Office of Environmental Management – Grand Junction



Moab UMTRA Project Five-Year Site Plan Fiscal Years 2020–2024

Revision 0

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Five-Year Site Plan Fiscal Years 2020-2024

Revision 0

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Revision History

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0	April 2020	Initial issue.

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Acronyms and Abbreviations

AUI	asset utilization index
DOE	U.S. Department of Energy
EIS	environmental impact statement
EM	DOE Office of Environmental Management
FIMS	Financial Information Management System
FEIS	Final Environmental Impact Statement
FY	fiscal year
FYSP	Five-Year Site Plan
GSF	gross square feet
HVAC	heating, ventilation, air conditioning
LM	Legacy Management
NEPA	National Environmental Policy Act
OSF	other structures and facilities
PSO	Program Secretarial Office
RAC	Remedial Action Contractor
RPV	replacement plant value
RRM	residual radioactive material
TAC	Technical Assistance Contractor
UMTRA	Uranium Mill Tailings Remedial Action
UMTRCA	Uranium Mill Tailings Radiation Control Act
US-191	U.S. Highway 191
USC	United States Code

1. Executive Summary

1.B. Moab Project Executive Summary

The Five-Year Site Plan (FYSP) is the foundation of strategic planning at the sites, facilities, and office areas used for the Moab Uranium Mill Tailings Remedial Action (UMTRA) Project. The FYSP integrates technical requirements, performance measures, budget, and cost projections within a five-year window of the Office of Environmental Management (EM) Program in compliance with U.S. Department of Energy (DOE) Order 430.1C, "Real Property Asset Management." This Plan was prepared and formatted in accordance with Guidance for Real Property Five-Year Site Plan Fiscal Years 2018-2022 provided by EM.

1.B.1. Moab Project Site Overview

The Moab site is a former uranium ore-processing facility located about three miles northwest of Moab in Grand County, Utah. A tailings pile is located in an unlined impoundment in the western portion of the site that reached 94 feet at its highest point above surrounding ground (elevation 4,076 feet) and is about 750 feet from the western bank of the Colorado River.

The Moab site was a Title 42 United States Code Part 7901 (42 USC 7901) Uranium Mill Tailings Radiation Control Act (UMTRCA) Title II site licensed by the U.S. Nuclear Regulatory Commission. With the enactment of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398), Congress changed the designation to a Title I site and mandated that it be remediated by DOE. On October 25, 2001, DOE assumed ownership of the Moab site. The DOE EM office in Grand Junction, Colorado, is responsible for reclamation and stewardship of the site. To fulfill these responsibilities, DOE established the Moab UMTRA Project. This plan includes activities conducted at the Moab site or the Crescent Junction disposal site.

The Moab Project mission is to relocate approximately 16 million tons of uranium mill tailings and other contaminated materials known as residual radioactive material (RRM) at the Moab site to the Crescent Junction site 30 miles north, also in Grand County, for permanent disposal. In addition, the Project will actively remediate groundwater at the Moab site, assess vicinity properties in Moab, and remediate those properties with contamination that exceeds established criteria. DOE awarded a Remedial Action Contract (RAC) and a Technical Assistance Contract (TAC) to perform the Project scope.

Groundwater in the alluvium at the Moab site was contaminated by milling operations. Ammonia and uranium are the primary contaminants of concern. To reduce the impact on the Colorado River, groundwater is extracted through eight wells installed close to the toe of the tailings pile. Extracted water is used for dust control by direct application to soils in the Contamination Area. Fresh water is injected in up to 15 wells directly upgradient of the habitat areas. DOE anticipates active groundwater remediation will cease concurrently with the completion of surface remediation at the Moab site.

During fiscal years (FYs) 2020 through 2024, the site infrastructure will include facilities, such as trailers or prefabricated, relocatable buildings, and their supporting utilities.

The utilities supporting these facilities include heating, ventilation, and air conditioning (HVAC) systems, water, electricity, and fiber optic utilities.

The Project conducts maintenance and corrects deficiencies on all facilities to ensure they remain in a safe and habitable condition. The majority of the Moab and Crescent Junction site property assets or facilities is more than 10 years old, with a Facility Information Management System (FIMS) summary condition of "adequate." Deferred maintenance is anticipated for these sites.

A snapshot of Project information is provided below.

