for radioactive materials that did not pose a clear present or future hazard. Therefore, supplemental standards were applied as permitted by 40 CFR 192.21 and 40 CFR 192.22.

Exposure and land-use scenario assumptions for property MS-00176 have not changed. An alternative cleanup level of 16 pCi/g ^{226}Ra was established for the property assuming future residential use. The 16 pCi/g residential cleanup level was a conservative value based on achieving a total effective dose equivalent (TEDE) of 30 millirem per year (mrem/yr), which was a site-specific goal agreed upon by EPA and DOE. That cleanup level equates to approximately 6×10^{-4} (EPA 1997).

Since the establishment of the alternative cleanup standard, EPA has revised their guidance for establishing cleanup goals for sites with radioactive contamination (EPA 2014). EPA's current Superfund recommendation for a protective dose-based applicable or relevant and appropriate requirement (ARAR) is 12 mrem/yr and is based on achieving a risk level of 3×10^{-4} (EPA 2014).

ICs established for property MS-00176 require that the footprint of any future building must be cleaned up to meet 40 CFR 192 standards. This reduces the estimated TEDE of using the alternative standard to 12 mrem/yr (DOE 1999b), consistent with EPA's current recommendation. Although EPA's acceptable dose level has lowered, this revised lower level is met by implementing existing ICs in combination with the alternative standard. Therefore protectiveness of the property is not affected as long as the ICs remain in place.

Exposure assumptions regarding residual contamination beneath city-street and utility corridors and in the Highway 191 embankment over Montezuma Creek remain valid. This contamination is effectively isolated from an exposure pathway. When exposed during construction activities or by heavy erosion events, the contamination is managed by monitoring, and removal or reburial, as specified in an approved maintenance plan (DOE 2007).

The remedial action objective to eliminate the potential for exposure by the local population to elevated levels of radon gas and gamma radiation has been accomplished through source removal and implementation of ICs.

7.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No.

8.0 Issues, Recommendations, and Follow-up Actions

This review did not identify any issue or site condition that would potentially compromise the protectiveness of the MVP remedy. No recommendations or follow-up actions are identified for the MVP remedy. To maintain continuity in the remedy, the following actions apply:

- The Cooperative Agreement between DOE and the City of Monticello has been extended to March 31, 2022.
- The LTS&M Plan will be updated to include revised procedures and new technologies.

9.0 Protectiveness Statement

The remedy at OU H is protective of human health and the environment. Contaminated soil was removed or contained, ICs are in place to prevent additional exposure where contaminated soils remain, and management plans are in place which contain or remove remaining contamination which may become exposed. Routine surveillance and monitoring is conducted to ensure that the ICs remain effective.

Because the remedial actions at OU H of the MVP are protective, and other OUs at this site are suitable for UU/UE, the site is protective of human health and the environment.

9.1 Comprehensive Protectiveness Statement for MVP

The remedy for all OUs of the MVP is protective of human health and the environment. There are no issues that would compromise the protectiveness of the remedy.

10.0 Next Review

The next Five-Year Review for the MVP will be completed by June 30, 2022.

11.0 References

DOE (U.S. Department of Energy), 1982–1987. *Monticello Remedial Action Project, Monticello Vicinity Properties Equivalency of Documentation*, prepared by UNC Geotech for the U.S. Department of Energy, Grand Junction Projects Office under contract No. DE-AC07-861D12584.

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DOE (U.S. Department of Energy), 1999c. *Remedial Action Report of Monticello, Utah, Vicinity Properties National Priorities List Site Operable Unit H*, June.

DOE (U.S. Department of Energy), 1999d. *Monticello Vicinity Properties, Application for Supplemental Standards, Highways 191 and 666 Rights-of-Way Within the City Limits of Monticello*, GJO-96-8-TAR, May.

DOE (U.S. Department of Energy), 1999e. *Monticello Vicinity Properties, Application for Supplemental Standards for City of Monticello Streets and Utilities*, GJO-98-68-TAR, May.

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EPA (U.S. Environmental Protection Agency), 2001. *Comprehensive Five-Year Review Guidance*, EPA 540-R-01-007, OSWER No. 9355.7-03B-P, Office of Emergency and Remedial Response, June.

EPA (U.S. Environmental Protection Agency), 2011a. *Recommended Evaluation of Institutional Controls: Supplement to the Comprehensive Five-Year Review Guidance*, OSWER Directive 9355.7-18, Office of Solid Waste and Emergency and Remedial Response, September 13.

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EPA (U.S. Environmental Protection Agency), 2014. *Distribution of the "Radiation Risk Assessment at CERCLA Sites: Q&A"*, OSWER Directive 9285.6-20, June 13.

EPA (U.S. Environmental Protection Agency), 2016a. *Five-Year Review Recommended Template*, OLEM 9200.0-89, Office of Solid Waste and Emergency Response, January 20.

EPA (U.S. Environmental Protection Agency), 2016b. *A Citizen's Guide to Radon*, EPA402/K-12/002.

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Attachment 1

**Executive Summary, Inspection Checklist, and Excerpted Figures
from the *2016 Annual Inspection Report for the DOE Monticello,
Utah, Mill Tailings Site and Monticello Vicinity Properties***

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Executive Summary

The annual inspection of the U.S. Department of Energy (DOE) Monticello Mill Tailings Site (MMTS) and Monticello Vicinity Properties (MVP) was conducted on September 12 and 13, 2016. These sites, which are part of the Monticello, Utah, Disposal and Processing Sites, are inspected annually to ensure that the selected remedies remain protective of human health and the environment. Under those remedies, uranium mill tailings–related contamination remains in place at some locations where use is restricted and exposure is limited. Annual inspections (1) verify that long-term surveillance and maintenance (LTS&M) activities implemented throughout the year are effective and appropriate, (2) confirm that the institutional controls (ICs) restricting land and groundwater use under the MMTS and MVP remedies remain effective, and (3) identify deficiencies and maintenance items, and recommend corrective actions as needed. This report summarizes the results of the 2016 annual inspection. In accordance with the *Long-Term Surveillance and Maintenance Plan for the Monticello NPL Sites* (DOE–LM/1465–2007), also known as the LTS&M Plan, the results will also be used to prepare the 2017 Comprehensive Environmental Response, Compensation, and Liability Act Five-Year Reviews.

Repository Findings

The repository site consists of the access area (support buildings and the Temporary Storage Facility [TSF]), the repository perimeter, runoff/run-on controls, Pond 4, the repository cover, and cover penetrations (manholes, settlement monuments, and structures associated with the embedded lysimeter). The site is well-maintained and well-managed. New signs displaying updated information were on order. The TSF bin did not contain any material. Site fences were intact and functional with no evidence of vandalism. The repository cover did not show any settling, slumping, fracturing, seepage, ponding, or significant erosion. Site vegetation is healthy and composed primarily of desirable species. Evidence of some movement of surface rock, identified in 2015, is still visible on the repository side slopes but does not indicate slope failure or subsurface movement of materials. Sediment and materials movement and vegetation were apparent in some of the drain ditches and toe trenches but do not impair their function. Perimeter signs, though legible, were faded and will be replaced in 2017. There was approximately 8 feet of water in Pond 4, mostly from the operation of the groundwater remedy optimization system.

City-Owned Property Findings

There was no evidence of the violation of any ICs on properties owned by the City of Monticello (City). Signs on the properties posting ICs (such as a prohibition against overnight camping) were peeling and difficult to read. Wetlands were ecologically healthy and undamaged. No groundwater drilling applications were sought for the City-owned properties, and no drilling activities within the restricted area were noted or reported by onsite personnel. Fire pits and day campsites discovered during previous annual inspections showed no evidence of additional use. Mountain bike trails were in good condition, and they appeared to be regularly used by the public.

City Streets and Utility Corridor Findings

No unplanned or unmonitored excavations related to city streets and utility corridors were identified during the 2016 annual inspection. No new erosion of highway shoulders or along the Highway 191 embankment at Montezuma Creek was apparent. All planned excavations had been properly monitored by onsite personnel.

Private Property Findings

No changes in land use on restricted properties were apparent. No well-drilling permit applications were received by the Utah Division of Water Rights within the Montezuma Creek Restrictive Easement Area or the Groundwater Restricted Area. Onsite personnel also verified during routine surveillance that no wells were drilled in the alluvial aquifer for domestic use within the Groundwater Restricted Area. No significant land-use changes in these areas were apparent.

Records Findings

Deed restrictions were verified at the San Juan County Recorder's Office, including those associated with the sale of properties. The Information Repository (updated in April 2014) and the Operable Unit III Administrative Record (updated in October 2012) were present and accessible. The site record books were correct and complete with only minor deficiencies.

Operable Unit III Findings

Facilities related to the groundwater remedy optimization system, including the pipeline access road, transfer building, and extraction well field were intact and functioning. The Permeable Reactive Barrier is a subsurface installation that cannot be inspected visually. The ex situ treatment system was inactive, but surface features were intact and in good condition. No evidence of standing water, saturated soil, surface disturbance, or stressed vegetation was observed in the area of the groundwater wells. Water sampling teams noted no deficiencies during routine well inspections in October 2015 and April 2016. Several inactive wells on property MP-00179 were found to be missing surface components.

Conclusions and Recommendations

The 2016 annual inspection confirmed that DOE LTS&M activities implemented throughout the year remain effective and appropriate, and ICs restricting land and groundwater use as part of the MMTS and MVP remedies remain effective. No corrective actions or maintenance actions are necessary. Minor maintenance of inactive wells on property MP-00179 is recommended to prevent damage from livestock. The Information Repository also requires an update.

