DOE-EM/GJ2188

Office of Environmental Management – Grand Junction

UMTRA Project

Moab UMTRA Project
FY2016 Site Sustainability Plan

Revision 0

December 2015

U.S. Department of Energy

Office of Environmental Management

Prepared by the Technical Assistance Contractor under contract number DE-EM0002067
and the Remedial Action Contractor under contract number DE-DT0002936
for the U.S. Department of Energy Office of Environmental Management, Grand Junction, Colorado.

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Revision History

Revision Number	Date	Reason for Revision
0	December 2015	Initial issue.

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Acronyms and Abbreviations

AFV	alternate fueled vehicle
CEDR	Consolidated Energy Data Report
DOE	U.S. Department of Energy
DOE O	DOE Order
EISA	Energy Independence and Security Act
EM	Office of Environmental Management
EO	Executive Order
FAST	Federal Automotive Statistical Tool
FIMS	Financial Information Management System
FY	fiscal year
GHG	greenhouse gas
GSA	U.S. General Services Administration
GSF	gross square feet
HVAC	heating, ventilation, and air conditioning
RAC	Remedial Action Contractor
ROD	Record of Decision
TAC	Technical Assistance Contractor
UMTRA	Uranium Mill Tailings Remedial Action

Executive Summary

This Site Sustainability Plan is the foundation of the strategic planning for energy conservation measures at the sites, facilities, and office areas managed by the contractors for the U.S. Department of Energy (DOE) Moab Uranium Mill Tailings Remedial Action (UMTRA) Project. This Plan identifies the performance status and planned actions in support of DOE sustainability program goals. This Plan was prepared with a graded approach determined to be appropriate for the Moab Project and in accordance with "Guidance for FY2016 DOE Site Sustainability Plans," provided by the DOE Office of Environmental Management (EM) and as required by DOE Order (O) 436.1, "Departmental Sustainability." This Plan is updated annually as part of a DOE process of improvement to continue seeking opportunities to integrate sustainability into management processes.

The Moab Project site is a former uranium ore-processing facility located about 3 miles northwest of Moab in Grand County, Utah. In 2001, DOE assumed ownership of the Moab site; the DOE EM office in Grand Junction, Colorado, is responsible for managing the Moab UMTRA Project. The scope of the Moab Project is to relocate the uranium mill tailings and associated contaminated materials at the Moab site to a permanent disposal cell constructed near Crescent Junction, Utah, predominantly by rail. The scope also includes active ground water remediation at the Moab site. Construction of the site infrastructure needed to haul and dispose of the mill tailings began in 2008. For the purposes of tracking performance against DOE site sustainability goals, alternate fiscal years (FYs) will be used as the baseline year for the Project when the DOE-established baseline pre-dates the Project's operating status.

The Moab Project's Environmental Policy demonstrates the Project and senior executive commitment to ensure a safe and protective environment for workers and the public through everyday sustainable practices that adhere to applicable environmental protection laws, regulations, and standards. The Project will ensure transparency of its actions and decisions while implementing the following principles for ethical and responsible environmental stewardship: Conduct operations in an environmentally sound manner that is protective of the air, water, land, and other natural and cultural resources; maintain compliance with requirements, guidance, and standards relating to environmental management systems and integrated safety management; identify and protect workers and the public from hazards associated with environmental risks; Acquire environmentally preferable, energy/water efficient and recycled-content goods and services that effectively use sustainable environmental practices; acquire, manage, and disposition personal property utilizing best environmental practices; and prevent pollution, reduce waste, reuse, and recycle where possible. All Moab Project employees are responsible for understanding and complying with environmental requirements and expectations relevant to their assigned duties as well as the protection of the environment in the course of daily operations.

The Project's constructed facilities were installed with energy efficiency in the design and in compliance with DOE O 430.2B, "Departmental Energy and Utilities Management," and to comply with the former DOE Secretary's energy initiatives for real property, The Moab Project does not budget directly for sustainable projects.

The Project maintenance program includes assessments of each facility and identification of general maintenance and repair requirements. Regularly scheduled maintenance and anticipated major repairs or replacement of components will occur periodically over the expected service life of the facilities to sustain them and to ensure energy efficiency is maximized through available components (e.g., energy-efficient lighting, low-flow faucets, waterless urinals).

The Project implements a graded approach in its planning strategies for achieving sustainability goals. The Grand Junction administrative office is a fully loaded lease, with the landlord responsible for providing all utilities. The Project uses relocatable facilities at the Moab and Crescent Junction sites for Project administration and operations, including the lidding and maintenance structures. All structures at both sites (except one permanent building with about 30 percent utilization) are relocatable, and potentially, every structure will be demolished or removed at Project completion. These facilities do not require extensive heating, ventilation, and air conditioning (HVAC) systems. Due to the relatively short-term nature of these facilities, the Project currently has no plans to introduce advanced metering based on the cost to do so. The Project is excluded from Section 432 of the Energy Independence and Security Act (EISA) (Public Law 110-140).

A major challenge for the Project is completing the remediation of the mill tailings pile and construction of the disposal cell by FY2025. If the Project cannot be completed by FY2025, energy usage and facility costs will continue for a longer period of time.

The Project has met or will meet by the required date the following DOE EM sustainability goals: clean and renewable energy, water use efficiency and management, fleet alternative fuel consumption and fuel reduction, sustainable acquisition, pollution prevention and waste reduction, and electronic stewardship. A summary of DOE EM Sustainability Goals for FY2015 is provided in Table 1.

Table 1. Summary Table of DOE EM Sustainability Goals

SSPP Goal	DOE EM Goal	Performance Status through FY2015	Planned Actions and Contribution	Risk of Non-attainment
GOAL 1: GHG Reduction				
1.1	50% Scopes 1 and 2 GHG reduction by FY2025 from a FY2008 baseline (2015 target: 19%)	The Project didn't begin reporting until FY2009, so an overall increase in Scopes 1 and 2 GHG was noted; however, Scopes 1 and 2 GHG was reduced by 30% from FY2014 and by 46% from FY2012, the last time the Project operated a full year.	The Project anticipates Scopes I & 2 GHG will remain at the current level near term but will increase if the Project ships year round in the future.	High
1.2	25% Scope 3 GHG reduction by FY2025 from a FY2008 baseline (2015 target: 6%)	The Project didn't begin reporting until FY2009, so an overall increase in Scope 3 GHG was noted; however, Scope 3 GHG was reduced by 11% from FY2012, the last time the Project operated a full year.	It is expected that Scope 3 GHG reduction will remain at the current level near term.	High
GOAL 2: Sustainable Buildings				
2.1	25% energy intensity (BTU per GSF) reduction in goal-subject buildings, achieving 2.5% reductions annually, by FY2025 from a FY2015 baseline	The Project reduced its energy intensity by 47% from FY2012, the last time the Project operated a full year. The Project does not envision further reductions from a FY2015 baseline.	There are no plans to further reduce energy intensity in goal subject buildings.	High
2.2	EISA Section 432 energy and water evaluations	EM has excluded the Moab Project from the EISA Section 432 requirements.	There are no plans to implement EISA Section 432 requirements.	NA
2.3	Meter all individual buildings for electricity, natural gas, steam and water, where cost-effective and appropriate	There have been no individual meters installed.	The Project currently has no plans to introduce advanced metering based on the cost to do so and the short-term nature of the buildings.	NA
2.4	At least 15% (by building count or GSF) of existing buildings greater than 5,000 GSF to be compliant with the revised Guiding Principles for HPSB by FY2025, with progress to 100% thereafter	All structures at both sites (except one permanent building in very poor condition) are relocatable. Therefore, an assessment for the GPs has not been performed.	There are no planned actions beyond regularly scheduled maintenance and anticipated major repairs or replacement of components over the expected service life of the facilities.	High

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2015	Planned Actions and Contribution	Risk of Non-attainment
GOAL 2: Sustainable Buildings (continued)				
2.5	Efforts to increase regional and local planning coordination and involvement	The Project maintains open communication with the community; however, the closest community to the site is a small town that does not have a transit system planned or in place. Tourism is the economic base for the community with limited permanent population growth.	There are no planned actions to increase regional and local planning coordination and involvement.	NA
2.6	Net Zero Buildings: Percentage of the site's existing buildings above 5,000 GSF intended to be energy, waste, or water net-zero buildings by FY2025.	There have been no actions beyond regularly scheduled maintenance and repairs or replacement of components. The only existing building above 5,000 GSF is currently scheduled for decommissioning and will be demolished before FY2025.	There are no planned actions beyond regularly scheduled maintenance and anticipated major repairs or replacement of components over the expected service life of the facilities.	NA
2.7	Data Center Efficiency. Establish a power usage effectiveness target in the range of 1.2-1.4 for new data centers and less than 1.5 for existing data centers	The Project maintains no data centers.	NA	NA

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2015	Planned Actions and Contribution	Risk of Non-attainment
GOAL 3: Clean and Renewable Energy				
3.1	"Clean Energy" requires the percentage of an agency's total electric and thermal energy accounted for by renewable and alternative energy shall be not less than: 10% in FY2016-2017, working towards 25% by FY2025.	The Project currently participates in the Blue Sky Renewable Energy Program and purchased 14.7% renewable energy in FY2015. There are no thermal renewable sources available to the Project.	The Project plans to continue its commitment to participate in the Blue Sky Renewable Energy Program by buying up to 25% renewable energy to meet the newly mandated DOE goal of 25% of annual electric and thermal consumption from renewable sources by FY2025.	Low
3.2	"Renewable Electric Energy" requires renewable electric energy account for not less than 10% of a total agency electric consumption in FY2016-2017, working towards 30% of total agency electric consumption by FY2025.	The Project currently participates in the Blue Sky Renewable Energy Program and purchased 14.7% renewable energy in FY2015.	The Project plans to continue its commitment to participate in the Blue Sky Renewable Energy Program by buying up to 30% renewable energy to meet the newly mandated DOE goal of 30% of annual electricity consumption from renewable sources by FY2025.	Low