Active Footprint (current) sq. mi	2.99
Projected Footprint (2024) sq. mi	2.99
Number of Active* Facilities Last Year (B and T)	43 (includes GJ lease space)
Number of Active Facilities Today (B and T)	43 (includes GJ lease space)
Projected Active Facilities in 2024 (B and T)	43 (includes GJ lease space)
GSF Last Year (B)	49,493
GSF This Year (B)	49,493
Projected GSF (B) in 2024	49,493
Current RPV (active facilities only) in \$	65,632,230
Projected RPV in 2024 (active facilities only) in \$	79,704,030
Current Federal Workforce (by Field Office and PSO)	5 (3 - Permanent, 2 - Open Position. The Project is allocated five federal employee positions.)
Current Contractor Workforce (by Field Office and PSO)	136

Project Snapshot

B = buildings; GJ = Grand Junction; GSF = gross square feet; mi = miles; PSO = Program Secretarial Office; RPV = replacement plant value; sq = square; T= trailers

*Active facilities are those with a FIMS status of Operating, Operational Standby, or Operating, Pending, Deactivation, and Decommissioning (facility required for current and ongoing mission needs).

General Site Planning Assumptions

Assumptions about the Project during this FYSP period are as follows:

- Currently, RRM shipping operations are on a schedule of one shift per day, four days per week. Up to 144 filled RRM containers are shipped from Moab to Crescent Junction per shift. The same amount of empty containers is returned from Crescent Junction to Moab each shift.
- Under the RAC contract awarded in FY2016 (started in FY2017), approximately 900,000 tons of tailings are expected to be shipped in FY2020. The following years' tonnage is expected to remain the same depending on funding.
- The approved life cycle baseline end date is FY2034.
- Most site infrastructure components will not require replacement or modernization during this FYSP period.

- There are no facilities currently identified as excess within the period of this FYSP. However, the Atlas Building will be further evaluated for possible demolition and replacement. No footprint reductions are anticipated during this FYSP time period. Disposition activities will be described in future FYSPs as site closure approaches.
- Excavation of disposal cell Phase 3a was completed in 2016, and disposal cell Phase 3b excavation was completed in FY2017. Excavation of disposal cell Phase 3c is planned for the summer of FY2020 and will continue into the fall of FY2021.
- The Project will identify and comply with all applicable environmental and safety and health laws and regulations at each location where operations are conducted.
- There are no significant changes anticipated to the Project mission.

Cleanup Strategy

The Project cleanup strategy at the Moab site is to relocate RRM, including tailings and debris in a safe and efficient manner. The strategy at the Crescent Junction site is to place RRM, excavate new portions of the disposal cell and install interim and final cover in a safe and efficient manner.

For FY2020 through FY2024, planned Project accomplishments include:

- Continued operation of groundwater interim remedial action.
- Continued excavation and transport from the millsite to the disposal cell of approximately 900,000 tons of RRM in FY2020. The amount of tailings excavated and transported annually will remain the same based on funding.
- Continued assessment of potential vicinity properties identified in the Moab community, as needed.

Management Concerns

Management concerns include:

- Rockfall hazards.
- Atlas building (deficiencies/life safety concerns).
- Disposal cell cover performance.
- Project intermodal shipping container longevity.
- Haul road suitability/safety.

Five-Year Site Plan Development

Documents used in the development of this FYSP include the following:

- Moab UMTRA Project Ten-Year Site Plan Fiscal Years 2016-2025 (DOE-EM/GJ2169)
- Moab UMTRA Project FY2020 Site Sustainability Plan
- Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement (DOE/EIS-0355)
- Final Remedial Action Plan and Site Design for Stabilization of Moab Title I Uranium Mill Tailings at the Crescent Junction, Utah, Disposal Site (DOE-EM/GJ1547)

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Asset Management

A summary of real property asset management of land is provided in Table B.1. A summary of real property asset management of facilities and other structures and facilities (OSF) is provided in Table B.2.