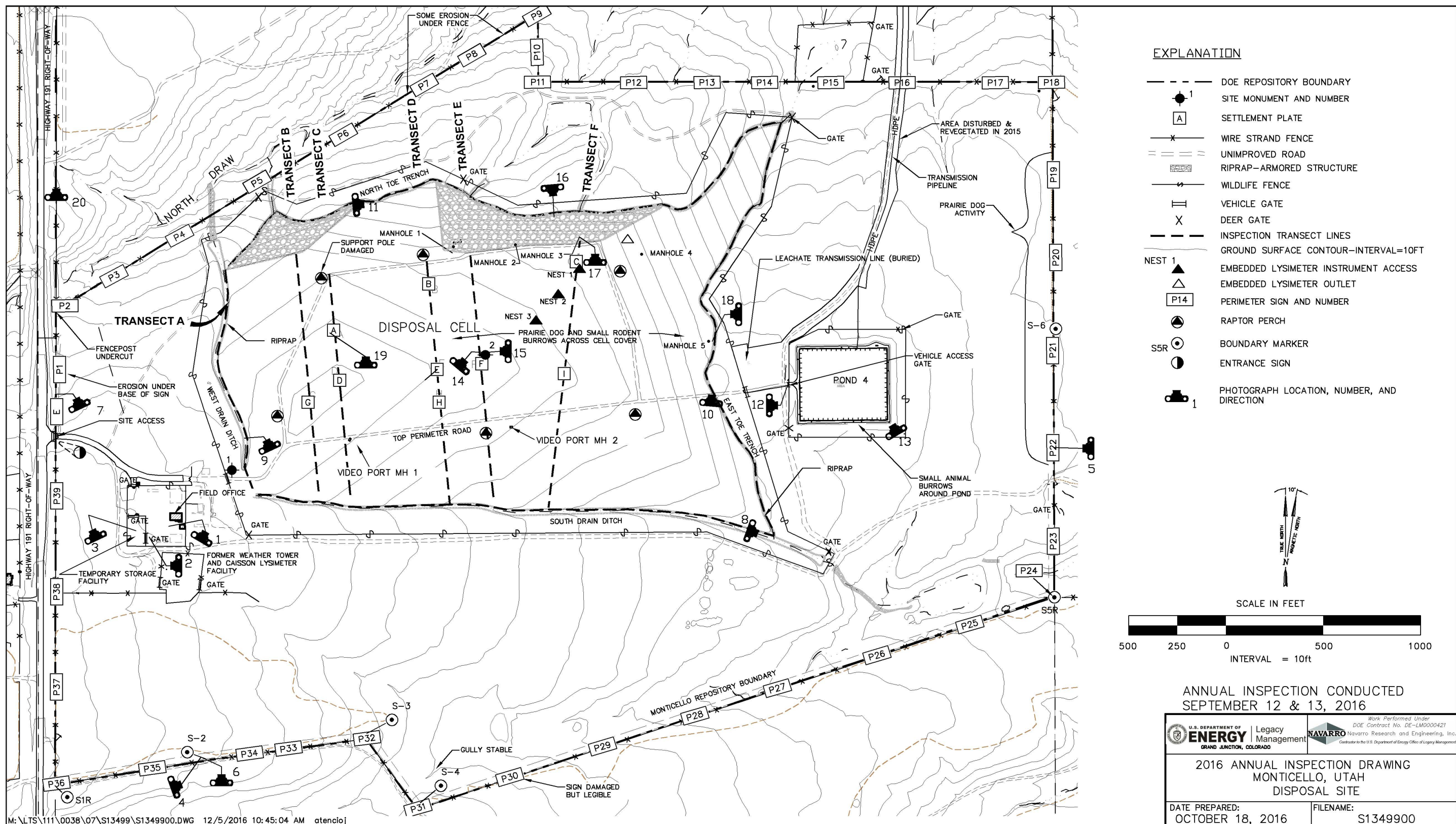


Figure 2. Monticello, Utah, Repository Site

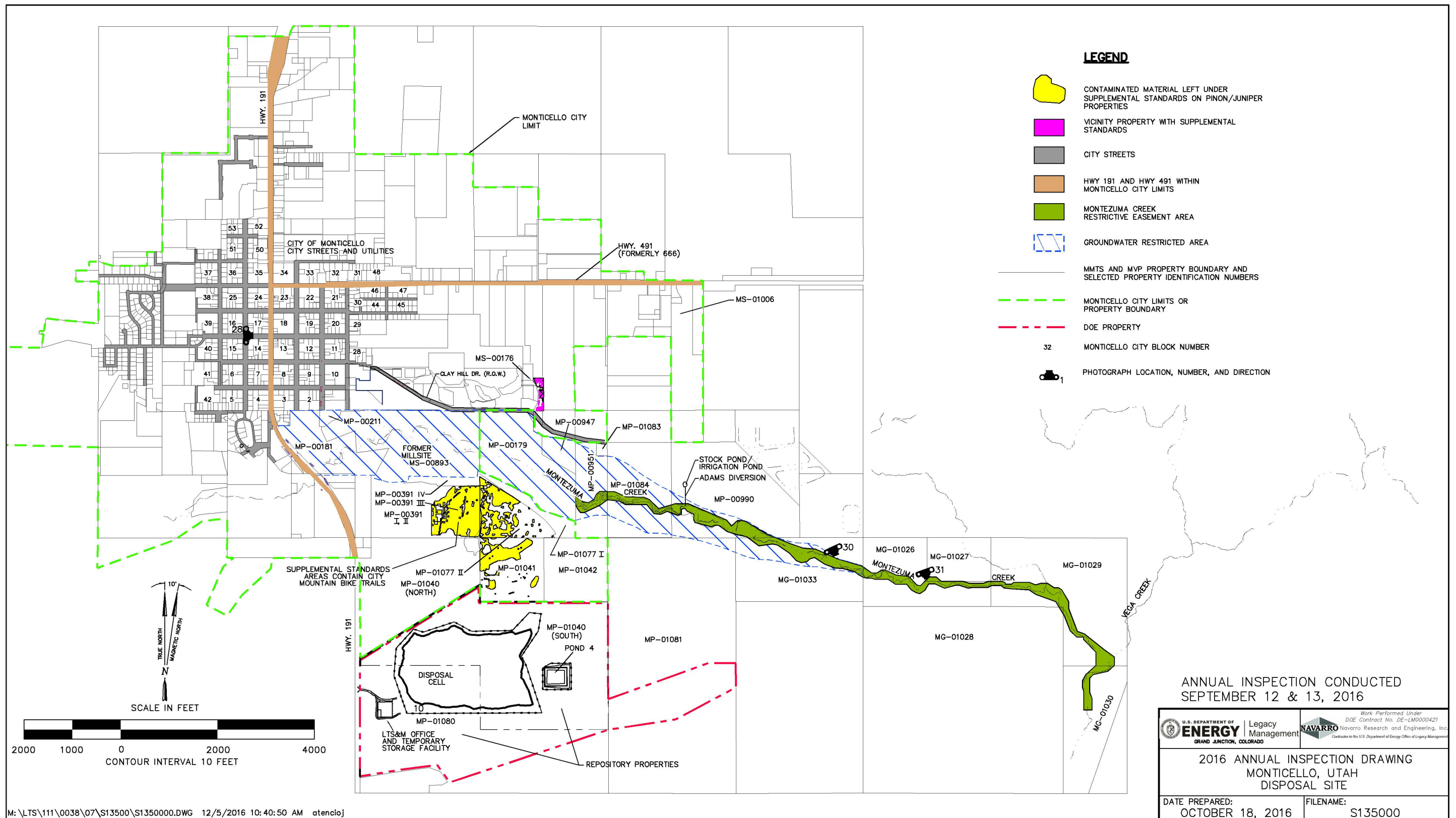


Figure 3. MMTS and MVP Supplemental Standards and Groundwater Restricted Areas

MMTS: Monticello Mill Tailings (USDOE) Site; Operable Units I, II, and III (UT 3890090035)
MVP: Monticello Radioactively Contaminated Properties (Monticello Vicinity Properties) (UTD 980667208)
 Location: Monticello, Utah: EPA Region 8

Note: Section 6.1 of the Long-Term Surveillance and Maintenance Plan contains detailed inspection procedures. See attached maps for the location of site inspection features identified in this checklist.

Annual Inspection Preparation:

The following tasks were completed in preparation for the current MMTS and MVP annual inspection:

	Y	N
Review annual inspection requirements outlined in Section 6.1 of the LTS&M Plan	X	<input type="checkbox"/>
Schedule site inspection and appoint chief inspector	X	<input type="checkbox"/>
Review previous reports and records as outlined in Section 6.1.2 of LTS&M Plan	X	<input type="checkbox"/>
Notes:		
Review OU III water quality data for contaminant trends and distribution	<input type="checkbox"/>	X
<i>(This is reviewed by the groundwater team independent of the annual inspection)</i>		
Provide team members with background information, maps, and inspection checklists	X	<input type="checkbox"/>
Notify EPA and UDEQ at least 2 weeks prior to site visit and invite them to participate	X	<input type="checkbox"/>
Notify representatives from other agencies as necessary and invite them to participate	X	<input type="checkbox"/>
Verify names and telephone numbers of parties with access or notification agreements	X	<input type="checkbox"/>
Verify key contact information listed in Section 6.1.2 of the LTS&M Plan	X	<input type="checkbox"/>
Contact State Engineer's Office for water well permit applications in/near GWMA	X	<input type="checkbox"/>
Verify annual contact with UDOT re: planned highway projects for current year	X	<input type="checkbox"/>
Verify regular contact with City of Monticello re: planned or unplanned excavations	X	<input type="checkbox"/>

Date(s) of Annual Inspection: 9/12/16 - 9/13/16

Inspection Team Members

Name	Affiliation	Phone Number	E-mail
Linda Sheader	Navarro Research and Engineering, Inc. (ecologist and curator of site records)	(970) 248-6711	Linda.Sheader@lm.doe.gov
Paul Wetherstein	Navarro Research and Engineering, Inc. (Environmental Compliance)	(970) 248-6645	Paul.Wetherstein@lm.doe.gov
Danika Marshall	Navarro Research and Engineering, Inc. (ecologist)	(970) 248-6137	Danika.Marshall@lm.doe.gov
Jason Nguyen	U.S. Department of Energy (site manager)	(970) 248-6707	Jason.Nguyen@lm.doe.gov
Fred Smith	Navarro Research and Engineering, Inc. (site manager)	(970) 248-6182	Fred.Smith@lm.doe.gov
David Dille	Navarro Research and Engineering, Inc. (site operations manager)	(435) 587-2902	David.Dille@lm.doe.gov

Notes: Attach additional sheets as needed for any of the following sections.