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2015	Planned Actions and Contribution	Risk of Non-attainment
GOAL 4: Water Use Efficiency and Management				
4.1	36% potable water intensity (gallons per GSF) reduction by FY2025 from a FY2007 baseline (2015 target: 16%).	Tailings removal operations did not begin until FY2009, so water intensity calculations were not available until then. A waterline was constructed to the Crescent Junction site from the Green River, reducing total domestic water usage for the Project by 94% to date and meeting the 36% water intensity reduction goal.	The Project has met this goal.	NA
4.2	30% water consumption (gallons) reduction of ILA water by FY2025 from a FY2010 baseline (2015 target: 10%).	Due to the cyclic nature of Project activities, yearly reduction may not be feasible, but overall reduction has been achieved; ILA water consumption has been reduced by 62% since FY2010.	The Project has met this goal.	NA
GOAL 5: Fleet Management				
5.1	20% reduction in annual petroleum consumption by FY2015 relative to a FY2005 baseline; maintain 20% reduction thereafter (2015 target: 20%) .	Overall fuel consumption decreased by 33% from the previous year. In addition, it has decreased by 76% since FY2010, meeting the goal.	It is expected that petroleum consumption will remain at the current level near term.	Low
5.2	10% increase in annual alternative fuel consumption by FY2015 relative to a FY2005 baseline; maintain 10% increase thereafter (2015 target: 10%).	E85 fuel consumption has increased by 27% since FY2010.	Currently, E85 fuel, while available in Grand Junction, is not available in the Moab or Crescent Junction areas. If E85 becomes available, it will be utilized, meeting alternate fuel consumption increase and petroleum fuel reduction goals.	Low
5.3	30% reduction in fleet-wide per-mile GHG emissions reduction by FY2025 from a FY2014 baseline. (2015 target: N/A; 2017 target: 4%).	A reduction of 33% from FY2014 was achieved primarily due to a 3-month shipping suspension this FY.	If year-round operations resume, it is anticipated per-mile GHG emissions will increase until decommissioning occurs after FY2025.	High

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2015	Planned Actions and Contribution	Risk of Non-attainment
GOAL 5: Fleet Management				
5.4	75% of light duty vehicle acquisitions must consist of AFVs (2015 target: 75%).	100% of the vehicle acquisitions in FY2015 were GSA-leased AFVs. This meets the current goal.	Future GSA-leased vehicle replacements are Projected to be AFVs.	Low
5.5	50% of passenger vehicle acquisitions consist of zero emission or plug-in hybrid electric vehicles by FY2025 (2015 target: N/A).	No zero emission or plug-in hybrid electric vehicles have been acquired to date.	Due to the Project being one of demolition and disposal, using primarily 4x4 trucks and SUVs, it is unlikely it will meet this goal.	High
GOAL 6: Sustainable Acquisition				
6.1	Promote sustainable acquisition and procurement to the maximum extent practicable, ensuring BioPreferred and bio-based provisions and clauses are included in 95% of applicable contracts.	100% of RAC procurements contained the necessary provisions and clauses. TAC procurements have sustainable acquisition provisions and clauses, but do not include BioPreferred and bio-based language as that requirement has not been added to the TAC contract by DOE.	Sustainable procurement activities will continue in an effort to meet and maintain DOE goals.	Low
GOAL 7: Pollution Prevention and Waste Reduction				
7.1	Divert at least 50% of non-hazardous solid waste, excluding construction and demolition debris.	There was a 28% increase in off-site non-hazardous solid waste disposal for FY2015 from FY2014; however, there was a 57% reduction since FY2010. Non-hazardous solid waste diverted in FY2015 consisted of commonly recycled items (e.g., computers, batteries, aluminum cans, plastic bottles, paper, cardboard) and composted materials.	Waste reduction practices for this Project will continue at the present level. Due to the remote location of the Project sites, many diversion options are not available.	Low
7.2	Divert at least 50% of construction and demolition materials and debris.	Safety modifications to one aging building on site resulted in 21.8 metric tons of construction debris being generated and sent to the landfill in FY2015. None was diverted.	No construction or demolition activities are anticipated before FY2022.	NA

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2015	Planned Actions and Contribution	Risk of Non-attainment
GOAL 8: Energy Performance Contracts				
8.1	Annual targets for performance contracting to be implemented in FY2017 and annually thereafter as part of EO 13693 section 14 planning .	There are no energy performance contracts currently planned.	Due to the comparatively near-term completion date for the Project, no energy performance contracts are currently planned.	NA
GOAL 9: Electronic Stewardship				
9.1	Purchases – 95% of eligible acquisitions each year are EPEAT-registered products.	100% of eligible electronics procured by the Project met EPEAT standards.	Sustainable procurement activities will continue in an effort to meet and maintain DOE goals.	Low
9.2	Power management – 100% of eligible PCs, laptops, and monitors power-management enabled.	All eligible PCs, laptops, and monitors have power-management actively implemented and in use.	Power-management activities will continue in an effort to meet and maintain DOE goals.	Low
9.3	Automatic duplexing – 100% of eligible computers and imaging equipment have automatic duplexing enabled.	Duplexing was implemented as a default programmatically on six convenience copiers. Thirty stand alone printers were managed by users, and 13 older printers do not have duplexing capability.	All printers now have duplexing enabled as a default with the exception of 13 older ones which will be replaced with duplexing capable printers as they fail.	Low
9.4	End of life – 100% of used electronics are re-used or recycled with environmentally sound disposition options each year.	100% of used electronics are reused or recycled using environmentally sound disposition options each year.	End of life activities will continue in an effort to meet and maintain DOE goals.	Low

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2015	Planned Actions and Contribution	Risk of Non-attainment
GOAL 10: Climate Change Resilience				
10.1	Update policies to incentivize planning for and addressing impacts of climate change.	Due to the comparatively short-term completion date for the Project, no additional climate change adaptation efforts are currently planned; however, our environmental control plans are reviewed annually and revised as needed based upon changing weather conditions.	NA	NA
10.2	Update emergency response procedures and protocols to account for projected climate change, including extreme weather events.	Due to the comparatively short-term completion date for the Project, no additional climate change adaptation efforts are currently planned; however, Project environmental control plans are reviewed annually and revised as needed based upon changing weather conditions. In FY2015, because of changing weather conditions the Project initiated heat index monitoring of workers.	Project environmental control plans are reviewed annually and revised as needed based upon changing weather conditions.	Low
10.3	Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.	Due to the comparatively short-term completion date for the Project, no additional climate change adaptation efforts are currently planned; however, our environmental control plans are reviewed annually and revised as needed based upon changing weather conditions.	NA	NA
10.4	Ensure site/lab management demonstrate commitment to adaptation efforts through internal communications and policies.	Due to the comparatively short-term completion date for the Project, no additional climate change adaptation efforts are currently planned; however, our environmental control plans are reviewed annually and revised as needed based upon changing weather conditions.	NA	NA
10.5	Ensure site/lab climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.	Due to the comparatively short-term completion date for the Project, no additional climate change adaptation efforts are currently planned; however, our environmental control plans are reviewed annually and revised as needed based upon changing weather conditions.	NA	NA

Table 1. Summary Table of DOE EM Sustainability Goals (continued)

SSPP Goal	DOE EM Goal	Performance Status through FY2015	Planned Actions and Contribution	Risk of Non-attainment
GOAL 11: Sustainable Remediation				
11.1	Integrate Sustainability into Remediation Activities	The Project's ROD is dated September 2005, and the Project doesn't have plans to deviate from the remediation processes identified in the ROD at this time.	The Environmental Impact Statement process is a dynamic one and will continue to be modified, with sustainability stressed in the future.	Low

AFV = alternate fueled vehicle; BTU = British Thermal Unit; EPEAT = Electronic Product Environmental Assessment Tool; GP = guiding principle; GSA = General Services Administration; GSF = gross square feet; HPSB = high-performance and sustainable building; ILA = industrial, landscaping, and agricultural; PC = personal computer; PUE = power utilization effectiveness; RAC = Remedial Action Contractor; SSPP = Site Sustainability Performance Plan; TAC = Technical Assistance Contractor

1.0 Introduction

The Moab Project site is a former uranium ore-processing facility located about 3 miles northwest of Moab in Grand County, Utah. In 2001, DOE assumed ownership of the Moab site; the DOE EM office in Grand Junction, Colorado, is responsible for managing the Moab Project. The scope of the Project is to relocate the 16-million-ton uranium mill tailings pile and associated contaminated materials at the Moab site to a permanent disposal cell constructed near Crescent Junction, Utah, predominantly by rail. Construction of the site infrastructure needed to haul and dispose of the mill tailings began in 2008. It was completed in FY2009, when the operation phase of the Project began.

For the purposes of tracking performance against DOE site sustainability goals, alternate FYs are used as the baseline year for the Project when the DOE-established baseline pre-dates the Project's operating status; , since construction was not completed, and operations did not begin until FY2009, all energy usage and emission data increased after the baseline date. The level of activity has fluctuated during the past 6-½ years since tailings removal operations began, partly due to American Recovery and Reinvestment Act (Public Law 111-5) funding, which peaked in FY2010, and a 3-month suspension of operations at the Crescent Junction site in early FY2014. In early FY2015, waste shipments were suspended for 2 months following a rockfall event on the hillside above the train loading area at the Moab site.

1.1 Site Maps and Photographs

Figure 1 shows the general location of the sites relative to Moab and other geographical locations. Site features maps of Moab and Crescent Junction are shown in Figures 2 and 3, respectively. Photos 1 and 2 show the relocatable facilities in the administrative areas at the Moab and Crescent Junction sites, respectively.

1.2 Facilities and Infrastructure Overview

Facilities infrastructure at the Moab site is comprised of:

- Trailers that provide office space, restrooms, showers, break rooms, radiological access control, security and site access control, and conference areas.
- A canvas-covered maintenance structure.
- A lidding structure.
- A constructed warehouse.
- Remediation wells, either for extracting contaminated ground water or injecting freshwater (diverted river water) in addition to various monitoring wells.
- An evaporation pond located on top of the tailings pile, a freshwater settling and storage pond, and four associated pumping systems.
- A freshwater intake structure and associated pumps.
- A decontamination pad to scan vehicles and equipment for contamination and a container rinse system that rinses any residual contamination off the containers before they leave the site.
- Roads, parking lots, and a rail load-out area.
- Fencing.
- Underpass.