Life Cycle Eurotion/Operational Status	Land (Acreage)			
Life Cycle Function/Operational Status	Prior Year	Current	Change	
Total	2,110	2,109	1	
Active	2,110	2,109	1	
Acquired	0	0	0	
Inactive	0.97	0	0.97	

Table B.1. Summary of Real Property Asset Management of Land

Life Cycle Eurotion/Operational Status	Facilities and OSF (GSF)			
Life Cycle Function/Operational Status	Prior Year	Current	Change	
Total (Buildings, Trailers, & OSFs w "GSF" Measurements)	71,455	71,455	0	
Active	71,445	71,455	0	
Acquired (In FIMS in the current year, but was not in FIMS last year)	216	0	216	

GSF = gross square footage

1.B.2. Moab Project Top Priorities

One top priority project is planned for FYs 2020 – 2024 as shown in Table B.3.

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Title	Category (Land Use, Facilities, Infrastructure)	Total Project Cost (Million \$)	Timeframe (Current, start in next 5 years, start after 5 years)
Mechanics Building construction planned for FYs 2020-2024	Land Use	\$0	NA
	Facilities	\$3	18 months
	Infrastructure	\$0	NA

1.B.3. Moab Project Top Management Concerns

Top management concerns are summarized as follows:

Description of Concern	In November 2014, there was a rockfall event on the rail bench in Moab that shut down shipping operations for approximately eight weeks. Shipping operations restarted in mid-January on a limited basis with a return to full shipments following initiation of hillside monitoring and installation of a rockfall barrier in the most hazardous area. No indication of an impending major rockfall has been observed; however, this is a continuing concern.
Timeframe	Ongoing.
Desired Outcome	Protection of workers and equipment.
	1. Continue monitoring hillside.
Corrective Actions	2. Perform detailed area mapping.
Conective Actions	3. Modify monitoring and operations, as appropriate.
HQ Action/Decision	None.
Consequences	The projected completion date may be extended if operations are impacted.

Concern 1. Rockfall Hazards

HQ = headquarters

Concern 2 Atlas Building (Deficiencies/Life Se	fate (Canaarna)
- Concern Z. Alias bulloino (Deliciencies/Life Sa	iew Concerns)

Description of Concern	Mechanics currently exceed 10% of DAC, which is the group of employees with the highest exposure, by far. The Atlas Building is the most contaminated structure on site with its internal elements all showing contamination. Multiple deficiencies and "Life Safety Concerns" have been identified during previous five-year <i>Condition</i> <i>Assessment Surveys</i> , one performed in March 2010 and one performed in September 2014. Since identification and contractual fluctuations, use of this building has been restricted with no employees occupying offices or other areas. Current use is restricted to temporary activities (e.g., mechanics performing preventative maintenance activities, QA/QC performing occasional moisture tests on soils). Additionally, a handful of deficiencies and "Life Safety Concerns" have been completed (e.g., "limited" asbestos abatement, full electrical upgrade, installation of a fire alarm system or smoke/heat detection, roof work). Continuing efforts are being made for a final path forward via an updated cost-benefit analysis.
Timeframe	The project is continuing to analyze the need for this structure and potential alternatives for activities that currently take place within the Atlas building.
Desired Outcome	Abandon in place with demolition of this facility in future contractual years. Additional funding will be needed to support this effort if proven legitimate via the updated cost-benefit analysis.
Corrective Actions	 Continue to analyze the need for this structure. Determine the best alternatives to perform activities currently taking place within the Atlas building. Construct a replacement facility for mechanics.
HQ Action/Decision	None.

Consequences	Minimal consequences will occur if continued restricted use of the Atlas building continues; however, the design of the Atlas building will continue to limit maintenance activities due to inadequate clearances and size of openings (e.g., roll-up doors) versus the size of equipment and vehicles needing maintenance. The continued restricted use of the Atlas building will also continue to require maintenance costs due to the age of this facility and less than ideal layouts and design restrictions.

Concern 2. Atlas Building (Deficiencies/Life Safety Concerns) (continued)

HQ = headquarters; QA/QC = Quality Assurance/Quality Control

Description of Concern	The current rock mulch disposal cell cover performance could be improved by converting the cover to an ET cover. The DOE Office of Legacy Management has expressed concern about the excessive maintenance on several UMTRA rock covers that they maintain.
Timeframe	The project is continuing to analyze the merits of modifying the existing cover and also discussing the alternative with the Nuclear Regulatory Commission.
Desired Outcome	Modify the cover design and convert the existing cover to an ET cover using the existing cover materials.
Corrective Actions	 Perform design modification. Obtain approval of design change. Implement change.
HQ Action/Decision	None.
Consequences	Minimal consequences will occur if design change is vetted and implemented.