I. Interviews		
Name of Individual Interviewed	Affiliation	Date Interviewed
D. Dille	Onsite LM Representative	September 12, 2016
Notes: <i>The onsite LM representative accompanied inspectors on portions of the inspection. Notes are included in individual checklist sections, below.</i>		
Name of Individual Interviewed	Affiliation	Date Interviewed
	City of Monticello	
Notes: <i>Individuals from the City of Monticello were not interviewed during the 2016 inspection. Interviews related to the CERCLA Five-Year Review were conducted separately from the annual inspection.</i>		
Name of Individual Interviewed	Affiliation	Date Interviewed
Marc Stilson	State Engineer	September 20, 2016
Notes: <i>Mr. Stilson, Southeast Regional Engineer with the Utah State Engineer's office (i.e., Utah Division of Water Rights), confirmed via e-mail to P. Wetherstein that in 2016:</i> <ul style="list-style-type: none"> • <i>There were no requests or approvals to drill into or through the shallow alluvial aquifer in DOE's Groundwater Restricted Area (GWRA).</i> • <i>There were no new applications or approvals, or change applications or approvals, to appropriate water for domestic purposes from or near the shallow alluvial aquifer in DOE's GWRA.</i> <i>Limitations on water appropriation and drilling activities in DOE's GWRA were established at DOE's request in the UDWR Ground-Water Management Policy for the Monticello Mill Tailings Site and Adjacent Areas, May 1999.</i>		
Name of Individual Interviewed	Affiliation	Date Interviewed
Notes: <i>No additional individuals were interviewed during the 2016 inspection.</i>		

II. Administrative and Records Inspection

	Readily Available		Current	
	Y	N	Y	N
1. General LTS&M Documents				
Ready access from field office to online manuals (Long-Term Surveillance and Maintenance Plan, Health and Safety Manual, QA Manual)	X	<input type="checkbox"/>	X	<input type="checkbox"/>
2. LTS&M Training Records (<i>ID names in TSF log; verify with Training dept.</i>)				
Onsite employees (<i>verified via past-due training list online</i>)			X	<input type="checkbox"/>
City workers (<i>unescorted workers must have current training</i>)		N/A 2016	<input type="checkbox"/>	<input type="checkbox"/>
3. Public Records (<i>verify records are present and in order</i>)				
OU III Administrative Record no update necessary	X	<input type="checkbox"/>	X	<input type="checkbox"/>
Information Repository (Monticello) updated 2/2014	X	<input type="checkbox"/>	<input type="checkbox"/>	X
Information Repository (Grand Junction) n/a - extra GJ copy decommissioned in 2012				
4. Record Books (<i>Note: Inspection guidelines are listed inside covers of record books; LTS&M Plan Appendix B contains record book management and entry protocol.</i>)				
Record book entries/documentation	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Repository Site Record Book	X	<input type="checkbox"/>	X	<input type="checkbox"/>
TSF Record Book (<i>see LTS&M Plan Section 3.4</i>)	X	<input type="checkbox"/>	X	<input type="checkbox"/>
City-owned properties (<i>see LTS&M Plan Section 4.4</i>)	X	<input type="checkbox"/>	X	<input type="checkbox"/>
Private Property Restricted Areas (<i>see LTS&M Sec. 4.4</i>)	X	<input type="checkbox"/>	X	<input type="checkbox"/>
Public Roads and Utilities Record Book	X	<input type="checkbox"/>	X	<input type="checkbox"/>
Documentation/recordkeeping requirements met	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Information readily traced to updated drawings	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Rad scan info for eroded/excavated material	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Entries include TSF transfers	<input type="checkbox"/>	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Entries include info on stockpiled material and follow-up scan results	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Hwy 191/491 entries include information on scan				
Results and material returned to excavation	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Storm event surveys documented	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Notes for Record Books Inspection:				
General LTS&M documents are available online.				
The Information Repository update has not been completed since 2014, as the current paper-based system is almost never used by the public. Discussions are planned to transfer the record to an electronic, online system.				
No transfer of radioactive material into TSF in FY 2016. Material removed and transported to Grand Junction Disposal Site in April 2016.				
5. Radiological As-Built Drawings				
Drawing updated annually	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Documentation/recordkeeping requirements met	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
Radiological scan information recorded	X	<i>satisfactory</i>	<input type="checkbox"/>	<i>unsatisfactory</i>
6. Surveillance Checklists and Records				
		Readily Available		Current
<i>(Note: Repository and Pond 4 LCRS and LDS monitoring records are sent electronically on a regular basis.)</i>				
TSF Access/Security Logs	X	<input type="checkbox"/>	X	<input type="checkbox"/>
Meteorological Monitoring Data, Monthly and Quarterly Repository Surveillance Checklists, and Monthly Pond 4 Surveillance Checklists	X	<input type="checkbox"/>	X	<input type="checkbox"/>
Notes for checklist and records inspection:				
Monitoring data are managed electronically.				
Minor deficiencies found in Public Roads and Utilities record book or on drawings. Corrections were made in record book and/or on drawings by September 14, 2016.				
7. Agreements (<i>Note: verify inclusion in Information Repository.</i>)				
DOE/City Cooperative Agreement (<i>in file IR074; agreement expires on 12/31/16</i>)	X		X	<input type="checkbox"/>
DOE/UDOT Memorandum of Understanding (<i>in file IR021; does not expire</i>)	X		X	<input type="checkbox"/>
8. Zoning Restriction—Overlay Zone OL-1 (<i>in file IR044; do not expire</i>)				
Restriction is verified as current through City for property MP-00211-VL			X	<input type="checkbox"/>
Restriction is verified as current through City for property MP-00176-VL			X	<input type="checkbox"/>

9. Deed Restrictions (verify at San Juan County Recorder's Office, 117 S. Main)

Properties Transferred from DOE to City of Monticello

IC Annotations in Place

DOE ID	Parcel	Document	Book	Page	Y	N
Electronic Record	A34240063004	applies to properties listed in notes			X	<input type="checkbox"/>
MP-00181-OT	A33230367201	E061691	B788	100-113	X	<input type="checkbox"/>
	33S23E367204					
MP-00391-VL	33S24E316001	E061691	B788	100-113	X	<input type="checkbox"/>
MS-00893-OT	33S24E315400	E061691	B788	100-113	X	<input type="checkbox"/>
MP-01040-VL (N)	34S24E061200	E061691	B788	100-113	X	<input type="checkbox"/>
	34S24E061201			electronic record	X	<input type="checkbox"/>
MP-01041-VL	34S24E060600	E061691	B788	100-113	X	<input type="checkbox"/>
MP-01042-VL	34S24E060000	E061691	B788	100-113	X	<input type="checkbox"/>
MP-01077-VL	33S24E318400	E061691	B788	100-113	X	<input type="checkbox"/>

Note: Correction to quitclaim deed for properties transferred to City recorded as E062130, B789, P450-452 (applies to all of the above listed properties).

Properties Sold by DOE to Private Parties

DOE ID	Parcel	Document	Book	Page	Y	N
MP-01081-VL	34S24E053000	114283	933	105-111	X	<input type="checkbox"/>

Montezuma Creek Soil and Sediment Properties

DOE ID	Parcel	Document	Book	Page	Y	N
MP-00990-CS	33S24E324800	E063343	B793	831-852	X	<input type="checkbox"/>
	33S24E328400	E063343	B921	474-476	X	<input type="checkbox"/>
	33S24E324802	E063343		electronic record	X	<input type="checkbox"/>
	A33240324802	E063343		electronic record	X	<input type="checkbox"/>
	A33240324804	E063343		electronic record	X	<input type="checkbox"/>
MG-01033-VL	34S24E050000	E063343	B793	831-852	X	<input type="checkbox"/>
	34S24E050601	E063343		electronic record	X	<input type="checkbox"/>
MG-01026-VL	34S24E043000	E063343	B793	831-852	X	<input type="checkbox"/>
MG-01027-VL	34S24E042400	E063343	B793	831-852	X	<input type="checkbox"/>
MG-01030-VL	34S24E047200	E063255	B793	526-538	X	<input type="checkbox"/>
MG-01029-VL	34S24E040000	E063255	B793	390-404	X	<input type="checkbox"/>
	34S24E040001	E063255		electronic record	X	<input type="checkbox"/>
MP-00951-VL	33S24E317200	E063926	B796	188-202	X	<input type="checkbox"/>
	33S24E317204	E063926		electronic record	X	<input type="checkbox"/>
	33S24E317207	E063926		electronic record	X	<input type="checkbox"/>
	A33240317206	E063926		electronic record	X	<input type="checkbox"/>
MP-01084-VL	33S24E326000	E063926	B796	188-202	X	<input type="checkbox"/>

Note: Correction to warranty deed for MP-01026-VL recorded as E073394, B830, P611.

Utah Department of Transportation Properties

DOE ID	Parcel	Document	Book	Page	Y	N
MS-00895-OT	A33230367811	E068703	B814	533	X	<input type="checkbox"/>
	A33230367825			electronic record	X	<input type="checkbox"/>
MS-00892-OT	A33230367202	E068704	B814	534	X	<input type="checkbox"/>
MS-01021-OT	A33230367812	E068705	B814	535-536	X <i>book</i>	X <i>electronic</i>
MS-01020-OT	A33230369001	E068706	B814	537-538	X	<input type="checkbox"/>

Notes for deed restriction inspection:

A34240063004 applies to all transferred City properties: 181, 391, 893, 1040, 1041, 1042, and 1077.

There is an error in the records for property MP-00181: the annotation shows an access agreement for a well, but the well is not located on this property (it is located on MP-00179).

III. Repository Inspection

A. Access Area

- | | | |
|--|--|---|
| 1. Site Access Sign/Emergency Information | <input checked="" type="checkbox"/> Satisfactory | <input type="checkbox"/> Repairs/Maintenance Needed |
| 2. Field Office | <input checked="" type="checkbox"/> Satisfactory | <input type="checkbox"/> Repairs/Maintenance Needed |
| 3. Temporary Storage Facility | <input checked="" type="checkbox"/> Satisfactory | <input type="checkbox"/> Repairs/Maintenance Needed |
| Bin cover | <input checked="" type="checkbox"/> Functional | <input type="checkbox"/> Not Functional |
| Approximate volume of bin contents (cubic yards) | 0 . Material shipped in April 2016 | |
| Health and safety/rad postings | <input checked="" type="checkbox"/> Appropriate | <input type="checkbox"/> Inadequate |
| Drums and secondary containment | <input checked="" type="checkbox"/> Good condition | <input type="checkbox"/> Unavailable/not good condition |
| Vandalism/trespassing | <input checked="" type="checkbox"/> Not evident | <input type="checkbox"/> Evident (locate on map) |

Describe access area repairs/maintenance needed:

New signs for the front gate were on order at the time of the inspection.

B. Repository Perimeter *(Note locations of erosion, noxious weeds, vandalism, or excessive vegetation on map)*

- | | | |
|--|---|--|
| 1. Outer Fencing and Gates | <input checked="" type="checkbox"/> Satisfactory | <input type="checkbox"/> Repairs/Maintenance Needed |
| 2. Signs <i>(Note condition of 40 numbered reference signs and posts)</i> | | |
| Signs damaged but legible, requiring monitoring: <i>All perimeter signs are faded but legible and are scheduled to be replaced in 2017.</i> | | |
| Signs requiring replacement: <i>none</i> | | |
| 3. South Boundary Markers | <input checked="" type="checkbox"/> All six markers located | <input type="checkbox"/> Marker(s) _____ not located |
| 4. Erosion/Gullying | <input type="checkbox"/> Not evident | <input checked="" type="checkbox"/> Evident <i>(but stabilized)</i> |
| 5. Vegetation | <input checked="" type="checkbox"/> Not excessive | <input type="checkbox"/> Excessive growth |
| | <input type="checkbox"/> Noxious weeds absent | <input checked="" type="checkbox"/> Noxious weeds present |
| 6. Land use changes on adjoining property | <input checked="" type="checkbox"/> No change | <input type="checkbox"/> Change |
| 7. Vandalism/trespassing | <input checked="" type="checkbox"/> Not evident | <input type="checkbox"/> Evident |

Notes for condition of repository perimeter (e.g., repairs needed, erosion areas, vandalism):

Roads accessing the pipeline and transfer building were recently graded. Infestations of noxious weeds were mapped (and subsequently treated with herbicide on September 15, 2016).