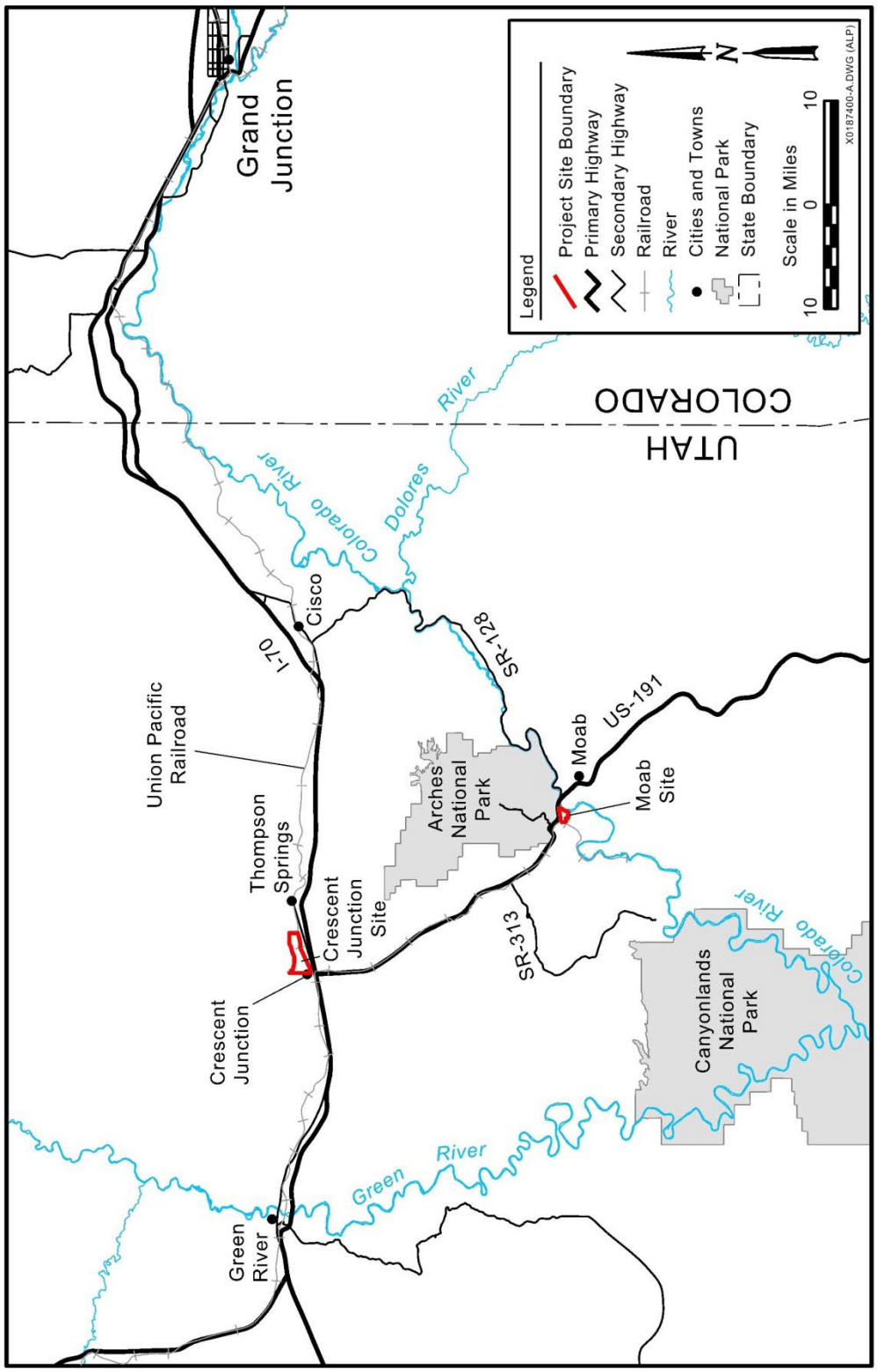


Figure 1. Location of Moab Site and Crescent Junction Disposal Site

Photo 1. Moab Project Site Administrative Area

Photo 2. Crescent Junction Site Administrative Area

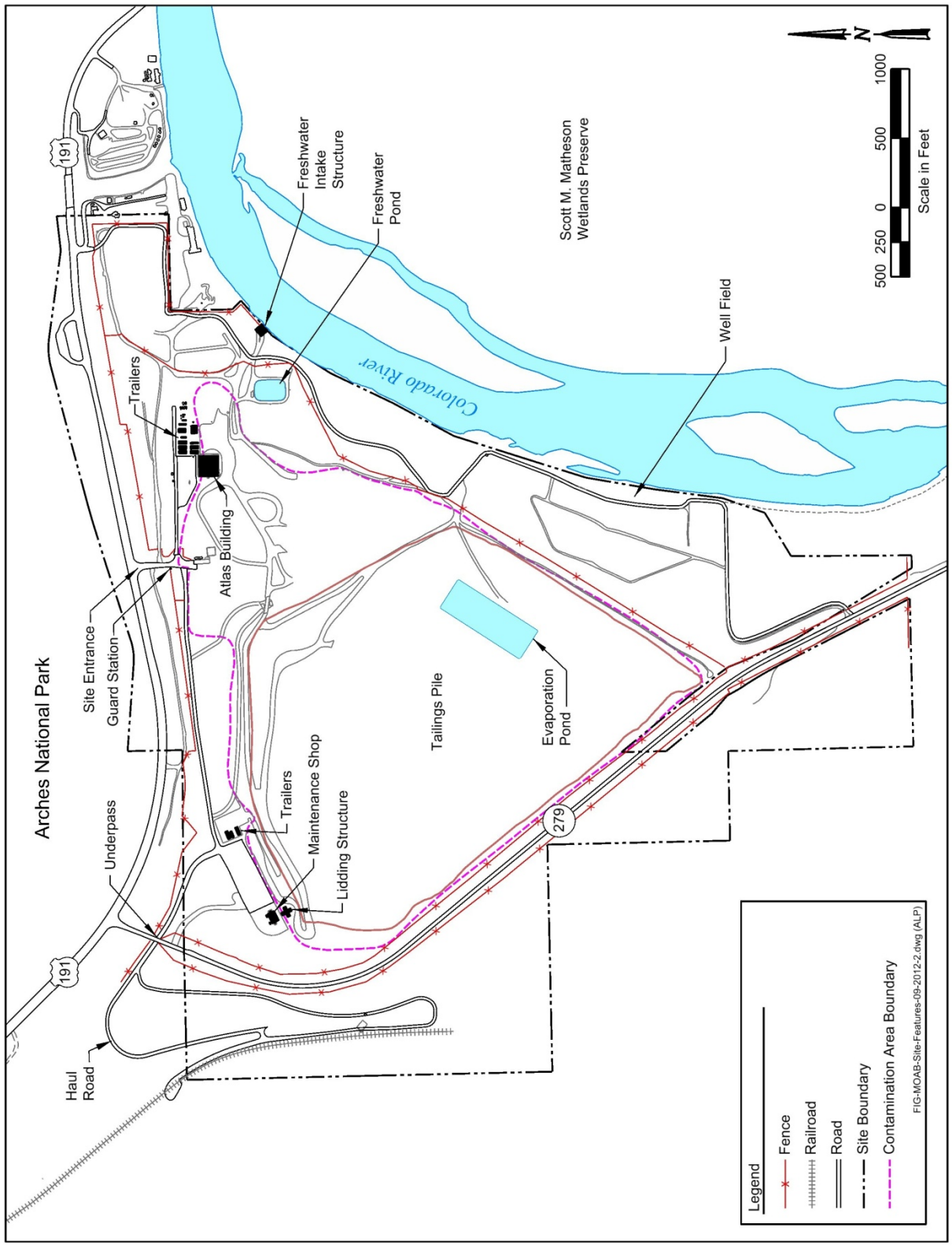


Figure 2. Moab Project Site Features

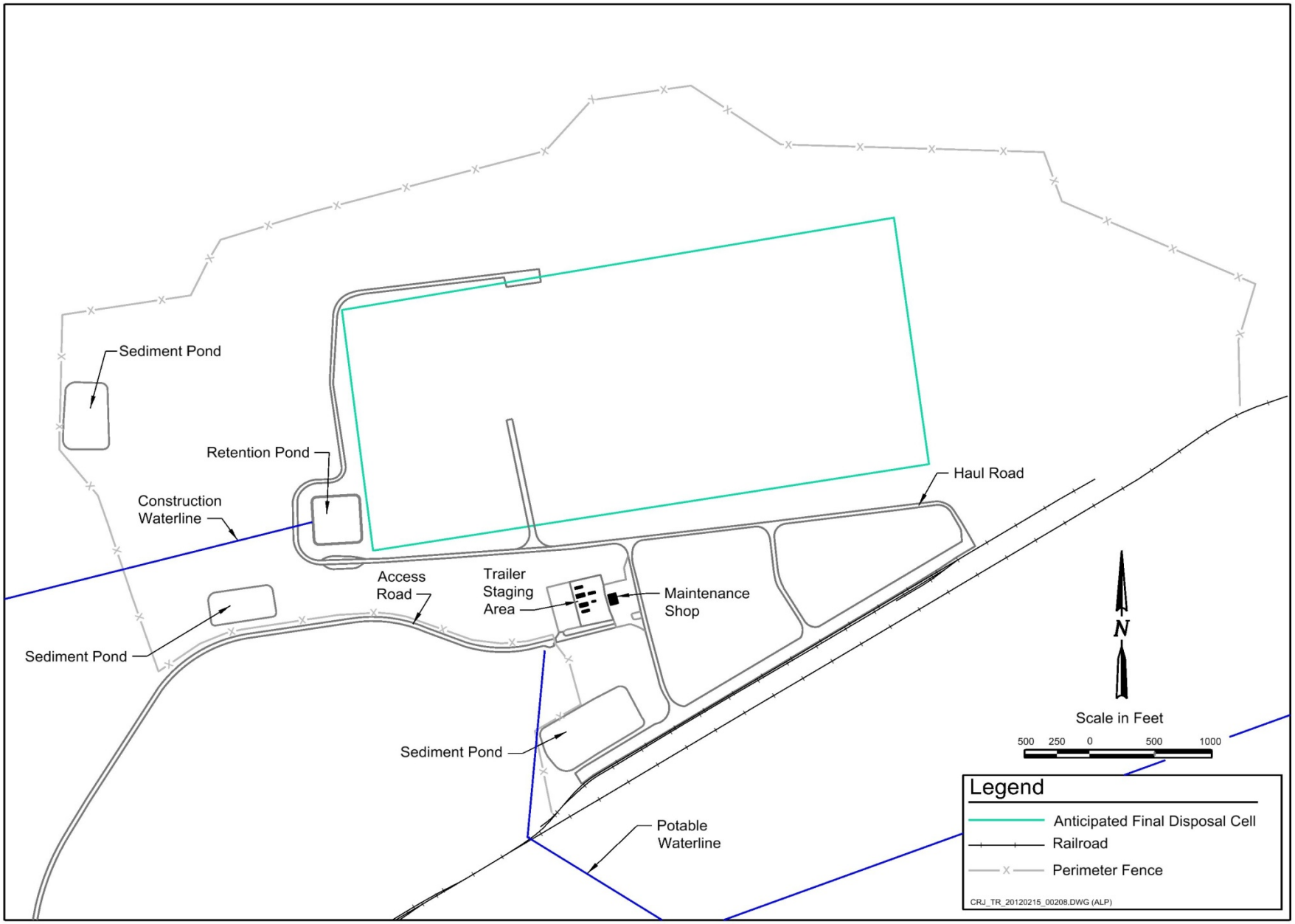


Figure 3. Crescent Junction Site Features

Facilities infrastructure at the Crescent Junction site includes:

- Trailers that provide office space, security and site access control, restrooms, break rooms, and a conference area.
- A canvas-covered maintenance structure.
- Roads, parking lot, and a rail load-out area.
- Storm water retention ponds.
- Construction and domestic waterlines.
- Freshwater storage pond.
- Disposal cell.
- Fencing.