Concern 3. Disposal Cell Cover Performance Concern

ET = evapotranspiration; HQ = headquarters

Description of Concern	Containers used for transporting residual radioactive materials have met their life expectancy and are requiring significant repair to remain available for use.	
Timeframe	Ongoing.	
Desired Outcome	Protection of workers and avoidance of a release.	
Corrective Actions	 Continued inspection and repair of containers. Fifty-one new containers were procured in FY2019, and more than 60 containers were coated in FY2018. Continue to analyze the need to replace portions of the existing fleet and develop a procurement strategy to fit within the existing funding profile. 	
HQ Action/Decision	None.	
Consequences	The projected completion date may be extended if operations are impacted due to reduced shipments.	

HQ = headquarters

Description of Concern	The uphill haul road at the Moab site leading from the Support Area (Queue) to the rail loadout area (rail bench) has experienced two rollover accidents in the past 5 years. The curve radius and speed of trucks were contributing factors. Concern for the integrity of the road, safety factor of the roadway design, and safe operation of haul trucks on the entire up and down hill haul road is under question.		
Timeframe	Ongoing.		
Desired Outcome	Protection of workers and avoidance of a release.		
	1. Review existing design basis.		
	Conduct engineering review of existing design for safety		
Corrective Actions	improvements.		
Conective Actions	3. Evaluate cost benefit of improvements.		
	4. Implement improvements		
HQ Action/Decision	None.		
Consequences	Impact to project performance if repeat roll-over accident occurs.		

Concern 5. Haul Road Suitability/Safety

HQ = headquarters

2. Site Description

2.B. Moab Project Site Description

2.B.1. Moab Project Current Missions and Programs

The Project mission is to relocate approximately 16 million tons of RRM from the Moab site to the Crescent Junction site for permanent disposal, actively remediate groundwater at the Moab site, and address vicinity properties in Moab with contamination that exceed established criteria.

FY20-24 Planned Project Goals:

- Continued operation of interim remedial action for contaminated groundwater.
- Continued excavation and transport of RRM from the millsite to the disposal cell.
- Continued placement of RRM into the disposal cell and construction of some interim cover.
- Convert disposal cell cover to an ET cover.

2.B.2. Moab Project General Description

Moab Site:

The Moab site is a former uranium ore-processing facility located about three miles northwest of Moab in Grand County, Utah (See Figure B.1). The 480-acre site is bordered on the north and west by sandstone cliffs. U.S. Highway 191 (US-191) parallels the northern site boundary, and State Route 279 transects the western portion of the property (See Figure B.2). Arches National Park has a common property boundary with the Moab site north of US-191. The Colorado River forms the eastern boundary. The Moab Wash, an ephemeral stream, runs northwest to southeast through the site and joins the Colorado River.

The Union Pacific Railroad traverses a small section of the site on a hillside just west of State Route 279, then enters a tunnel. The eastern portion of the site lies within Moab Wash and the Colorado River 100-year floodplain. The Scott M. Matheson Wetlands Preserve lies directly across the river from the site. Several easements are located on the Moab site for electrical power, roads, natural gas, and fiber optics.

Facilities and infrastructure at the Moab site include:

- Trailers and prefabricated relocatable buildings provide office space, restrooms, showers, break rooms, radiological access control, a conference area, vehicle maintenance space, and a constructed warehouse providing a site total of 47,482 gross square feet (GSF).
- The warehouse (Atlas building) is an original site building and has been used as storage and to perform equipment maintenance. The building is slated for future demolition.
- Eight wells used for extracting contaminated groundwater and 34 wells are capable of injecting fresh water (diverted river water), 15 of which have been utilized within the last five years in addition to various monitoring wells, a sand filter shed, an infiltration trench, and a water truck fill station.
- A decontamination pad to scan vehicles and equipment for contamination and wash when necessary before they leave the site.
- A lidding structure.
- Roads and rail load-out area.
- Fencing.
- Underpass.
- Container rinse system.
- HVAC systems, water, and electricity.

Crescent Junction Site:

The Crescent Junction site is located northeast of the eastern junction of Interstate Highway 70 and U.S. Highway 191, approximately 30 miles north of the Moab site. DOE selected the Crescent Junction site for permanent disposal of RRM from the Moab site and vicinity properties (See Figure B.1).