C. Repository Runoff/Run-On Controls *(North and East Toe Drains; South and West Drain Ditches)*

- | | | | |
|--------------------------------|---|---|---|
| 1. Settlement | <input type="checkbox"/> Not evident | <input checked="" type="checkbox"/> Evident | <i>Not significant</i> |
| 2. Material Degradation | <input type="checkbox"/> Not evident | <input checked="" type="checkbox"/> Evident | <i>Not excessive; no change since 2015</i> |
| 3. Erosion/gullies | <input checked="" type="checkbox"/> Not evident | <input type="checkbox"/> Evident | |
| 4. Siltation | <input type="checkbox"/> Not evident | <input checked="" type="checkbox"/> Evident | <i>Not affecting integrity of cell</i> |
| 5. Obstructions | <input checked="" type="checkbox"/> Not evident | <input type="checkbox"/> Evident | |
| 6. Excessive Vegetation | <input checked="" type="checkbox"/> Not evident | <input type="checkbox"/> Evident | |

Notes for condition of repository runoff and run-on controls *(Note: locate all areas of concern on map)*:

Rock above the North Toe Trench shows evidence of some movement and settlement, but trench function is not impaired. Continued monitoring is recommended.

D. Pond 4 *(Note: Locate all areas of concern on map.)*

- | | | |
|--|---|---|
| 1. Perimeter Fence and Access Gate | <input checked="" type="checkbox"/> Satisfactory | <input type="checkbox"/> Unsatisfactory |
| 2. Erosion/Biointrusion of Pond Berm | <input type="checkbox"/> Not evident | <input checked="" type="checkbox"/> Evident <i>small animals only</i> |
| 3. Safety Equipment | Pond barrier rope intact | |
| | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Personal floatation device (PFD) posting present and visible | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| PFD storage containers appropriately marked and in good condition | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| PFDs accessible, in good condition, and appropriately sized | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 4. Pond 4 LCRS and LDS Electrical Housing/Surface Installations | | |
| Physical condition is: | <input checked="" type="checkbox"/> Satisfactory | <input type="checkbox"/> Unsatisfactory |
| 5. Liner—Holes/Cracks/Tears | <input checked="" type="checkbox"/> Not Evident | <input type="checkbox"/> Evident |
| 6. Liner Anchors | <i>No longer needed in pond; removed in 2014</i> | |
| 7. Siltation and Vegetation in Pond 4 | <input type="checkbox"/> Not evident | <input checked="" type="checkbox"/> Evident <i>patches of emergent reeds</i> |
| 8. Pond 4 Water Level | Estimated water depth is <u>8</u> ft. | |
| 9. Vandalism | <input checked="" type="checkbox"/> Not evident | <input type="checkbox"/> Evident |

Notes for condition of Pond 4 features:

Electrical components were being upgraded at the time of the annual inspection.

E. Repository Cover Inspection

- 1. **Top Perimeter Road and Road to Pond 4** Satisfactory Unsatisfactory
- 2. **Interior Wildlife Fence and Wildlife Gates**
Physical condition is: Satisfactory Unsatisfactory
Wildlife gates are: Open Closed
- 3. **Cover Vegetation**
See attached Repository Cover Vegetation Index form; note areas of concern on map
- 4. **Riprap Armoring**
 Slumping/sliding not evident Slumping/sliding evident (locate on map)
 Rock deterioration not evident Rock deterioration evident (locate on map)
- 5. **Settlement/Desiccation/Erosion/Gullies**
 Settlement depressions not evident Settlement depressions evident (locate on map)
 Desiccation cracking not evident Desiccation cracking evident (locate on map)
 Erosion/gullies not evident Erosion/gullies evident (locate on map)
- 6. **Holes/Burrows/Biointrusion**
 Holes/burrows/biointrusion not evident Holes/burrows/biointrusion evident (locate on map)
- 7. **Seepage/Ponding**
 Seepage not evident Seepage evident (locate on map)
 Ponding not evident Ponding evident (locate on map)
 Soft subgrade not evident Soft subgrade evident (locate on map)
 Phreatophytes not present Phreatophytes present (locate on map)
- 8. **Site Monument at apex of cover** Satisfactory Repairs/maintenance needed
Site Monument at boundary gate Satisfactory Repairs/maintenance needed

Notes for repository cover inspection:

Some movement of rock evident above the North Toe Trench, creating horizontal features in the rock. Rock also building up just above the smaller rock on the North Toe Trench. A channel-shaped feature on the repository side slope described in 2015 was not photographed. Areas continue to be monitored. Minor animal burrowing on disposal cell top.

F. Cover Penetrations (Caution: confined space entry requirements in effect for all manholes)

- 1. **Manholes 1 and 3 (LCRS and LDS access vaults)**
Covers secure and operable Yes No
Exterior pump access ports are undamaged Yes No
Evidence of leakage into vaults Yes No
Evidence of drainage through cover penetrations Yes No
Telemetry surface installations in good condition Yes No
Vaults are posted as confined-spaces Yes No
- 2. **Manholes 2, 4, and 5**
Covers secure and operable Yes No
Evidence of drainage through cover penetrations Yes No
Manholes are posted as confined-spaces Yes No

Notes for condition of manholes:

Some signs have been removed from manhole covers because they are no longer applicable.

- 3. **LCR Video Ports (check covers only; ports are inoperable)**
Covers secure and operable Yes No
Evidence of drainage through cover penetrations Yes No
- 4. **Settlement Monuments (A to I) (Note: Plates surveyed during Five-Year Reviews only.)**
Surface completions undamaged Yes No
Inner plates undamaged Yes No

5. Embedded Lysimeter

Evidence of seepage at outlet	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Instrumentation installations undamaged	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Evidence of drainage along cover penetrations	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Telemetry surface installations in good condition	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

6. Operation of Repository and Pond 4 LCRS and LDS (interview onsite LM operator)

LCRS and LDS pumps, water level sensors, and flow meters are fully operational Yes No

Telemetry system is fully operational Yes No

Leachate production is below action levels Yes No

Leachate production rates are stable Yes No

Water levels do not exceed top of sumps Yes No

Monitoring data are managed through SOARS Yes No

Pumping rates (gallons/week): LCRS 1 _____ LCRS 2 _____ LDS 1 _____
LDS 2 _____ Pond 4 LCRS 1 _____ Pond 4 LDS 1 _____

Notes for cover penetrations inspection and operation of LCRS/LDS:

Pumping rates are reported in quarterly Federal Facility Agreement reports to EPA and UDEQ. No anomalies reported. Reports are available in SOARS. Leachate pumps every 6 to 7 weeks.

IV. City-Owned Properties Inspection

A. City-Owned Properties Transferred from DOE

(MP-00181, MP-00391, MS-00893, MP-01040 (North Portion), MP-01041, MP-01042, and MP-01077)

Property	181		391		893		1040		1041		1042		1077	
	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
Accessible to public	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Evidence of camping	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Habitable structure(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Gullies/erosion	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Runoff/drainage controls intact and in good repair (ditches, riprap structures, dams, check dams, berms)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Land use changes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evidence of vandalism	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soil removal evident	n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a		n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water well installation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a		n/a		n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland/creek damage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a		n/a		n/a		n/a	
Supp. Stds. fence intact	n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a		n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Describe any violations of institutional controls and/or repair/maintenance issues (locate on map):

Sign posting the IC for no overnight camping is peeling and difficult to read. A gully has formed on property 1077 and will be monitored. Bow hunting is allowed on some City properties. The supplemental standards fence is no longer intact/maintained because of use by mountain bike trails; the area is scanned after significant rainfall events in accordance with the LTS&M Plan.

B. City-Owned Property MP-00211

	Yes	No	N/A
Evidence of excavation or construction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If yes, confirm the following with onsite LM representative:			
In accordance with Monticello zoning district Overlay Zone (OL-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Violation has been reported	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Radiological contamination was encountered	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Radiological contamination was appropriately managed	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Corrective action required	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Notes for City-owned property MP-00211 inspection:

No evidence of activity on this property.

V. Montezuma Creek Soil and Sediment Properties

(Note: Refer to Plates 2 and 3 in the LTS&M Plan for boundary of restricted areas on the following properties: MP-00951, MP-00990, MP-01084, MG-01026, MG-01027, MG-01029, MG-01030, and MG-01033.)

Evidence of habitable structures within the restricted area	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Evidence of soil removal from the restricted area	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Land use/ownership has changed *	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Land owners are aware of use restrictions *	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Violations have been reported *	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Corrective action required	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	

Notes for Soil and Sediment Properties inspection: **The entire canyon was not visited, as beaver/muskrat dams blocked access to the lower canyon. No anomalies have been reported by sampling teams or onsite representatives.**

* Confirm with onsite LM representative.

VI. Groundwater Management Area

(Note: The boundary of the Groundwater Management Area [GWMA] is shown in Plate 4 of the LTS&M Plan and includes the following properties: MP-00181, MS-00893, MP-00211, MP-00179, MP-00947, MP-00951, MP-01084, MP-00990, and MG-01033.)

Evidence of water well installation within the restricted area*	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
No permits for water well installation within the restricted area†	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Violations have been reported*	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
Land ownership has changed*	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Landowners are aware of water use restriction*	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Corrective action required	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	

Notes for Groundwater Management Area inspection:

Onsite representatives regularly inspect area to verify that new wells have not been drilled.

* Confirm with onsite LM representative.

† Confirm with State Engineer's Office.

VII. OU III Monitoring Wells and Water Treatment Systems

A. Monitoring well surface completions (Note: Active wells are inspected and maintained twice annually during sampling events. Inactive wells are inspected during the annual inspection. See attached map for locations.)

	Yes	No
Active wells in working condition (verify with sampling teams)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outer casing or flush mount vault intact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wells are locked/flush mount well lids secured	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Notes for inactive monitoring well inspection (note location of any maintenance issues on map):

Wells are checked and maintained twice a year by groundwater sampling team. Approximately 4 of the inactive wells are missing bolts, and one is missing a cover. Repairs will be requested to prevent damage to the wells by the landowner's livestock. Some wells are no longer flush mounted.

B. Permeable Reactive Barrier (PRB) and Auxiliary Treatment Cells and Infiltration Trench

	Yes	No
Electrical panel, antenna, fence, and vault access in satisfactory condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Evidence of ponded water or saturated soil	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evidence of surface disturbance	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evidence of stressed vegetation	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Notes for PRB and treatment cells inspection:

Treatment cells are inactive but capable of being restarted if needed.