1.3 Utilities Overview

Utilities are defined as the private or public service facilities such as gas, electricity, telephone, water, and sewer that are provided as part of the development of the land. Below is an overview of the utilities at the Project sites.

- The Moab site non-potable water supply system currently consists of river pumps, wells, storage pond, freshwater infiltration trench, sand filter, water truck-fill station, spray evaporators, and an evaporation pond on the tailings pile. The Crescent Junction site construction water system consists of a 21-mile pipeline and associated pumping stations that transport water from the Green River to a retention pond that gravity feeds a water truck fill station.
- Potable water for the Moab site is trucked in and stored in plastic water tanks and distributed via a booster pump in waterlines to the restroom trailers. Potable water for the Crescent Junction site is piped from Thompson Springs through a 6.3-mile waterline.
- The electrical distribution systems at the Moab and Crescent Junction sites include poles, lights, conduit, lines, and junction boxes. Minor upgrades will be performed on an as-needed basis as part of the daily site operations.
- The septic tanks, leach field, and collection piping to trailers were installed at both the Moab and Crescent Junction sites. No significant issues are foreseen unless work scope increases dramatically. Minor upgrades will be performed on an as-needed basis as part of the site operations.
- Both sites use propane for heating the maintenance structures. At Moab, recycled oil is used to heat the mechanic's shop in the permanent building.
- There are no natural gas utilities.
- There are no central steam systems.

1.4 Energy Management/Executive Order 13693

The Project's constructed facilities were installed with energy efficiency in the design, in compliance with DOE O 430.2B, and to comply with the DOE Secretary's energy initiatives for real property. Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade," was issued on March 19, 2015. The goal of EO 13693 is to maintain Federal leadership in sustainability and greenhouse gas (GHG) emission reductions. EO 13693 builds upon progress made against previous EOs and extends many current requirements through FY2025.

The Project shares sustainability efforts with the local community through an annual compliance letter to the county. Monthly sustainability calls with HQ and other DOE projects along with the Annual Site Environmental Report to DOE headquarters enables the Project to share Lessons Learned throughout the agency.

2.0 Performance Status

2.1 Goal 1: GHG Reduction

2.1.1 Scopes 1 and 2 GHG Reduction

Performance Status
Excavation, transportation, and disposal activities at the Moab and Crescent Junction sites consisted of a single shift, 4 days per week. Scopes 1 and 2 GHG were reduced by 30 percent from FY2014 and by 46 percent from FY2012, the last time the Project operated a full year. Table 1 shows a goal of a 50 percent reduction in GHG emissions by FY2025 from the FY2008 baseline. Because the Project was in construction phase in FY2008, and operations didn't begin until FY2009, an overall increase of 123 percent in Scopes 1 and 2 GHG emissions was noted from FY2008 to FY2015; however, the trend from 2012 to 2015 was downward, achieving an overall reduction of 46 percent. The Project does not generate any fugitive emissions.

Planned Actions
The Scopes 1 and 2 GHG 50 percent reduction by FY2025 goal has not been met per the DOE "Consolidated Energy Data Report" (CEDR) Tabs 3.1 and 7.1a. The Project anticipates Scopes 1 and 2 GHG will remain at the current level near term, but will increase if the Project ships year-round in the future.

2.1.2 Scope 3 GHG Reduction

Performance Status
Scope 3 GHG was reduced by 11 percent from FY2012, the last time the Project operated a full year. The Remedial Action Contractor (RAC) works a 4–day-per-week schedule, while the Technical Assistance Contractor (TAC) allows an alternate work schedule, both of which contribute to fewer commute miles and lower energy use. Commute miles increased by 1 percent in FY2015 but decreased 18 percent since FY2012. Commute miles were calculated based upon employees' home addresses to work miles and type of vehicle driven.

Teleconferencing and video conferencing are used extensively to reduce travel; however, air miles increased by 34 percent in FY2015, and an increase of 35 percent in ground miles was also noted. Recycling and composting efforts have resulted in a 5 percent reduction in off-site non-hazardous municipal solid waste disposal for FY2015. Facility clean up and demolition activities added additional waste, resulting in an overall increase of 42 percent from FY2014.

Planned Actions
It is expected that Scope 3 GHG reduction will remain at the current level near term (CEDR Tabs 3.1, 3.2b, 8.1, 8.2 8.3, 9.1b, and 9.1c). There are no plans to relocate or expand existing facilities.

2.2 Goal 2: Sustainable Buildings

2.2.1 Energy Intensity Reduction

Performance Status
Energy intensity decreased by 47 percent from FY2012, the last time the Project operated a full year (CEDR Tab 3.1).
Planned Actions
There are no plans to further reduce energy intensity in goal subject buildings.

2.2.2 EISA Section 432 Energy and Water Evaluations

Performance Status
EM has excluded the Project from the EISA Section 432 requirements. The Project has no covered facilities to report (CEDR Tab 11).

Planned Actions
There are no plans to implement EISA Section 432 requirements (CEDR Tab 2.1).

2.2.3 Metering

Performance Status
The Grand Junction administrative office is a fully loaded lease, with the landlord responsible for providing all utilities. The Moab and Crescent Junction sites have electric meters. All structures at both sites (except one permanent building with about 30 percent utilization) are relocatable, and potentially every structure will be demolished or removed at Project completion.

Both sites use propane for heating the maintenance structures. At Moab, recycled oil is used to heat the mechanic's shop in the permanent building. In addition, a water meter has been installed for non-potable water at the Moab site and for both potable and non-potable water at the Crescent Junction site.

Planned Actions
Currently, the Project has no plans to introduce advanced metering based on the cost to do so and the short-term nature of the buildings (CEDR Tab 2.1).

2.2.4 Existing Building Compliance with Guiding Principles

Performance Status
The Project is utilizing relocatable facilities for Project administration and operations, including the lidding and maintenance structures located at the Moab and Crescent Junction sites. All structures at both sites (except one permanent building in very poor condition) are relocatable, and potentially every structure will be demolished or removed at Project completion, so a GP assessment has not been performed.

Planned Actions
There are no planned actions beyond regularly scheduled maintenance and anticipated major repairs or replacement of components over the expected service life of the facilities.

2.2.5 Regional and Local Planning

Performance Status
The Project maintains open communication with the community; however, the closest community to the site is a small town that does not have a transit system planned or in place. Tourism is the economic base for the community with limited permanent population growth.

Planned Actions
There are no planned actions to increase regional and local planning coordination and involvement.

2.2.6 Net Zero Buildings

Performance Status
There have been no actions beyond regularly scheduled maintenance and repairs or replacement of components. The only existing building above 5,000 gross square feet (GSF) is currently scheduled for decommissioning and will be demolished before FY2025. There are no plans for new or expanded facilities based on the short-term nature of the Project (CEDR Tab 3.4).

Planned Actions
There are no plans for new or expanded facilities >5,000 GSF based on the short-term nature of the Project.

2.2.7 Data Center Efficiency

Performance Status
The Project maintains no data centers.

Planned Actions
The Project has no plans to construct a data center.

2.3 Goal 3: Clean and Renewable Energy

2.3.1 Clean Energy

Performance Status
The Project currently participates in the Blue Sky Renewable Energy Program and purchased 14.7 percent renewable energy in FY2015. There are no thermal renewable sources available to the Project.

Planned Actions
The Project plans to continue its commitment to participate in the Blue Sky Renewable Energy Program by buying up to 25 percent renewable energy to meet the newly mandated DOE goal of 25 percent of annual electric and thermal consumption from renewable sources by FY2025.

2.3.2 Renewable Energy

Performance Status
The Moab and Crescent Junction sites receive power from overhead lines through the Rocky Mountain Power distribution system. The Project currently participates in the Blue Sky Renewable Energy Program and purchased 14.7 percent renewable energy in FY2015 (CEDR Tab 3.2b).

With this participation level, the RAC and the Project have received Blue Sky Champion Partner and U.S. Environmental Protection Agency Green Power Partner designations. In addition, the sites have four meteorological stations (one off site), a sand filter system, and a disposal cell operations monitoring system, all powered by solar panels (CEDR Tab 3.2a).

Planned Actions
The Project plans to continue its commitment to participate in the Blue Sky Renewable Energy Program by buying up to 30 percent renewable energy to meet the newly mandated DOE goal of 30 percent of annual electricity consumption from renewable sources by FY2025.

2.4 Goal 4: Water Use Efficiency and Management

Potable water for the Moab site is trucked in and stored in plastic water tanks and distributed via a booster pump in waterlines to the restroom trailers. The system was not sized to provide fire protection. Potable water for the Crescent Junction site is piped from Thompson Springs municipality through a 6.3-mile waterline; its primary use is for bathrooms. There are no plans to perform an end-of-use water balance.

A waterline was installed from the Green River to the Crescent Junction site to provide construction water, reducing total domestic water usage for the Project and meeting the 36 percent water intensity reduction goal. To manage the water usage, meters have been installed on the DOE domestic waterline and the Green River waterline at Crescent Junction. In addition, when storm water is available in appreciable quantities, it is utilized for construction purposes.

2.4.1 Potable Water Reduction

Performance Status
Tailings removal operations did not begin until FY2009, so water intensity calculations were not available until then. A waterline was constructed to the Crescent Junction site from the Green River, reducing total domestic water usage for the Project by 94 percent to date and meeting the 36 percent water intensity reduction goal (CEDR Tab 3.1).

Planned Actions
The Project has met this goal.

2.4.2 Industrial, Landscaping, or Agricultural Water Reduction

Performance Status
Because water is necessary to meet dust suppression and compaction requirements, and due to the cyclic nature of Project activities, yearly reduction may not be feasible, but overall reduction has been achieved, and industrial, landscaping, and agricultural water consumption has been reduced by 62 percent since FY2010 (CEDR Tab 3.1).

Planned Actions
The Project has met this goal.

2.5 Goal 5: Fleet Management

Sixty-six percent of the Project fleet is comprised of U.S. General Services Administration (GSA)-leased vehicles. The other 34 percent of the fleet is primarily made up of special use vehicles kept within the controlled areas of the sites, with license plates removed. Fleet-management data is reported in the Federal Automotive Statistical Tool (FAST).

2.5.1 Reduction in Annual Petroleum Consumption

Performance Status
Overall fuel consumption decreased by 33 percent from the previous year. In addition, it has decreased by 76 percent since peak operations in FY2010, meeting the goal.