Through a series of temporary withdrawals of public domain land and a permanent land

transfer by the Department of the Interior, DOE currently owns 500 acres of land and has another 936 acres in a 20-year withdrawal near Crescent Junction for the disposal cell and surrounding buffer area, the Support Area, access road, and ancillary facilities (See Figure B.3).

The Crescent Junction site includes:

- Trailers and prefabricated relocatable buildings that provide office space, restrooms, a break room, a conference area, and vehicle maintenance space, totaling 12,090 GSF.
- Roads and rail load-out area.
- Three sediment ponds.
- Construction waterline, pump stations, and storage pond.
- Disposal cell.
- Fencing.
- HVAC systems, water, and electricity.

Grand Junction Site

Facilities infrastructure located in Grand Junction, Colorado, includes the following:

- 8,387 GSF DOE-leased office space occupied by DOE and TAC personnel.
- 1,030 GSF DOE-leased office space occupied by RAC personnel.

The asset utilization index (AUI) on operational buildings owned by DOE, which includes facilities, such as trailers and prefabricated, relocatable buildings, is 100 percent for the Moab site, except for the original site building that is only partially in use as a warehouse, vehicle maintenance bay, and soils laboratory; however, considered 100 percent utilized for DOE Facilities Information Management System purposes.

The AUI is 100 percent for the Crescent Junction site, meeting Federal Real Property Council and Office of Acquisition and Project Management guidelines. As of March 1, 2020, contractor employment on the Project totaled 136 people.

2.B.3. Moab Project Site Maps

Figure B.1 shows the locations of the Moab site and Crescent Junction disposal site relative to Moab and other geographical locations. Site features maps of Moab and Crescent Junction are shown in Figures B.2 and B.3, respectively. All features represent operating EM facilities and are expected to remain unchanged throughout the period of this FYSP.

3. Land Use Planning

3.B. Moab Project Land Use Planning

In 2005 the DOE issued the *Moab UMTRA Project Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement* to fulfill the National Environmental Policy Act (NEPA) codified at Title 42 United States Code Section 4321 (42 USC 4321) requirements for significant federal actions. Subsequently supplement analyses were prepared in 2013 and 2015.



Figure B.1. Location of Moab and Crescent Junction Sites



Figure B.2. Moab Site Features



Figure B.3. Crescent Junction Site Features

The FEIS also serves as the Project's site-wide NEPA document that addresses land use planning. Significant changes, new work scope, or major proposed actions will be evaluated to determine if further NEPA review is necessary.

DOE anticipates active groundwater remediation will cease concurrently with the completion of surface remediation at the Moab site. Long-term monitoring of the groundwater will be managed by Legacy Management (LM); however, the future use of the site is yet to be established.

Final decisions on allowable future land use at the Moab site can be made only after the success of surface and groundwater remediation is determined.

At completion of the disposal cell, EM will transfer responsibility for long-term maintenance and monitoring to LM. DOE plans to retain ownership of the Crescent Junction site in perpetuity. No changes to land use and no land use projects are planned within the timeframe of this FYSP.

Title	Project Status	Project Schedule	Total Project Cost
The Moab Project has no "Land Use" projects planned for the FYSP FYs 2020-2024.	NA	NA	\$0

Table B.4. Moab Project Land Use Projects

Reductions to the annual EM budget would likely extend the Project's completion schedule. A portion of the land may be retained for a few years after the tailings have been relocated for final remedial actions requiring some facilities and infrastructure to be maintained.

4. Facility Planning

4.B. Moab Project Facility Planning

Assumptions about the Project during this FYSP period are as follows:

- Currently, RRM shipping operations are on a schedule of one shift per day, four days per week. Up to 144 filled RRM containers are shipped from Moab to Crescent Junction per shift. This same amount of empty containers is returned from Crescent Junction to Moab each shift. Under the RAC contract modified in FY2016 (started in FY2017), approximately 900,000 tons of tailings are required to be shipped annually per contract year.
- Site shipping operations from FY2020 through FY2024 are anticipated to be on a comparable schedule, but the number of train shipments per week and number of containers per train will depend on available annual funding. The number of shipments could increase based on increased funding.
- The projected completion date of FY2034 may be impacted by funding, which is appropriated annually. Most site infrastructure components will not require replacement or modernization during FY2020 through FY2024.
- There are no facilities currently identified as excess within the period of this FYSP. No footprint reductions are anticipated during this FYSP time period. Disposition activities will be described in future FYSPs as site closure approaches.