VIII. MVP Field Inspection

A. City Streets and Utilities

Roads/Utilities Under Construction	Y	N
Unmonitored excavations observed during inspection	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned excavations are identified by onsite LM representative	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiological material is properly controlled and managed <i>N/A</i> in 2016	<input type="checkbox"/>	<input type="checkbox"/>
The utility locator service is contacted regularly by the onsite LM representative	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Notes for city streets and utilities inspection:

Onsite personnel normally drive city streets daily to look for excavation work. The utility locator service is accessed through blue stakes notices (811 from the State of Utah). No radioactive material was encountered during 2016.

B. UDOT Highways 191 and 491 Rights-of-Way

1. Roads Under Construction	Y	N
Unmonitored excavations observed during inspection	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned excavations are identified by onsite LM representative	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Radiological material is properly controlled and managed <i>N/A</i> in 2016	<input type="checkbox"/>	<input type="checkbox"/>
The local UDOT official is contacted periodically by the onsite LM representative – <i>n/a – website only</i>		

Notes for UDOT highways inspection:

UDOT information available on website; no construction. Onsite LM representative routinely consults website for future projects. No highway projects in 2016.

2. Erosion (highway shoulders and Highway 191 embankment at Montezuma Creek)

New erosion evident Previous erosion evident; unchanged No erosion evident

Eroded material scanned for radiological contamination and properly managed

Yes No N/A

Describe erosion noted on UDOT highways:

UDOT is planning to repair erosion areas on the embankment, but a time frame has not been published. Onsite representatives will scan the area prior to work.

C. Property MS-00176 (Note: Observations and activities for MS-00176-VL are recorded by the onsite LM representative in the Private Properties Restricted Areas Record Book.)

Monticello zoning district Overlay Zone (OL-1) requires radiological scanning of the footprint of new habitable structures. Radiologically contaminated material is removed under the direction of the onsite LM representative.

	Y	N
Unmonitored excavations observed during inspection	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Planned excavations are identified by onsite LM representative	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Site conditions indicate ICs properly implemented	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Notes for property MS-00176 inspection:

**No changes noted since last annual inspection.
Parcel #A33240310009**

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Attachment 2

2017 CERCLA Five-Year Review Announcements

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U.S. DEPARTMENT OF
ENERGY | Legacy
Management

Notice of CERCLA Five-Year Review for the Monticello Mill Tailings Site and the Monticello Vicinity Properties

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) is conducting its fifth five-year review of remediation remedies for the Monticello Mill Tailings Site (MMTS) and the Monticello Vicinity Properties (MVP) in Monticello, Utah. The review is conducted under the *Comprehensive Environmental Response, Compensation and Liability Act* (CERCLA) to ensure the CERCLA remedies remain protective of human health and the environment.

Remedies included removing and relocating approximately 2.5 million cubic yards of uranium mill tailings and radiologically contaminated soil and debris from the mill site, adjacent properties, and vicinity properties to a permanent repository constructed south of Monticello. Land use restrictions, in conjunction with alternate cleanup standards (supplemental standards), and groundwater use restrictions were implemented as part of the remedy to ensure that known contamination left in place is not further dispersed and does not adversely affect human health and the environment. Additionally, one area of contaminated groundwater is being treated through a pump and evaporate system installed in 2014.

The review team will study site reports, past and present monitoring and inspection data, monitoring and surveillance practices, and conduct a physical inspection of the site. In addition, interviews will be conducted with selected land owners, local government, and State of Utah officials for comments and concerns regarding remedy effectiveness and administration of the sites. The review will begin in September 2016 and conclude in April 2017. A Five-Year Review Report will be prepared at the conclusion of the review to document and present the findings.

The final report will be available on the LM website at <http://www.lm.doe.gov/monticello/Sites.aspx>.

Results of the last five-year review, conducted in 2012, are available at http://www.lm.doe.gov/Monticello/S08399_MNT.pdf. For more information, visit the LM website located at www.lm.doe.gov/monticello/Sites.aspx, or contact:

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Attachment 3

2017 CERCLA Five-Year Review Interviews

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2017 Monticello Five-Year Review

Interviews for Five-Year CERCLA Review

Former mayor, City of Monticello

Interview Date: September 20, 2016

Location: Blue Mountain Foods, Monticello, Utah

Question 1: What is your general impression of the DOE management (remediation and post remediation) of the Monticello Mill Tailings Site (repository, former mill site, supplemental standards properties, groundwater restricted area)?

Answer: Pretty good. I think overall they've seemed to do a good job. They've been helpful to the community. I'm not in City government anymore, but I know they assist our city people when they need to dig.

Question 2: Are you aware of any restrictions placed on your property regarding land use or groundwater use following remedial actions by DOE?

Answer: No [for myself], but speaking for the city, yeah. There is the mill site itself that has restrictions.

Question 3: Are you concerned about the level of safety provided by the remedial actions?

Answer: Currently, no I'm not very concerned. I think there's always a little underlying fear that there's something that still could be lingering. I know there are still some areas in the mill site that could possibly be problematic. I can't give any updates on it because it's been 3 years since I've been in the know. I have friends who live downstream from the mill site. Some of their concerns have been about the contaminated water. They've been advised to not spend a lot of time in water. But, when it is summer and it's hot, the kids will be in the water. I think as far as the Monticello vicinity, they did a good job of cleaning it up and continue to do a good job. It'd probably be cheaper for them to move us.

Question 4: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Answer: Just on the possibilities of the surface-water contamination around the mill site and downstream. Beyond that, I hear very little concern, if any. There is still an underlying concern about the effects of the exposure during the mill operations and before cleanup. There's still a lot of concern of cancer potential. That is gonna be a cloud over people till they all die off, I guess. It's not a concern of them living now, but if they lived here before the cleanup. It wasn't just the people who lived close by, but the whole town was affected. The people who lived here, went to work or school all have been affected. We export our greatest resource, our children. The effects of the contamination covers a lot more than the 2000 people that live here, since many of the children have moved. It's hard to tell how many could have been exposed.

Question 5: Have you noticed any unusual activities on the mill site or surrounding properties that may affect the level of protection provided by the remedial actions?

Answer: No.

Question 6: Do you feel the safeguards provided by the site remedy are adequate in protecting the public from contaminated soil? From contaminated groundwater?

Answer: I think so. The known factors are adequate, but what if there was a weather-related incident that could expose the contamination? I haven't been involved for a while. I remember DOE thought there was a high level of contamination in the seeps. I don't know if they wanted to fence us off from the seeps. I don't think that's happened. I don't think there's a danger to the community. A flash flood hasn't been a concern, but there's always a possibility. Possibly with groundwater changes, springs can change. It's always gonna need to be monitored.

Question 7: Are there general or specific community concerns regarding the administration or operation of the site by DOE? By the City?

Answer: Not that I'm aware of.

Question 8: Is there adequate communication, response, involvement, and cooperation with DOE onsite personnel (David Dille, Gary McKinnon) regarding site operations?

Answer: I believe so. I've never heard anything to the contrary. Nate Langston (City of Monticello Public Works Director) has never brought anything to our attention that's been a big concern.

Question 9: Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or current activities?

Answer: No.

Question 10: How do you keep informed about site activities?

Answer: Just through the grapevine basically, anymore. I'm on the VMTE committee. We do meet 6 to 8 times a year. If something major happens, I'd be informed of that there.

Question 11: Can you suggest anyone else we should talk to?

Answer: Steve Young, the VMTE chair. You could also contact Nate Langston. He's on City council. Willie Greyeyes and Rebecca Benally, San Juan County Commissioner, would also be helpful. She's an educator and is well-spoken.

Question 12: If you had questions or concerns, would you know how to contact DOE/Utah Department of Environmental Quality (UDEQ)/U.S. Environmental Protection Agency (EPA)?

Answer: Yes.

Question 13: Any other comments?

Answer: No, not that DOE can help out on. I wish the federal government or DOE would own up to the health issues in Monticello. We got an appropriation through Senator Hatch of \$900,000 to do cancer screening. We felt like it saved lives. Even though it's not DOE's mission to take care of that, their mission says they are about health and safety. It's a tough pill to swallow when DOE says [to get compensation] it takes an act of Congress. Our senators don't touch it anymore because of earmarks. Those are dirty words anymore.

We have a kiosk and display at the visitors center. The previous issues about the visitor's center not wanting the kiosk because they thought it would affect tourism and economic development is not a factor anymore. Everyone's pretty positive that it's been cleaned up and it's a healthy place now. I don't see it as a detriment to our growth. Sometimes realtors met with families interested in moving to Monticello. They would Google Monticello and find out about the radiation and get fearful. I don't think that's the biggest pressing problem to Monticello's economic development.

DOE contributed funds to make the area usable to the citizens. The City of Monticello used those funds toward creating a golf course. The walking area does get used.

VMTE is trying to explore compensation issues. If you worked on the mill site anytime during the mill operation days or were a cleanup worker, there are programs that would give lifetime cancer screenings and help pay for cancer and respiratory-related illnesses. There's a magic line, and that's called Monticello. If you're on other side of the fence, you don't get the support. The argument from VMTE is that anybody that has lived in Monticello, worked or gone to school here for at least 6 months should be eligible for funding. That needs direction from Congress.

RESEP and RECA (Radiation Exposure Compensation Act) covers miners and millers or haulers and RESEP covers down-winders. Someone who lived in Grand Junction and transported piping to the Monticello site once every year was covered. The community, who lived near it, daily, and got exposed from the smokestack chemicals and from the operation and were not covered. It doesn't make sense. Kids swam in ponds that were left that were made out of radioactive ore tailings. They were not protected. The City of Monticello community members were all site participants.

I think the federal government should sponsor a screening program. All it would take is \$500,000 per year. It'd have to be kept up for 20 years. DOE has said that would be a drop in the bucket. We have a hard time swallowing that—especially when they say, “You'd have to get an act of Congress to do that.” It seems like no politician wants to touch it. Our best bet is to convince the bureaucrats that the people who lived here were onsite participants for the mill site. That's all we're asking.

We've had to shut down the screening program because there wasn't funding. We were doing it really efficiently. We had hundreds of residents screened. The criteria to get screened was to live or work in the community from 1941 to 2000. If health insurance covered the screening, the program would pay the deductible. It went a long ways and saved lives. That's why we think it wouldn't take much to provide a screening program, given federal and DOE budgets. Just getting cancer screenings would be huge. VMTE is at a loss of what to do.

City Manager, City of Monticello

Date of Interview: September 21, 2016

Location: By phone

Question 1: What is your general impression of the DOE management (remediation and post remediation) of the Monticello Mill Tailings Site (repository, former mill site, supplemental standards properties, groundwater restricted area)?