Planned Actions
It is expected that petroleum consumption will remain at the current level for the near term.

2.5.2 Increased Alternate Fuel Consumption

Performance Status
E85 fuel consumption has increased by 27 percent at the Grand Junction office since FY2010. This represents a cumulative increase of 1,801 percent since FY2005. In FY2015, E85 consumption has decreased by 3 percent from the previous year. In FY2015, the Project utilized a blend of diesel and biofuel, ranging from 0 to 15 percent biofuel depending on temperature, with approximately 5 percent used as an average.

Planned Actions
While available in Grand Junction, E85 fuel is not currently available in the Moab or Crescent Junction areas. If E85 becomes available in these areas, it will be utilized, meeting alternate fuel-consumption increase and petroleum fuel-reduction goals.

2.5.3 Reduction of Fleet GHG Emissions

Performance Status
A reduction of 33 percent from FY2014 was achieved primarily due to the 3-month shipping suspension this FY.

Planned Actions
If year-round operations resume it is anticipated that per-mile GHG emissions will increase until decommissioning occurs after FY2025.

2.5.4 Increased Light-duty Alternative Fuel Vehicles Acquisition

Performance Status
As the GSA-leased vehicles are exchanged according to the GSA replacement schedule, alternate fueled vehicles (AFVs), are supplied, assuming they meet operational needs. One-hundred percent of the vehicle acquisitions in FY2015 were alternative fuel GSA-leased vehicles, meeting the 75 percent goal.

Planned Actions
Future GSA-leased vehicle replacements are projected to be AFVs.

2.5.5 Increased Zero Emission or Plug-in Hybrid Electric Vehicles Acquisition

Performance Status
No zero emission or plug-in hybrid electric vehicles have been acquired to date.

Planned Actions
Due to the Project's use of 4x4 trucks and SUVs for the purpose of demolition and disposal operations, it is unlikely it will meet this goal.

2.6 Goal 6: Sustainable Acquisition

The Project Green Team consists of representatives from the TAC and the RAC, including environmental staff, and meets annually to review performance against annual goals.

2.6.1 Sustainable Acquisition and Procurement

Performance Status
The 2015 Sustainability Acquisition Priority Goals are shown in Attachment 1, including energy-efficient, water-efficient, bio-based, and recycled content products. Equipment and supplies excess to other federal agencies are procured whenever possible in place of purchasing new items. Due to these efforts, a cost avoidance of approximately $28,000 was realized by the Project, and these materials were potentially removed from the waste stream in FY2015.

One-hundred percent of RAC procurements contained the necessary provisions and clauses. TAC procurements have sustainable acquisition provisions and clauses, but do not include BioPreferred and bio-based language as that requirement has not been added to the TAC contract by DOE (CEDR Tab 2.2).

Planned Actions
Sustainable procurement activities will continue in an effort to meet and maintain the 95 percent goal for eligible procurements.

2.7 Goal 7: Pollution Prevention and Waste Reduction

2.7.1 Municipal Solid Waste Diversion

Performance Status
There was a 28 percent increase in off-site non-hazardous solid waste disposal for FY2015 from FY2014; however, there was a 57 percent reduction since FY2010. Non-hazardous solid waste diverted in FY2015 consisted of commonly recycled items (e.g., computers, batteries, aluminum cans, plastic bottles, paper, cardboard) and composted materials.(CEDR Tabs 9.1b and 9.1c).

Day-to-day site work and operations are routinely evaluated, especially by employees in the field, to identify pollution prevention and waste minimization opportunities. Site staff accurately measure and document waste generation, pollution prevention, and waste minimization activities. All work locations provide employees with both local and centralized recycling stations, and employees are encouraged to utilize them for appropriate materials.

Electronic equipment and batteries are recycled through vendors to divert waste. Seventy-five percent of used oil is shipped to a recycling vendor. Approximately $1,500 worth of supplies and equipment, excess to the Project, were sold through GSA or re-utilized by another agency, keeping it out of the waste stream.

Planned Actions
Waste reduction practices for this Project will continue at the present level. Due to the remote location of the site, many diversion options are not available.

2.7.2 Construction and Demolition Waste Diversion

Performance Status
Safety modifications to one aging building on site resulted in 21.8 metric tons of construction debris being generated and sent to the landfill in FY2015. None was diverted.

Planned Actions
No construction or demolition activities are anticipated before FY2022.

2.8 Goal 8: Energy Performance Contracts

Performance Status
The Project has no energy performance contracts.

Planned Actions
Due to the comparatively near-term completion date for the Project, no energy performance contracts are currently planned.

2.9 Goal 9: Electronic Stewardship

2.9.1 Purchases

Performance Status
The Project purchases its electronic equipment to meet sustainable procurement goals whenever possible. All electronics purchased in FY2015 met Electronic Product Environmental Assessment Tool standards, and electronic units disposed of in FY2015 were disposed through the United States Postal Service's Blue Earth Program or a local certified recycler. All eligible personal computers, laptops, and monitors have power-management actively implemented and in use (CEDR Tab 5.2).

Planned Actions
The Project will continue to purchase equipment that meets the sustainable procurement criteria and will continue all other electronics stewardship activities, including sustainable acquisition, power management, and responsible reuse and recycling.

2.9.2 Power Management

Performance Status
All eligible PCs, laptops, and monitors have power management actively implemented and in use.

Planned Actions
Power-management activities will continue in an effort to meet and maintain DOE goals.

2.9.3 Automatic Duplexing

Performance Status
Duplexing was implemented as a default programmatically on six convenience copiers. Thirty stand-alone printers were managed by users, and 13 older printers do not have duplexing capability.

Planned Actions
All printers now have duplexing enabled as a default, with the exception of 13 older ones that will be replaced with duplexing capable printers as they fail.

2.9.4 End of Life

Performance Status
One-hundred percent of used electronics are re-used or recycled using environmentally sound disposition options each year.

Planned Actions
End of life activities will continue in an effort to meet and maintain DOE goals.

2.10 Goal 10: Climate Change Resilience

Performance Status
In FY2012, the Project worked with the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service to gain support for the creation of wetland plant communities in an area particularly prone to flooding. In FY2014, in response to President Obama's June 2014 memorandum, "Sustainable Practices for Designed Landscapes and Supporting Pollinators on Federal Landscapes," the Project decided to take a proactive approach and work with a local pollinator group, hosting two bee hives in a revegetation area of the Moab site. An increase in plant growth and blossoming plants in the revegetation area has been observed and is believed to be related to the additional pollination.

Site operations actively control the water levels in the fresh and retention water ponds, reducing the Project's vulnerability to extreme weather events. Waste storage areas have been designed in a very conservative manner to better withstand beyond design basis storms. The Project also continues to cease operations for 2 weeks at the end of December, reducing energy demands at the coldest time of the year. In FY2015, because of changing weather conditions, the Project initiated heat monitoring of workers.

Planned Actions
Due to the comparatively short-term completion date for the Project, no additional climate change adaptation efforts are currently planned; however, our environmental control plans are reviewed annually and revised as needed based upon changing weather conditions.

2.11 Goal 11: Sustainable Remediation

The Project's Record of Decision (ROD), *"Record of Decision for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah"* (6450-01-P) is dated September 2005, and the Project does not have plans to deviate from the remediation processes identified in the ROD at this time; however, the Environmental Impact Statement process is a dynamic one and will continue to be modified, with sustainability stressed in the future.

3.0 Fleet Management Plan

The TAC Property Manager arranges and coordinates the Project's GSA vehicle leases, directs acquisition and disposition activities, and provides utilization guidance in conjunction with the *Moab UMTRA Project Motor Vehicle Procedure* (DOE-EM/GJ1554) provided in Attachment 3. In addition, the Property Manager provides annual data reporting in the FAST.

The Moab and Crescent Junction sites primarily use 4x4 light-duty pick-up trucks based upon the prevalence of construction activities and off-road use. The Grand Junction office uses a sedan and 4x4 SUVs due to extensive highway travel between sites and off-road use. Vehicle acquisition is for GSA-leased vehicle replacements determined by the GSA replacement schedule. Typically, vehicle types are replaced with similar types. AFVs have been acquired whenever possible based upon the assumption that E85 fuel would become available at the Utah sites in the near term.

Vehicle utilization is reported daily using monthly trip reports that track mileage, the number of passengers for each trip, and is reviewed by TAC Property Management monthly. When other than special use vehicles are identified as having too many or too few miles based upon GSA utilization recommendations, vehicles are rotated between Project drivers to normalize usage. Drivers of Project vehicles must complete defensive driver training and are regularly reminded about avoiding excessive idling and fueling policies among other vehicle operation requirements.

4.0 References

DOE (U.S. Department of Energy), "Consolidated Energy Data Report."

DOE (U.S. Department of Energy), *Moab UMTRA Project Motor Vehicle Procedure* (DOE-EM/GJ1554).

DOE (U.S. Department of Energy) Order 430.2B, "Departmental Energy and Utilities Management."

DOE (U.S. Department of Energy) Order 436.1, "Departmental Sustainability."

Executive Order 13693, "Planning for Federal Sustainability in the Next Decade."

Presidential Memorandum, "Sustainable Practices for Designed Landscaping and Supporting Pollinators on Federal Landscapes."

Public Law 110-140, Energy Independence and Security Act of 2007.

Public Law 111-5, American Recovery and Reinvestment Act of 2009.