- Continue to assess and remediate vicinity properties as required.
- Excavation of additional portions of the disposal cell at Crescent Junction will continue.
- The Project will identify and comply with all applicable environmental and safety and health laws and regulations at each location where operations are conducted.
- The Project currently uses a radar unit to monitor movement on the hillside above the rail bench as an early warning system before a rockfall event.

The new DOE EM Cleanup Program was implemented starting October 1, 2017. The Project will develop Contract Performance Baselines that adhere to this policy. In FY2010, the Project was determined to be an Operating project rather than a Capital Asset project.

The Project uses an integrated work plan system to ensure operations and maintenance are performed safely, regulatory requirements are met, and necessary resources are available. This process utilizes subject matter experts and work team reviews to verify work plans are in compliance with the Project's overall plan. This integration includes DOE, RAC, and TAC personnel as appropriate for each component.

Reductions to the annual EM budget would likely extend the Project's completion schedule, while facilities and infrastructure at the two sites would be maintained over a longer period of time than planned.

Title	Project Status	Project Schedule	Total Project Cost
Mechanics Building construction planned for FYs 2020-2024	Planning	18 months	\$3,000,000

Table B.5. Moab Project Facility Projects

5. Infrastructure Planning

5.B. Moab Project Infrastructure Planning

There is no infrastructure planned to be phased out or newly constructed during the period of this FYSP (see Table B.6).

A summary of the mission-critical facilities are as follows:

- The Moab site construction water supply system currently consists of river pumps, a sediment pond, and a water truck fill station.
- The interim action groundwater system consists of injection and extraction wells, pumps, filter and control sheds, and transfer tanks.
- Potable water at the Moab site is trucked in and stored in plastic water tanks and distributed via a booster pump in waterlines to the trailers. The system was not sized to provide fire protection.
- Potable water at the Crescent Junction site is piped from Thompson Springs, Utah, through more than 33,000 feet of pipe.
- The electrical distribution systems that supply power to both the Moab and Crescent Junction sites include poles, lights, conduit, lines, and junction boxes.

- Access roads at both sites provide the only approved local access routes to the sites. Asphalt haul roads at both sites allow transportation of RRM. An underpass of State Route 279 at the Moab site enables hauling RRM to the rail load-out area without interacting with public traffic.
- A decontamination pad located near the Moab site entrance is used to decontaminate equipment or vehicles before leaving the site Contamination Area.
- A lidding structure at the Moab site, allows placing a metal lid on each container filled with RRM to ensure containment of the RRM being transported between the Moab and Crescent Junction sites.
- The Crescent Junction RRM disposal cell is engineered for 200 years up to a 1,000-year lifespan.

Mission-dependent facilities, such as the office trailers, trailer staging areas, container rinse system, and maintenance structures perform an important support role in completing the Project mission. The Crescent Junction site construction water supply system consists of a 21-mile pipeline and associated pumping stations that transport water from the Green River to a retention pond located adjacent to the disposal cell.

Title	Project Status	Project Schedule	Total Project Cost
The Moab Project has no "Infrastructure" projects planned for the FYSP FYs 2020-2024, Only Maintenance and Repair activities.	NA	NA	\$0

Table B.6. Moab Project Infrastructure Projects

6. References

42 USC 4321 (United States Code), National Environmental Policy Act.

42 USC 7901 (United States Code), Uranium Mill Tailings Radiation Control Act.

DOE (U.S. Department of Energy), Moab UMTRA Project FY2020 Site Sustainability Plan.

DOE (U.S. Department of Energy), *Moab UMTRA Project Final Remedial Action Plan* and Site Design for Stabilization of Moab Title I Uranium Mill Tailings at the Crescent Junction, Utah, Disposal Site (DOE-EM/GJ1547).

DOE (U.S. Department of Energy), *Moab UMTRA Project Ten-Year Site Plan Fiscal Years* 2016-2025 (DOE-EM/GJ2169).

DOE (U.S. Department of Energy), *Moab UMTRA Project Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement* (DOE/EIS-0355).

DOE (U.S. Department of Energy) Order 430.1C, "Real Property Asset Management."

Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398).