Answer: I'm new to the area. I've been here 2 years. I moved here from Grantsville [Utah].

I don't know. I don't know what they do right now to manage the past. I know there's [DOE or contractor staff] who come to public works to ask if we're digging. No one understands what they do other than drive in their trucks and drink coffee.

Question 2: Are you aware of any restrictions placed on your property regarding land use or groundwater use following remedial actions by DOE?

Answer: Not that I know of. I live on Blue Mountain Drive.

Question 3: Are you concerned about the level of safety provided by the remedial actions?

Answer: No. I think everything's been cleaned up.

Question 4: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Answer: No.

Question 5: Have you noticed any unusual activities on the mill site or surrounding properties that may affect the level of protection provided by the remedial actions?

Answer: No.

Question 6: Do you feel the safeguards provided by the site remedy are adequate in protecting the public from contaminated soil? From contaminated groundwater?

Answer: Yes.

Question 7: Are there general or specific community concerns regarding the administration or operation of the site by DOE? By the City?

Answer: No. I get technical reports. I don't have the time to review them or know what they mean. It would be easier if someone could stop by and visit. Usually, it's just a contractor and not DOE. I don't have time to read or decipher the report. It would be good if DOE was interested in joint planning efforts for trails, parks or whatever else we could do to enhance the mill site as a community asset. I don't know if anything else is possible. The golf course is an amazing resource. DOE could do more with the mill site so that more people would view it as a community resource. Maybe they could create little ponds to walk around? We have people

come and walk on golf course instead of the mill site trails. You can't force them to go over there because it's dense and ugly and not enjoyable.

Question 8: Is there adequate communication, response, involvement, and cooperation with DOE onsite personnel (David Dille, Gary McKinnon) regarding site operations?

Answer: I've heard from public works guys that DOE comes and asks if we're digging. Usually [the public works employees] say no. They are viewed as wasting tax payer dollars. I'm sure there's a purpose, but I don't know what it is.

Question 9: Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or current activities?

Answer: I look forward to how to we can enhance the mill site, given the restrictive nature of it. As far as land use, it's an eyesore. No one knows what we can put into it. We ought to be developing the green space. I'd like to know what the possibilities are.

Question 10: How do you keep informed about site activities?

Answer: Technical report is all I ever see. I get readings of what the levels and water flow are. I don't have enough time to pretend I'm smart enough to understand the material.

Question 11: Can you suggest anyone else we should talk to?

Answer: Natalie Randall, she's the recreation director and is working on the trails master plan, but as far as what our options are to move the community forward, the community needs something to look forward to change the stigma. It would change the entire conversation. We've done, as a city, amazing work with what we were left with. We're trying to do things with the mill site. The kiosk is pathetic. Whatever we can do as a community or if there are partnership opportunities to work together to get past the stigma and look forward to using the resource, that would be helpful—even if it's a memorial.

Question 12: If you had questions or concerns, would you know how to contact DOE/UDEQ/EPA?

Answer: Not directly. I ask our public works and parks and recreation employees.

Question 13: Any other comments?

Answer: No. I think if there's anything DOE could do, working together would be good. As far as a city, we don't mind sticking on message, if we can work together. If we don't have any response [from DOE] or what DOE is working toward, then it doesn't help change the conversation.

A Monticello City Council member and representative of the Victims of Mill Tailings Exposure (VMTE) committee
Date of Interview: September 21, 2016
Location: City Office, Monticello, Utah

Question 1: What is your general impression of the DOE management (remediation and post remediation) of the Monticello Mill Tailings Site (repository, former mill site, supplemental standards properties, groundwater restricted area)?

Answer: I don't know all facts and details, but in all, a lot of people are really actually surprised that anything is happening. It's a quiet thing. I don't think it's a bad thing. I'm not an expert to say they're doing enough or not enough. But I would think it would be beneficial to have a little bit more of DOE explaining what they are doing and why, especially for the people who move into town. A lot of people who move in here don't know it exists. I didn't know much about it until I joined city council. They asked me to be on the VMTE subcommittee. When I learned about the history, I was shocked. I had no idea. A lot of people and old timers would understand. I'd guess if you polled the old timers, they'd think [what damage happened] was done.

I'm from northern Utah. We keep hearing about possible studies. [The community] wants to do it, but they feel like they're worn out, especially for someone to come out and ask questions we don't like talking about. I've lived in Monticello for 15 years.

Question 2: Are you aware of any restrictions placed on your property regarding land use or groundwater use following remedial actions by DOE?

Answer: No. I would say, when we bought our house, we bought from an older gentleman who passed away. When bought, they said, this house hasn't been tested. Didn't understand it until later on. There was a time where they were testing homes. Some homes were using tailings. The assumption is, I don't think anybody would think about. We ordered a radon kit.

Question 3: Are you concerned about the level of safety provided by the remedial actions?

Answer: No, I'm not. I'm a trusting person. I assume that what they're doing is being done right. I can't image where DOE would not be super sensitive of the situation to do everything they can.

Question 4: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Answer: Yes, Tammy Gallegos brought up water issues concerns from the springs coming out of [the] site and the safety of the water. That's probably the only thing I'm aware of.

Question 5: Have you noticed any unusual activities on the mill site or surrounding properties that may affect the level of protection provided by the remedial actions?

Answer: No.

Question 6: Do you feel the safeguards provided by the site remedy are adequate in protecting the public from contaminated soil? From contaminated groundwater?

Answer: I don't know even what they are. I would be willing to guess that's more common.

Question 7: Are there general or specific community concerns regarding the administration or operation of the site by DOE? By the City?

Answer: Not that I'm aware of.

Question 8: Is there adequate communication, response, involvement, and cooperation with DOE onsite personnel (David Dille, Gary McKinnon) regarding site operations?

Answer: No. It's not because I feel that they're avoiding it. If most citizens like myself don't know what's going on, it would be beneficial to have more communication and updates. I don't feel like they're hiding anything, but they're not communicating it either.

Question 9: Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or current activities?

Answer: Maybe just communicate or educate folks and do it early on. There are other people who have not been educated on it. Time has a way of changing things. When things were fresh and new and happening more obviously, there was a lot more being talked about. It's been quiet for so long that if you'd ask the high school seniors, they'd have no idea what was out there. But the old timers tell story after story. It's important to communicate through the changes in generation.

Question 10: How do you keep informed about site activities?

Answer: [Shaking head] Out of sight, out of mind. It would be awesome if someone from the site could come to a city council meeting—not every one—but quarterly or bi-yearly. Come in and offer to answer questions or clarify things. It would be a good thing. It would be published in the local paper and people could know. We have city council two times a month. All we know is that somebody comes one or two times per year and takes water samples.

There was a point, a couple of years ago; someone came in to talk about the work. They were gonna put in water drainage lines. The feedback we gave them was to use as many local people as they can. People have wanted bike trails out there. [DOE has] heavy equipment out there. Why wouldn't it be a win-win situation while the equipment is there to create some trails?

Question 11: Can you suggest anyone else we should talk to?

Answer: Natalie Randall and Andy Platt. They are mountain bikers and have some ideas about mountain bike trails. Him and Natalie probably have the same perspective.

There's not anything [at the mill site park]. It would be nice for visitors who came to have a kiosk at the visitor's center. The people visiting the visitor's center could learn from it.

Question 12: If you had questions or concerns, would you know how to contact DOE/UDEQ/EPA?

Answer: No.

Question 13: Any other comments?

Answer: Few local folks are getting into birding. There's bird watching down there. It's been my point of view that a little bit of extra funding or investment would change the perception. What DOE could contribute would be well worth the money. In the big scheme of things, it's a drop in the bucket money-wise. It costs \$5,000 or \$6,000 bucks to build a trail system or professionally built displays, and it goes a long ways. There are probably some things I'm missing. It would be nice for someone to put mileage markers in there. Anything like that would make it publicized in the newspaper. I would like to re-emphasize and offer for DOE to come to city council consistently. It would show that DOE is transparent and that they're not hiding anything. People will take things better if they're upfront.

Positive things go a long way. I think it goes a long way. The golf course is unreal. It's absolutely gorgeous. You don't go to a small town and find a course here. It's amazing what's been done.

City council meets on the second and fourth Tuesdays of every month. They have a VMTE committee meeting. Come to that committee meeting. There's a lot of people on that committee.

Peripheral-property owner

Date of Interview: September 29, 2016

Location: By phone

Question 1: What is your general impression of the DOE management (remediation and post remediation) of the Monticello Mill Tailings Site (repository, former mill site, supplemental standards properties, groundwater restricted area)?

Answer: Well, I think they've done an ok job. I don't know. I wasn't here when the mill was operating. I've talked to a lot of people with claims of having family die from uranium exposure to tailings. I am not really sure if the stuff around here was really that radioactive. I don't know. Some of the guys think it was because they had family who've died from cancer. I don't know. I think they've done a pretty good job.

I live not too far [from the mill site]. They tore our yard up when they cleaned up.

Question 2: Are you aware of any restrictions placed on your property regarding land use or groundwater use following remedial actions by DOE?

Answer: No.

Question 3: Are you concerned about the level of safety provided by the remedial actions?

Answer: No.

Question 4: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Answer: I think they were in the olden days. Now that it's cleaned up, they put a monument for people who've passed away where the mill used to be. Who knows? That could've been from Down-winders. You don't know.

Question 5: Have you noticed any unusual activities on the mill site or surrounding properties that may affect the level of protection provided by the remedial actions?

Answer: No.

Question 6: Do you feel the safeguards provided by the site remedy are adequate in protecting the public from contaminated soil? From contaminated groundwater?

Answer: I think so.

Question 7: Are there general or specific community concerns regarding the administration or operation of the site by DOE? By the City?

Answer: No.

Question 8: Is there adequate communication, response, involvement, and cooperation with DOE onsite personnel (David Dille, Gary McKinnon) regarding site operations?

Answer: I think so. I think they must. I never hear of any complaints. I don't know the people down there [as of today]. When the cleanup was going on, my wife had a cleaning business. She cleaned the offices down there for them. The people were always nice. I think it was ok. I really do.

Question 9: Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or current activities?

Answer: No. I think it's pretty well resolved. I think they've taken care of it. I'm not worried about it.

Question 10: How do you keep informed about site activities?

Answer: I don't know how to answer that. I don't know anybody that is out there taking care of it. I knew a guy once, Joe Slade. He was taking care of it. I know Joe worked for the company that cleaned it up. When they left, I think he stayed on as someone to watch over that thing.

Question 11: Can you suggest anyone else we should talk to?

Answer: I don't know who that would be.

Question 12: If you had questions or concerns, would you know how to contact DOE/UDEQ/EPA?

Answer: I think so.

Question 13: Any other comments?

Answer: No.