Attachment 1.
2015 Sustainability Acquisition Priority Goals

Attachment 1. 2015 Sustainability Acquisition Priority Goals (Total)

Category	Goal
Office	
Copy Paper	**Leadership Goal: 100% of purchases:** D-100% PC recycled content and chlorine free
Cartridges-Toner	**Leadership Goal: 75% of purchases (by # of units or dollar amount) meet one or more of the following:** D-remanufactured, STMC, ULE 2785
Electronic Equipment	
Electronics – Computer Thin Clients and Workstations	**Leadership Goal: 95% of purchases meet the following:** D+ EPEAT registered Gold and ENERGY STAR qualified
Electronics – Imaging (copiers, etc.)	**Leadership Goal: 95% of purchases meet one or more of the following:** D+ EPEAT registered (highest rating available)
Electronics – Servers –Enterprise	**Leadership Goal: 95% of purchases meet the following:** D-ENERGY STAR qualified
Grounds/Landscaping	
Vegetation	
Seed (acres)	**Leadership Goal: 95% of purchases meet the following:** Xeriscape and/or native
Plants (each)	
Custodial	
Trash Bags - Plastic	**Leadership Goal: 75% of purchases meet one or more of the following:** ULE 126, D+ 70% PC recycled content
Cleaners - Carpet, Glass, Hand, Multipurpose	**Leadership Goal: 95% of purchases meet one or more of the following:** ULE 2759,2784,2795, Green Seal GS-37, 41 (Avoid use of disinfectant whenever possible)
Tissue - Toilet	**Leadership Goal: 95% of purchases meet one or more of the following:** ULE 175, Green Seal GS-01, D+ 80% PC recycled content
Construction	
Lighting- LED Commercial	**Leadership Goal: 95% of purchases meet one or more of the following:** D-Energy Star Qualified
Operations/Fleet/Shipping/Shop	
Tires	**Priority Product Goal: 75% of purchases meet one or more of the following:** D Retreads for trucks and heavy equipment
Batteries	**Priority Product Goal: 75% of purchases meet one or more of the following:** Rechargable
Other	

Attachment 2.
Self-certification Form and
FIMS-excluded Buildings and Trailers List Report for FY2015

Attachment 2. Self-certification Form and FIMS-excluded Buildings and Trailers List Report for FY2015

DOE BUILDING EXCLUSION
SELF-CERTIFICATION FORM
FY2015

FROM: DOE Moab UMTRA Site
Office of Environmental Management

TO: Sustainability Performance Office

DATE: November 13, 2015

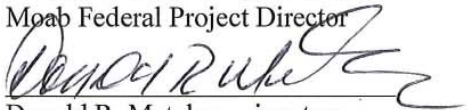
SUBJECT: SELF-CERTIFICATION FORM FOR THE ENERGY-INTENSITY GOAL OF EISA 2007

Each building or group of buildings excluded under the criteria for a Part G or Part H exclusion is/are metered for energy consumption and their consumption is reported annually.

If any building has been excluded under the criteria for Part H for impracticability, all practicable energy- and water-conservation measures with a payback of less than 10 years have been installed. A justification statement that explains why process-dedicated energy in the facility may impact the ability to meet the goal has been provided in the FIMS Report 063.

I certify that the buildings listed on the Excluded Buildings List produced by FIMS as Report 063, dated 29 October 2015, for the Moab UMTRA Project (Attachment 2) meet the exclusion criteria in *Guidelines Establishing Criteria for Excluding Buildings* published by Federal Energy Management Policy on January 27, 2006.

DONALD R. METZLER
Donald R. Metzler – printed name
Moab Federal Project Director


Donald R. Metzler – signature
Moab Federal Project Director

10-29-2015
Date

Contact Information: Polly Robinson
TAC Real Property Manager
Phone: (907) 257-2160
eMail: Polly.Robinson@gjemtac.doe.gov

Attachment 2. Self-certification Form and FIMS-excluded Buildings and Trailers List Report for FY2015 (*continued*)

(FIMS 063)

U.S. Department of Energy
Facilities Information Management System
Energy Consuming Excluded Buildings and Trailers List

10/29/2015

Program Office EM

Site 07011 Moab Site

Property ID Justification Comments:	Real Property Unique ID	Property Name	Exclusion Part	Property Type	Gross SQFT	Excluded Facilities (GSF)
GRJ01-B	204404	Grand Junction, CO, Office Space	C - Fully serviced lease	Building	8,387	8,387
Fully serviced lease.						
GRJ01-B-RAC	205773	Grand Junction, CO, Office Space	C - Fully serviced lease	Building	1,030	1,030
Fully serviced lease.						
MOA01-BA	139766	Moab, UT, Site Building	E - Skewed energy usage	Building	22,497	22,297
The project uses 200SF of the bldg. as a soils lab. Power use consists of lighting and a small fume hood. The remaining >22K SQFT is in very poor condition and only used to store contaminated large site equipment. We meter at the site level.						

This report qualifies DOE Owned, DOE Leased, Contractor Leased, Contractor License and Permit buildings and trailers where the Excluded Facilities (GSF) is greater than zero.

Attachment 3.
Moab UMTRA Project Motor Vehicle Procedure

Attachment 3. ***Moab UMTRA Project Motor Vehicle Procedure***

DOE–EM/GJ1554

Office of Environmental Management – Grand Junction

UMTRA Project

Moab UMTRA Project Motor Vehicle Procedure

Revision 3

November 2014

U.S. Department of Energy

Office of Environmental Management

Prepared by the Technical Assistance Contractor under contract number DE-EM0002067 and the Remedial Action Contractor Contractor under contract number DE-DT0002936 for the U.S. Department of Energy Office of Environmental Management, Grand Junction, Colorado.

Moab UMTRA Project
Motor Vehicle Procedure

Revision 3

November 2014

Prepared by the Technical Assistance Contractor under contract number DE-EM0002067
and the Remedial Action Contractor under contract number DE-DT0002936
for the U.S. Department of Energy Office of Environmental Management, Grand Junction, Colorado.

Attachment 3. ***Moab UMTRA Project Motor Vehicle Procedure (continued)***

DOE-EM/GJ1554

Moab UMTRA Project Motor Vehicle Procedure

Revision 3

Review and Approval

Polly Robinson — 11-17-14 — Date
TAC Property Manager

Steven D. Rima — Nov 14, 2014 — Date
RAC Environmental, Safety, Health, and Quality Manager

Scott Williams — 11/17/14 — Date
TAC Health, Safety, and Quality Manager

Joseph D. Ritchey — 11/17/14 — Date
TAC Senior Program Manager

Jeffrey C. Biagini — 11-17-2014 — Date
RAC Project Manager

Reviewed by:

Donald R. Metzler — 11-18-2014 — Date
DOE Moab Federal Project Director

Attachment 3. *Moab UMTRA Project Motor Vehicle Procedure (continued)*

Revision History

Revision No.	Date	Reason/Basis for Revision
0	February 2008	Initial issue.
1	June 2011	Procedural review to make corrections in management assessment and company references.
2	January 2013	Update includes addition of all Project vehicle procedures and pertinent DOE and EMCBC content.
3	November 2014	Update to include contractor use.

Attachment 3. ***Moab UMTRA Project Motor Vehicle Procedure (continued)***

Contents

Appendix

Attachments

Acronyms and Abbreviations

ANSI	American National Standards Institute
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
FTR	Federal Travel Regulation
GSA	Government Services Administration
IWP	Integrated Work Plan
JSA	Job Safety Analysis
POA	privately owned automobile
POV	privately owned vehicle
RAC	Remedial Action Contractor
TAC	Technical Assistance Contractor
TDY	Temporary Duty
UMTRA	Uranium Mill Tailings Remedial Action
USC	United States Code

Attachment 3. *Moab UMTRA Project Motor Vehicle Procedure (continued)*

1.0 Purpose

This procedure defines the minimum requirements for driver, traffic, and vehicle controls on the Moab Uranium Mill Tailings Remedial Action (UMTRA) Project. It also includes a Traffic Control Plan in Appendix A.

2.0 Scope

This procedure applies to all Remedial Action Contractor (RAC), Technical Assistance Contractor (TAC), U.S. Department of Energy (DOE), and subcontractor personnel visitors, deliveries, and vendors who may access the Project sites and be involved in any activities.

3.0 Definitions

Texting or text messaging – Reading from or entering data into any handheld or other electronic device, including short message service texting, e-mailing, instant messaging, obtaining navigational information, or engaging in any other form of electronic data retrieval or electronic data communication.

Privately owned automobile (POA) – A car or light truck, including vans and pickup trucks, that is owned or leased for personal use by an individual.

Privately owned vehicle (POV) – Any vehicle such as an automobile, motorcycle, aircraft, or boat operated by an individual that is not owned or leased by a government agency and is not commercially leased by an employee under a government rental agreement for use in connection with official government business.

Federal Travel Regulation (FTR) reimbursement rate – The applicable mileage rate based on the type of POV actually used (e.g., privately owned airplane, privately owned automobile, privately owned motorcycle). These rates will be published in the FTR bulletin and will also be displayed on the General Service Administration (GSA) website (http://www.gsa.gov/mileage).

Local travel – Any travel that is less than 50 miles from the official duty station.

Government-furnished vehicle – A government-furnished automobile, light truck, or van.

Flex-fuel vehicle – A vehicle that can be refueled and operated using either regular unleaded gasoline or E-85/ethanol.

Fleet credit card – The government-issued credit card assigned to each government-furnished vehicle to be used for fuel and necessary maintenance.

Attachment 3. *Moab UMTRA Project Motor Vehicle Procedure (continued)*

4.0 General Information

4.1 Official Use of Motor Vehicles

Government motor vehicles may be used only for official use and for the incidental purposes described in this policy and Title 41 Code of Federal Regulations Part 102-5 (41 CFR 102-5), "Home-To-Work Transportation."

Government motor vehicles are for federal employees and contractors for official use only. No family members, friends, strangers, or hitchhikers are permitted in the government vehicle while on local or temporary duty (TDY) travel. If the employee feels traveling alone while on TDY travel is a safety issue, the employee can always drive his or her own vehicle and get the lesser amount for mileage reimbursement.

Title 31 United States Code Section 1349(b) (31 USC 1349), "Money and Finance, Adverse Personnel Actions," provides for the suspension from duty of any officer or employee of the federal government who willfully uses or authorizes the use of a government passenger motor vehicle for other than official purposes. The suspension is:

- Issued by the head of the department concerned.
- Without compensation.
- For not less than 1 month. The suspension may be for a longer period or the officer or employee summarily removed from office if circumstances warrant.

4.2 POV Mileage Reimbursement for Official Travel

The Project must select the method most advantageous to the government when cost and other factors are considered for official travel. When the Project determines that travel must be by automobile, a government motor vehicle is presumed to be the most advantageous method of transportation, in accordance with 41 CFR 301-10, "Public Contracts and Property Management, Temporary Duty (TDY) Travel Allowances, Transportation Expenses."

When the use of a privately owned vehicle is determined by the Project to be advantageous to the government (e.g., if a government motor vehicle is not available), the employee will be reimbursed the FTR rate for use of a privately owned automobile when used for official travel, in accordance with 41 CFR 301-10.303, "What am I reimbursed when use of POV is determined by my agency to be advantageous to the Government?"

If the employee is authorized to use a government motor vehicle and use a POV instead, his or her reimbursement will be limited to the amount authorized by the FTR rate for use of a POA when a government motor vehicle is available, in accordance with 41 CFR 301-10.310, "What will I be reimbursed if I am authorized to use a Government owned automobile and I use a privately owned automobile instead?"

These requirements apply to both local and TDY travel.

4.3 Fuel Purchases

When using a government vehicle, all fuel purchases must be made using the fleet credit card assigned to the vehicle. Operators should purchase self-service E-85 or unleaded gasoline from service stations offering the lowest price. Operators should always check with the vendor to ensure the Wright Express fleet card is acceptable.