Peripheral-property owner

Date of Interview: September 20, 2016

Location: By phone

Question 1: What is your general impression of the DOE management (remediation and post remediation) of the Monticello Mill Tailings Site (repository, former mill site, supplemental standards properties, groundwater restricted area)?

Answer: I'm very disappointed with DOE. I feel like they contaminated the whole community. They covered the people that were at the mill site and left the town behind. I have 11 members of my family who've all had cancer. I've had half of [my] thyroid removed. I feel like DOE dropped the ball for the City of Monticello. The community members should be classified as onsite participants because they were. I know that the people of Monticello have asked for at least the last 13 to 14 years, for DOE to recognize the residents as onsite participants and DOE has completely ignored that. I feel like they don't want any part of it and they haven't acknowledged what they've done.

Question 2: Are you aware of any restrictions placed on your property regarding land use or groundwater use following remedial actions by DOE?

Answer: There are no restrictions that I'm aware of. I live across the highway from where the mill site was. The home I live in was part of the remediation project. They tore down a room in my house because some of the mortar materials were used from the mill site. It took several years for them to do it. They'd come in with these radiation suits and monitor it. Then, they said they would be back in a year to clean it up. After a few years of this, I said, "If it's too dangerous and you have to wear protective suits, then tear my wall down." This is the only home I can afford. I was very disappointed.

Question 3: Are you concerned about the level of safety provided by the remedial actions?

Answer: Yes.

Question 4: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Answer: Yes, there are over 700 cases of cancer in a community of 2000 people. DOE won't accept responsibility. There are 16 cases of childhood leukemia. The health concerns are the biggest concerns. The problem is most of the people who worked there, lived here. Most of have passed away and they're not here anymore. The people who have lived in the town [but didn't work there] have been completely forgotten. They need healthcare and need included in being onsite participants. Every time the [VMTE] committee talks with DOE, we're told we need it to be written into legislation. Then, we were told [what we want] can't be written into legislation because it needs to go through EEOICPA (Energy Employees Occupational Illness Compensation Program Act). The committee went back east and met with DOE several years ago and DOE told them go to Health and Human Services and have them add it as a line item to the legislative budget. VMTE went to Health and Human Services, who said DOE had to recognize the site. Then they would write it into the budget. It's a runaround. About 2 years ago, we had DOE down here and we spoke with them to ask how to get the community as onsite

participants. We were told we had to go to EPA. That was a whole new level of legislation. Every time, we've tried, we get nowhere.

Question 5: Have you noticed any unusual activities on the mill site or surrounding properties that may affect the level of protection provided by the remedial actions?

Answer: No, a lot of people think that there's still a stigma about it. Not a lot of people utilize the [mill site trails] because they believe its dirty still. When we've had benefits for cancer victims in our community and done cancer runs and other community events, people wonder if they'll be contaminated. We've talked about having a 5K run and I get asked, "Will I be contaminated?" A lot of people feel like it's still not clean.

Question 6: Do you feel the safeguards provided by the site remedy are adequate in protecting the public from contaminated soil? From contaminated groundwater?

Answer: I wish I had faith in DOE, but I've lost faith in DOE. I'm on the fence. They can tell me it's clean, but I don't know if I trust them anymore.

Question 7: Are there general or specific community concerns regarding the administration or operation of the site by DOE? By the City of Monticello?

Answer: Aside from health concerns, there was a time that DOE was spending \$50,000 to monitor blackbirds [for radiation effects]. The citizens felt like if they could monitor blackbirds, they could spend those funds on the community members. That sentiment is shared in the community.

Question 8: Is there adequate communication, response, involvement, and cooperation with DOE onsite personnel (David Dille, Gary McKinnon) regarding site operations?

Answer: I haven't seen a lot of onsite personnel. I used to know who the representative was, but I don't know who it is anymore. I used to see the vehicles drive through every once in a while. I don't know if you have someone who monitors the site now.

The community would like to see more movement on being seen as onsite participants. More [of the same] communication is not what they want. It would be looked at negatively. If the community was hearing about being made as onsite participants, then that would help. I don't know if it would ever happen.

Question 9: Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or current activities?

Answer: Yes, get the City of Monticello included in the EEOICPA benefits so that those who were contaminated in the community would have the same benefits as workers did. The community was just as contaminated. I don't know if you've been to Monticello, but the wind blows from the south. My dad was a child here when the mill site was running. They'd have chemicals, radiation, and enrichment come from smokestacks. They'd wipe the clothes hanging on the lines with cloth because the chemicals would be so bad. The chemicals would eat the screen doors. It would be nice if the community were considered onsite participants.

That would be the absolute best if we could get that pushed through.

Question 10: How do you keep informed about site activities?

Answer: I'm informed, usually, if we have something going on. We have the path down there; we've gotten the kiosk down there. That wasn't done by DOE. It was put there by the VMTE committee. Before the kiosk was installed, DOE never had anything down at the mill site. The VMTE found earmarks to get the kiosk. The earmarks are no longer allowed in [Washington] DC now. The earmarks helped provide the kiosk and it provided screening for participants in Monticello. We couldn't provide treatment. All we could do was provide screening. We could only screen.

Question 11: Can you suggest anyone else we should talk to?

Answer: Steve Young. He will probably be more educated in most of the stuff than I am. I'm new to VMTE. He'd be a great. Or, there's Fritz and Barbara Pipkin.

Question 12: If you had questions or concerns, would you know how to contact DOE/UDEQ/EPA?

Answer: I usually just Google them. Google is my way to find who I need to find. The website is adequate.

Question 13: Other comments?

Answer: Go to the kiosk and read the information. There is actually information in the kiosk that talks about the level of contamination. It will give you a brief education about the contamination from the mill site from beginning to end.

Highway maintenance supervisor

Date of Interview: September 28, 2016

Location: By phone

Question 1: What is your general impression of the DOE management (remediation and post remediation) of the Monticello Mill Tailings Site (repository, former mill site, supplemental standards properties, groundwater restricted area)?

Answer: I think it's done great. It's managed well—great. We communicate back and forth. Good communication.

Question 2: Are you aware of any restrictions placed on your property regarding land use or groundwater use following remedial actions by DOE?

Answer: I don't think so.

Question 3: Are you concerned about the level of safety provided by the remedial actions?

Answer: No.

Question 4: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Answer: None.

Question 5: Have you noticed any unusual activities on the mill site or surrounding properties that may affect the level of protection provided by the remedial actions?

Answer: I have not.

Question 6: Do you feel the safeguards provided by the site remedy are adequate in protecting the public from contaminated soil? From contaminated groundwater?

Answer: Yes, I do.

Question 7: Are there general or specific community concerns regarding the administration or operation of the site by DOE? By the City?

Answer: I don't know of any.

Question 8: Is there adequate communication, response, involvement, and cooperation with DOE onsite personnel (David Dille, Gary McKinnon) regarding site operations?

Answer: Yes.

Question 9: Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or current activities?

Answer: I think you're doing well. David and Fred are great.

Question 10: How do you keep informed about site activities?

Answer: David and Fred tell me. They come and ask if I have anything going on. It's small-town communication. It's all good.

Question 11: Can you suggest anyone else we should talk to?

Answer: I don't think so. There's no activity to speak of, so the port of entry wouldn't have any interest.

Question 12: If you had questions or concerns, would you know how to contact DOE/UDEQ/EPA?

Answer: Yes.

Question 13: Any other comments?

Answer: I wanna make sure that they know that David and Fred are doing a great job here.

Former peripheral-property owner

Date of Interview: September 21, 2016

Location: By phone

Question 1: What is your general impression of the DOE management (remediation and post remediation) of the Monticello Mill Tailings Site (repository, former mill site, supplemental standards properties, groundwater restricted area)?

Answer: I'm disgusted with them. We went to a meeting with them once in Grand Junction. Stoller was there. I couldn't believe the amount of waste in food and services and open bar and they lied to us all through the meeting. I'm disgusted. They came all the way from [Washington] DC. The meeting was in October or November 2011. We had to get special permission to be there. We had to beg for that. Our chairman of the committee did a wonderful job [speaking for the community]. DOE said the reasons why they couldn't help us. Then they said they didn't say it. There was so much waste and so much money spent. I don't know why they can't help who they've harmed. If they just gave the money they paid for the meeting, it would help.

The management of the site itself is hard to comment on. I think they're doing better at it. Before, it was abused. They were riding around in 4-wheelers. The work on the site that's been done was done from the community. The community built a kiosk and planted the trees. Someone was down there from DOE, maybe named Julie? I don't remember her name. She was down there with a bunch of Oriental people and commenting on how Monticello was such a good outcome because of the work DOE had done. The community did the work. We couldn't believe it.

Question 2: Are you aware of any restrictions placed on your property regarding land use or groundwater use following remedial actions by DOE?

Answer: There weren't any restrictions on land use. We always planted gardens. My grandfather grazed cows above the mill. About 5 years ago, we sold our home and moved to St. George, 400 miles from away from Monticello. When we lived in Monticello, our home was always 2 to 3 blocks away from site. But everyone living in the community was close to the site. Our home went through cleanup before we bought it.

Question 3: Are you concerned about the level of safety provided by the remedial actions?

Answer: Yes. Everybody asks us if it's clean. How do we know? We can't trust them anyway.

Question 4: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Answer: I'm not aware of other concerns than health. I don't think there's any more they can do. The study (Monticello Cancer Study July 2006 to July 2007) got us a little bit of money for screening, but there was no compensation in any way. People think it's really crappy they don't get compensation when it's available for millers, miners, or haulers, or people who worked on the mill. There's no compensation for [the community]. It's almost gotten to the point of, "What the heck, it won't do any good any way." I think DOE should make the community onsite participants, because they are. They need to recognize what they've done to us. We know it's

political. We know if they recognize us—I realize it's political—they'd have to recognize other sites. But, our lives are valuable, too.

Question 5: Have you noticed any unusual activities on the mill site or surrounding properties that may affect the level of protection provided by the remedial actions?

Answer: There was a time where there was [*sic*] a lot of people driving 4-wheelers down there. In your mind, you wonder what they're disturbing. DOE said they dug and went down to bedrock, but the stuff lasts a long time. It has concerned us.

Question 6: Do you feel the safeguards provided by the site remedy are adequate in protecting the public from contaminated soil? From contaminated groundwater?

Answer: They say it is. Who knows, you know, especially with the water? That water, on a wet year, runs down the hillside. We know there's still contamination up there.

Question 7: Are there general or specific community concerns regarding the administration or operation of the site by DOE? By the City?

Answer: I don't know of any concerns in the community other than health concerns. I guess their [management is] ok. I don't know if DOE manages the site to any extent other than monitoring it on a regular basis.

We brought up the black birds case 100 times, and I think we embarrassed them because they don't do the program anymore.

In about 2009, there was one time where a DOE person drove down to the mill site after huge snowmelt. Their pickup truck got stuck. It was not intelligent management.