Flex-fuel Vehicles
Alternative fuels (E-85/ethanol) must be used in flex-fuel vehicles when reasonably available. For the location of the most convenient alternative fuel-fueling sites, refer to the Alternative Fueling Station Locator at http://www.afdc.energy.gov/afdc/locator/stations.

4.4 Home-to-work Use of Government Motor Vehicles

Federal Staff
According to 41 CFR 102-5, official use does not include the use of vehicles between home and a place of work except for the circumstances addressed in this policy. Employees shall have written supervisory approval before a government vehicle is issued in the situations describe below. The supervisory approval may be in the form of email.

A government motor vehicle may be issued to a DOE employee at the close of the preceding workday when the employee is authorized to travel by government motor vehicle and either one of the following situations applies.

- There is a significant savings in time by permitting a departure from the employee's home.
- The employee is scheduled to depart for TDY, in the interest of the government, before the beginning of regular work hours.
- Similarly, when an employee is scheduled to return after regular work hours, the motor vehicle may be returned the next regular workday.

This type of use of a government motor vehicle is not regarded as prohibited by 31 USC 1344, "Money and Finance, Passenger Carrier Use."

Contractor Staff
According to 41 CFR 109-38.301-1.50, "Official Use of Government Motor Vehicles, Authorization for transportation between residence and place of employment," government motor vehicles shall not be used for transportation between residences and place of employment by designated contractor personnel except under extenuating circumstances. Contractor personnel, regardless of position and/or remote location of residence, are not authorized to use government vehicles for transport between home and the Project sites. Under no circumstances shall the comfort and convenience of contractor employees be considered justification for authorization of use.

Requests for use under extenuating circumstances must be submitted in writing by contractor personnel to their respective contractor senior manager (the RAC Project Manager or TAC Senior Program Manager). Requests must include the name and title of the employee, the reason for the use, and the expected duration.

The RAC or TAC Manager shall submit the approved request to the DOE head of the field organization (the Environmental Management Consolidated Business Center Director) or designee, which for the Moab Project is a warranted contracting officer, who can authorize use for up to 1 year.

An example extenuating circumstance the Moab Project considers cost-effective to DOE's interests is a contractor employee who stays at a relative's residence instead of a hotel while on temporary duty assignment to the Moab site and therefore parks a GSA vehicle at the relative's residence. The employee is not reimbursed per diem costs and the residence is a comparable distance to the site as a hotel, thereby saving the government money.

Contractor personnel are also not authorized to use government vehicles in a manner that constitutes a "park and ride" type of benefit (e.g., contractor personnel meeting at a designated location and being transported to their work site).

These requirements apply for both local duty and TDY travel, in accordance with 41 CFR 109-38.301-1.50 and DOE Guide 580.1-1, "Department of Energy Personal Property Management Guide."

4.5 Text Messaging While Driving by Federal Employees and Government Contractors

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving," federal employees and government contractors shall not engage in text messaging when:

- Driving a government-leased, government-rented, government-owned vehicle, or a POV while on official government business.
- Using electronic equipment supplied by the government while driving.

4.6 Government Vehicle Operator Requirements

Government vehicle operator requirements are listed below.

- The operator is responsible for safe driving and operation of government motor vehicles to prevent injury to self and others, and for safeguarding property from damage.
- The operator is to comply with all federal, state, and local laws and regulations regarding vehicle operations.
- Seat belt use is mandatory for each employee operating or riding in a government motor vehicle.
- It is prohibited to use tobacco products in GSA fleet and DOE-owned motor vehicles.
- A safety checklist (provided in Attachment 1) is provided with each vehicle and must be filled out daily, before initial use. When more than one shift operates the same vehicle, a pre-operation inspection shall be performed before each shift to determine the condition of the vehicle before operation by the next employee. Any damage must be noted on the vehicle inspection sheet and reported to the supervisor.
- Defensive driver training is a requirement of any employee before operation of a government motor vehicle.
- Unattended vehicles must remain locked and the keys removed at all times when not in a controlled area. The vehicle is considered attended if the person is within 25 feet and has direct visual contact.

- Vehicle fueling requirements:
  - The use of self-service pumps is required unless they are unavailable.
  - Premium gasoline must not be used unless required by the vehicle.
  - If the vehicle is capable of using alternative fuels (e.g., E-85, compressed natural gas), these fuels must be used where available.
- Follow the vehicle accident reporting requirements contained within the driver's book assigned to each vehicle.
- Vehicle operators must possess a valid operator's license and are responsible for notifying management if the license is suspended, revoked, or if any limitations are imposed on driving privileges.
- Any passenger motor vehicle shall be shut off while the vehicle is unattended (i.e., the operator of the vehicle is not within 25 feet of the vehicle). Diesel engine-powered equipment requiring long warm-up periods may be left unattended during initial warm-up; those vehicles that require wheel chocks shall have their wheels chocked in place during this time.
- Personnel involved in incidents that involve a vehicle or mobile equipment are subject to disciplinary action which may include, but is not limited to, losing their Project driving privileges, being drug tested, participating in remedial defensive driving training, uncompensated time off, or termination.
- The operator is personally responsible for paying any fines related to citations or tickets received as a result of the operator violating any traffic laws (i.e., moving violations such as speeding or disobeying traffic lights and signs).
- Personnel shall stay clear of all vehicles that are in motion.
- Operators of vehicles shall follow the requirements of the Traffic Control Plan included in this procedure (see Appendix A).

4.7 Government Vehicle Management Responsibilities

Project management must ensure:

- An Integrated Work Plan/Job Safety Analysis (IWP/JSA) shall be in place or established to safely move disabled Project work vehicles or equipment.
- Speed limits shall be established and signs posted for Project roadways.
- All operators will be trained by a competent person and authorized before operating vehicles or equipment. All operator training shall be documented.
- Parking areas in paved or unpaved areas should be well defined. Parking shall be in designated parking areas.

4.8 Vehicle Backing

Backing poses several hazards, so a backing policy has been put into place on the Moab UMTRA Project. Before any backing, the driver/operator should do a walkaround the vehicle/equipment to check for hidden or low profile obstacles. Before backing, the driver/operator of the vehicle/equipment shall honk the vehicle/equipment horn twice, check the area behind them, and then proceed to back up if it is safe to do so.

If the vision behind the driver/operator is blocked or obstructed by blind spots, a spotter shall be used to assist with the backing process. This policy applies to all backing activities on the Project sites.

4.9 Accidents

Report accidents, theft, or vandalism to the GSA vehicles by using the Accident Reporting Forms (SF-91, Motor Vehicle Accident Report, and SF-94, Statement of Witness) located in the glove box and by calling the Accident Management Center 1-866-400-0411 (call 911 for injuries or serious conditions). All accidents and incidents must be reported to the appropriate supervisor within 24 hours of the accident occurrence and to the Accident Management Center within 5 calendar days. Third-party accidents and accidents involving injury require a police report.

4.10 Utilization Controls and Practices

Utilization controls and practices apply to all DOE-owned and commercially leased motor equipment and to GSA fleet motor vehicles.

Utilization controls and practices used by DOE organizations and contractors should include:

- The maximum use of motor equipment pools, taxicabs, shuttle buses, or other common service arrangements.
- The minimum assignment of motor equipment to individuals, groups, or specific organizational components.
- Individual motor equipment use records, such as trip tickets or vehicles logs, (see Attachment 2) showing the date used, name of the operator, times of departure and return, mileage, and hours of use.
- The maintenance of individual motor equipment use records.
- The rotation of motor vehicles between high and low mileage assignments to maintain the fleet in the best overall replacement age and mileage balance and operating economy.
- The charging, if feasible, to the user organization for the direct and indirect cost of operating and maintaining motor vehicles assigned to groups or organizational components.
- The use of dual-purpose motor vehicles capable of hauling both personnel and light cargo to avoid the need for two motor vehicles when one can serve both purposes.
- The use of motor scooters and motorcycles in place of higher-cost motor vehicles for certain applications within plant, such as messenger and mail service and small parts and tool delivery.
- The use of electric vehicles for certain applications.

4.11 Powered Industrial Trucks

All new powered industrial trucks (e.g., forklifts, platform lift trucks, motorized hand trucks) shall meet requirements established in the current version of American National Standards Institute (ANSI) Standard B56.1, "Safety Standard for Low Lift and High Lift Trucks."

All nameplates and markings shall remain in place and be maintained in a legible condition.

Only trained and authorized operators shall be permitted to operate powered industrial trucks. Operators shall be trained in the safe operation of each powered industrial truck that they are authorized to use at the facility.

All training shall be conducted to meet the requirements of 29 CFR 1910.178, "Occupational Safety and Health Regulations, Powered Industrial Trucks." All training shall be documented, and the operator shall be signed off by the subject matter expert for that piece of equipment.

No person shall be allowed to stand or pass under the elevated portion of any powered industrial truck attachments, whether loaded or empty.

No person shall ride on the lifting mechanism of a forklift or use the forklift as a work platform. A manufacturer-approved personnel basket may be used if written approval has been obtained from the manufacturer, and all stipulations of such approval are met.

When a powered industrial truck is left unattended, the forks or loads shall be fully lowered, controls neutralized, power shut off, and brakes set. Wheels shall be blocked if the truck is parked on an incline.

If a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition. All repairs shall be made by authorized personnel.

5.0 Records

All vehicles and equipment shall be inspected daily and documented using the appropriate forms posted on the Project's SharePoint website and in the vehicle books. Supervisors shall ensure all training is documented and maintained in accordance with Project requirements and guidance. Supervisors shall ensure all operator qualification cards shall be maintained in accordance with Project requirements and guidance.

All documentation created as a result of compliance with this procedure is considered a Project record and will be managed in accordance with the *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545). Moab UMTRA Records are retained and maintained in accordance with federal orders, policies, and regulation, and all records created will be maintained and regulated according to the *Records Management Manual*.

6.0 References

29 CFR 1910.178 (Code of Federal Regulations), "Occupational Safety and Health Regulations, Powered Industrial Trucks."

41 CFR 102-5 (Code of Federal Regulations), "Federal Management Regulation, Home-To-Work Transportation."

41 CFR 109-38.301-1.5 (Code of Federal Regulations), "Official Use of Government Motor Vehicles, Public Contracts and Property Management, Authorization for transportation between residence and place of employment."

41 CFR 301-10 (Code of Federal Regulations), "Public Contracts and Property Management, Temporary Duty (TDY) Travel Allowances, Transportation Expenses."

31 USC 1344 (United States Code), "Money and Finance, Passenger Carrier Use."

31 USC 1349(b) (United States Code), "Money and Finance, Adverse Personnel Actions."

ANSI (American National Standards Institute) Standard B56.1, "Safety Standard for Low Lift and High Lift Trucks."