Question 8: Is there adequate communication, response, involvement, and cooperation with DOE onsite personnel (David Dille, Gary McKinnon) regarding site operations?

Answer: I don't think we ever met with the onsite person ever. If we ever met with anyone, it was from Stoller. I don't ever remember meeting with an onsite person. I don't think I'd want to meet them. My husband seeks information. Everything they have they get from Grand Junction. They are a puppet to be honest with you.

Question 9: Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or current activities?

Answer: I wish I could suggest a way for DOE to do better. When started, we spoke to people from New York to California. Every time I talk to someone [in DOE] they say there are RECA and RESEP [compensation programs]. The [community members] don't qualify for these programs. The people involved in the legislation don't understand what's in it. It's about the children who go to school here and the women who've [been exposed]. Those people don't qualify. There's no way to compensate them, other than through screening.

At first, [my husband] was diagnosed with leukemia, but the diagnosis changed to lymphoma. We were adamant he be diagnosed in Monticello, because it is a tiny community, and we needed the support. The doctor had to send the tests to Albuquerque where it was diagnosed through his blood. His records show he was diagnosed in Albuquerque. The cancer registry doesn't recognize it, and it affects our [cancer statistics in Monticello]. The study in 2006 and 2007 was to pull numbers into a cancer cluster study. It worked to some extent. A lot of people were missed because they were not living in Monticello when they were diagnosed. A friend we have who lived here all his life moved 2 miles away before the study. He had brain cancer. The cancer cluster didn't recognize him because he didn't live in Monticello [when he was diagnosed].

[Some of] the children's cancer records weren't recognized because the cancer registry hadn't been established yet. There were so many childhood leukemia. [At one time], there were 7 in the community of Monticello. DOE said time and time again poo poo'd that because they said we couldn't prove it. The parents weren't lying about their kids having cancer when they were burying their children at the cemetery.

The community is so untrusting. It's become...it's like with all the studies. When we did the last cancer cluster study, it was like twisting arms [to get the community to attend]. We had meetings at the high school, and the community thought something would happen. We couldn't get people to show up.

Question 10: How do you keep informed about site activities?

Answer: Living there, of course. We watched it continually. We've seen it and we're aware of it. We were constantly at the site in walks and monitoring stuff. When we built the kiosk, the kids were going down there breaking it up. We contacted the city and let them know. They found out who it was because we watched it through binoculars. We were in contact with the site. We also get the [Program Update] from DOE if there's anything. Now, it comes by email.

Question 11: Can you suggest anyone else we should talk to?

Answer: No.

Question 12: If you had questions or concerns, would you know how to contact DOE/UDEQ/EPA?

Answer: Yes. Usually, Steve does though email.

Question 13: Any other comments?

Answer: [The cancer] has literally devastated us financially. We feel like it could have been handled so much better. We should be onsite participants, because the community itself was a cleanup area. It was a superfund site. The mill, the community, and the water. We feel like DOE has turned their back on us. We don't know where else to go.

When we first started with the VMTE committee and called people, we'd lay awake at night and cry after hearing the stories. We've gathered funds and sent [the cancer victims] a card and a

\$100 to give reassurance that we're thinking of them and that they haven't been forgotten. It was our way of saying, "We know you're there."

Julie [peripheral property owner] came to me and said "You saved Mike's life. If it weren't for the [screening] program, we wouldn't have known he had cancer. When she came to us, we thought that if that's all the success we got, it was a success.

We felt strongly that we saved lives in doing that. I don't know what you could say that would make it better. We've seen family after family bankrupt. It was 30,000 a month for [my husband's] treatment. We didn't have any insurance. And once he was diagnosed, there wasn't any insurance that would cover \$30,000 a month for treatments. And, we felt blessed because he is still alive today.

The only help we've gotten is through [Utah Senator] Orrin Hatch and the grants he got us. The funding's run dry and we don't know where to turn. Government in DC is so bad. I don't know where we can go from here. We're spinning our wheels.

As a committee we sponsored a walk and light the path with luminarias that the kids would decorate. It was a wet year. My husband shoveled the path by hand to have walk in May. I'm pretty sure it was first walk. That was when we dedicated the kiosk. Salt Lake news was there. It was memorable. We've combined our effects into San Juan County's health fair. We couldn't get [enough of the community] interested. We recognize those that were lost and those still fighting the fight.

Transportation Special Service District board member and property owner

Date of Interview: September 29, 2016

Location: By phone

Question 1: What is your general impression of the DOE management (remediation and post remediation) of the Monticello Mill Tailings Site (repository, former mill site, supplemental standards properties, groundwater restricted area)?

Answer: I think they do a good job. Oh, they seem like... I know DOE has certain rules and regulations, trainings, and sign-ins. They seem like they know what's going on and get it figured out. I think that's nice. They're always looking to take care of the site and upgrade things as they need it. I think overall they seem like they have a good, well-rounded desire to do a good job out there.

Question 2: Are you aware of any restrictions placed on your property regarding land use or groundwater use following remedial actions by DOE?

Answer: No.

Question 3: Are you concerned about the level of safety provided by the remedial actions?

Answer: No, I mean. I can see you're asking me questions as a citizen. I've done a lot of work for them. Quite frankly, I've done a lot of work for them and I'm not afraid of it. They cleaned it up.

Question 4: Are you aware of any community concerns regarding the site or its operation and administration? If so, please give details.

Answer: No. I really don't. It's quiet since they stopped working around town.

Question 5: Have you noticed any unusual activities on the mill site or surrounding properties that may affect the level of protection provided by the remedial actions?

Answer: No, I haven't. I don't think anyone goes out there much.

Question 6: Do you feel the safeguards provided by the site remedy are adequate in protecting the public from contaminated soil? From contaminated groundwater?

Answer: Yes, I think so. What I understand and know of it, yes.

Question 7: Are there general or specific community concerns regarding the administration or operation of the site by DOE? By the City?

Answer: Not that I know of.

Question 8: Is there adequate communication, response, involvement, and cooperation with DOE onsite personnel (David Dille, Gary McKinnon) regarding site operations?

Answer: Yes, I do.

Question 9: Do you have any comments, suggestions, or recommendations regarding the site's management, operation, or current activities?

Answer: No, not really. They seem like everything's pretty quiet. Whatever they're doing they're doing fine. It seems like everything is pretty quiet.

Question 10: How do you keep informed about site activities?

Answer: I know a couple of the guys is how I know as much as anything. If I was a normal citizen, I probably wouldn't know if anything was going on out there.

Question 11: Can you suggest anyone else we should talk to?

Answer: Some of the people who live down there. I don't think they'd have a lot to say because they probably wouldn't know what's going on.

Question 12: If you had questions or concerns, would you know how to contact DOE/UDEQ/EPA?

Answer: Yes. I've got their phone numbers in my phone.

Question 13: Any other comments?

Answer: I don't think so.

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Plate 1
Location Map of
Monticello Vicinity Properties Operable Units

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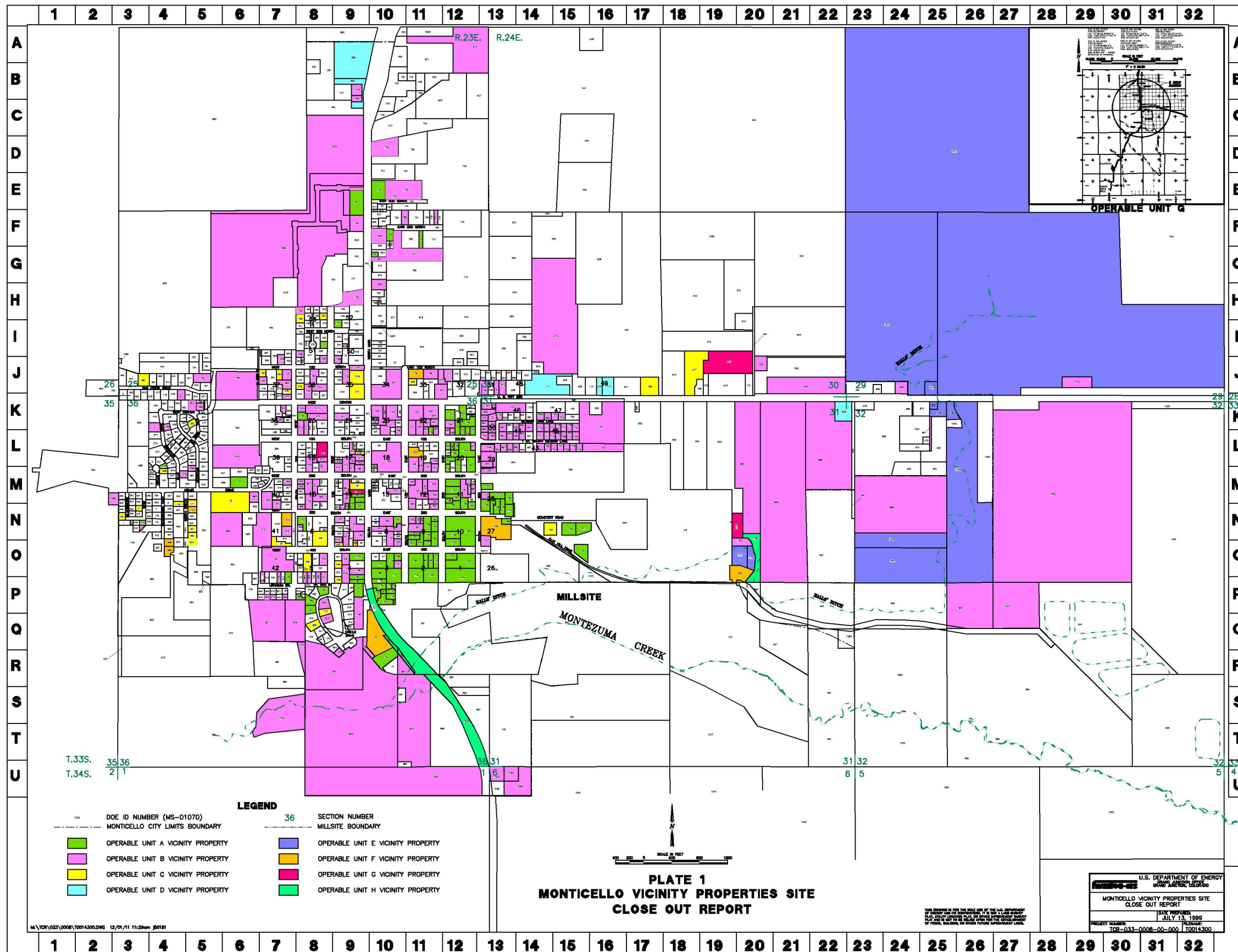


Plate 1. Location Map of Monticello Vicinity Properties Operable Units

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