DOE (U.S. Department of Energy), *Crescent Junction Project Site Fugitive Dust Control Plan* (DOE-EM/GJ1235).

DOE (U.S. Department of Energy) *Moab UMTRA Project Health and Safety Plan* (DOE-EM/GJ1038).

DOE (U.S. Department of Energy), *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545).

DOE (U.S. Department of Energy), *Moab UMTRA Project Site Moab Fugitive Dust Control Plan* (DOE-EM/GJRAC2072).

DOE (U.S. Department of Energy), *Moab UMTRA Project Transportation Plan* (DOE-EM/GJ1639).

DOE (U.S. Department of Energy) Guide 580.1-1, "Department of Energy Personal Property Management Program."

DOE (U.S. Department of Energy) Order 460.1C, "Packaging and Transportation Safety."

Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving."

Appendix A.
Traffic Control Plan

Appendix A. Traffic Control Plan

A-1.0 Purpose

The purpose of this Traffic Control Plan is to ensure and promote traffic safety by providing orderly and predictable movement of all traffic and warnings necessary to ensure safe and informed operations during Moab Project activities.

A-2.0 Scope

This Traffic Control Plan applies to all RAC, TAC, DOE, subcontractor personnel, visitors, deliveries, and vendors who may access the Moab UMTRA Project operation and be involved in any activities.

A-3.0 Responsibilities

The Operations/Site Manager is responsible for ensuring the safe movement and operation of all vehicles and equipment, access and haul road maintenance, snow removal, sanding, and traffic control within the boundaries of the work site.

Project employees, subcontractors, DOE, visitors, vendors, and anyone intending to operate a motor vehicle within controlled areas of the Project will read and comply with all aspects of this plan.

A-4.0 General Requirements

A-4.1 Moab Project Access

Access to any Moab Project site will be controlled as necessary to maintain security and access to any work or controlled areas. All non-Project personnel entering a Moab Project site will be directed to report to the site Administration Office, signed in by the security guard, or directed by posted signs. Physical barriers and/or signs shall be posted as needed to prevent accidental intrusion into work or posted radiological areas. All signs and postings will be in compliance with regulatory requirements and specific Project designs.

Authorized non-Project personnel shall sign in at the site Administration Office or by the guard on duty and be advised of the traffic flow pattern if they access these areas. At times, these vehicles may have to wait to be escorted in designated areas.

Visitors who have signed in at the site Administration Office and need access to the site will be escorted by a person knowledgeable of the site's traffic patterns.

A-4.2 Pedestrians

Vehicular traffic in construction areas always have the right of way; pedestrians shall yield to vehicles at all times in these areas.

Pedestrians must be aware of their surroundings and be knowledgeable of traffic patterns. Pedestrians must make radio and/or eye contact with operators when entering their work areas. Pedestrian traffic in close proximity to vehicles/equipment should only occur after verbal and/or visual approval for such movement is granted by the operator.

Vehicle operators must always be cognizant of their surroundings and watch for pedestrians.

A-4.3 Inspection and Maintenance of Haul Routes

Roadways will be kept free of obstructions. Roadways within the boundaries of the work site will be inspected regularly and after significant weather (e.g., high winds, precipitation, snow melt) events. Site management will determine if routes are impassable due to running water or damage. If a driver/operator deems the roads are unsafe for travel, they will stop their vehicle safely, notify management of the condition, and request an evaluation of the area.

The RAC will maintain Project access and haul roads for the sites. Various roads on the site cross utilities (e.g., high-pressure gas lines, fiber optics, communication lines) and are not to be graded (worked on) unless prior authorization is obtained from the Operations/Site Manager. The RAC will also remove snow and apply traction material(s) as needed to access roads, parking lots, and haul routes critical to transportation and disposal activities.

A-4.4 Vehicle Safety Operations

Site workers who operate a company or Project-provided passenger vehicle will have a valid driver's license and have completed defensive driving training. All drivers and operators of equipment shall have a qualification card signed off by a subject matter expert for the particular equipment being operated. Operators of clean-side haul trucks at the Moab site shall have a valid commercial driver's license with a hazardous materials endorsement. Operators of heavy equipment will be qualified, have the experience, skills, and knowledge to operate their equipment, copies of relevant valid licenses, certifications, and/or training records on file with the TAC Training Coordinator.

A-4.5 Government Passenger Vehicle Inspections

Government passenger vehicles will have documented inspections before use and drivers will use Form 3003, Daily Vehicle Inspection Log (see Attachment 1) for this purpose.

Government passenger vehicle drivers will document daily vehicle usage on Form 2191 Monthly Vehicle Trip Ticket (see Attachment 2).

A-4.6 Signage and Traffic Control Devices

The RAC will furnish, install, and maintain the necessary traffic signage (e.g., stop signs, left-hand traffic) and/or traffic control devices within the site itself as is necessary for safe operations. Traffic control devices will be used to direct and assist vehicle operators with guidance and navigation tasks required to travel the site haul road system safely.

A-4.7 Dust Control

Dust control for the Moab Project site roadways will be performed in accordance with the *Moab UMTRA Project Moab Project Site Fugitive Dust Control Plan* (DOE-EM/GJRAC2072) and the *Moab UMTRA Project Crescent Junction Project Site Fugitive Dust Control Plan* (DOE–EM/GJ1235).

A-4.8 Spill Control and Response

If a vehicle or equipment experiences a leak during operation, that operation shall be stopped, repairs made, and the area where the leak or spill occurred shall be cleaned up. Cleanup and all materials used and collected in the cleanup shall be placed into a proper receptacle following Section 12.0 of the *Moab UMTRA Project Health and Safety Plan* (DOE-EM/GJ1038), which details a spill response plan.

A-5.0 Traffic Flow Requirements

A-5.1 Traffic Flow Pattern

The traffic flow pattern at each site will be controlled by the Operations/Site Manager.

Workers will use only those roads that have been designated for use and not travel off road without prior review of the intended route and approval from the Operations/Site Manager or designee. Personnel will receive instructions in the pre-shift safety meetings for specific traffic patterns changes. If changes are made to the traffic patterns during work activities, the effected drivers shall be notified of the changes. When a change in a traffic pattern interfaces with other traffic, the driver making the change shall notify all other traffic by radio of this change. Drivers will be trained and encouraged to minimize back-up maneuvers. When backing is required, workers will follow the site's backing policy. Operators of non-work vehicles shall announce their presence before entering the area or by instructions given in the work area IWP.

A-5.2 Speed Limits

All site vehicles and equipment will be operated at safe speeds, but in no case faster than the posted or designated speed limit. Speed limit signs shall be posted in appropriate areas and designated in IWPs/JSAs when necessary.

A-5.3 Passing and Following Distances

Passing stopped haul trucks, equipment, and other vehicles that are on roadways can be performed only after communications and acknowledgement with the stopped vehicle. When stopping, vehicles and equipment should be parked as far off of the haul road as possible unless they are in a designated parking area.

All passenger vehicles shall keep a safe distance between them and the vehicle or equipment preceding them. Tailgating is prohibited on all site roads.

Attachment 1.
Daily Vehicle Inspection Log 3003

Attachment 3. ***Moab UMTRA Project Motor Vehicle Procedure (continued)***

Attachment 1. Daily Vehicle Inspection Log 3003

DAILY VEHICLE INSPECTION LOG

SEAT BELTS shall be worn at ALL times the vehicle is in motion.

If the vehicle does NOT have a backing alarm, sound the HORN TWICE before backing.

Vehicle ID: | Make/Model: | Year:

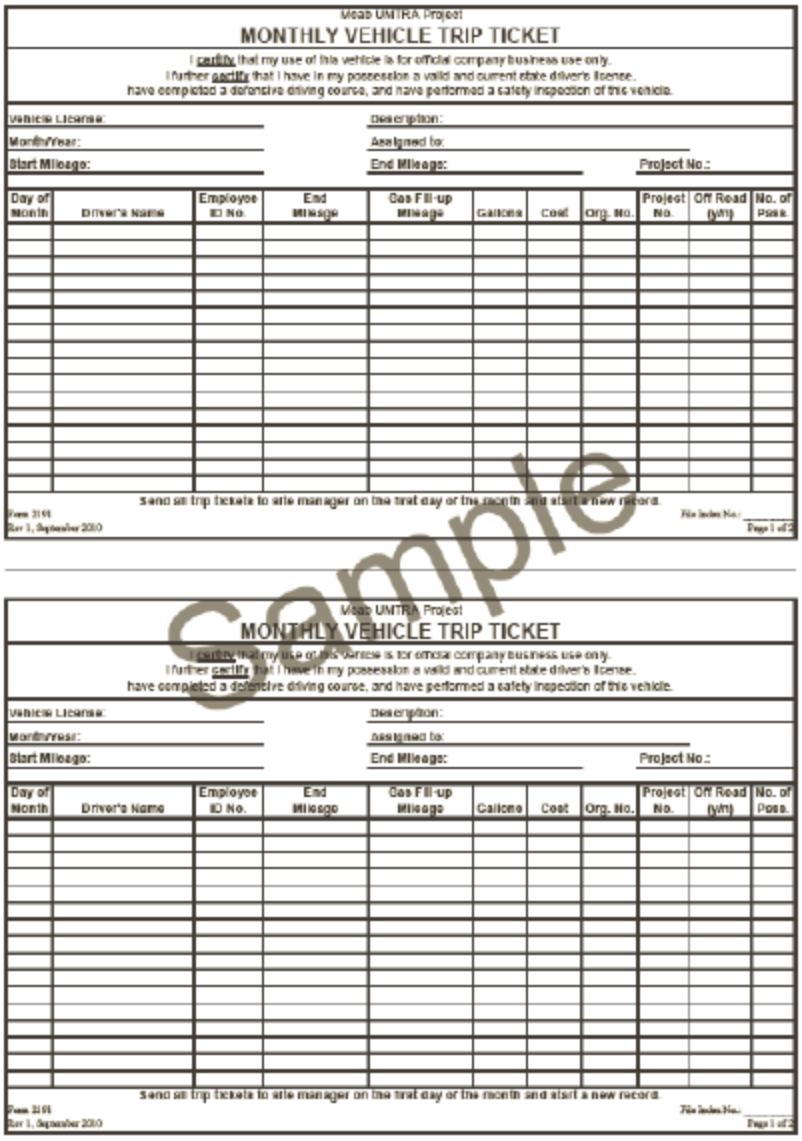
Date:	Inspected By:	Emergency Brake	Seat Belts	Mirrors	Gauges	Turn Signals	Horn	Tires	Emergency & First Aid Kits	Headlights	Parking Lights	Brake Lights	Backup Lights	Windshield Wipers	Spare Tire	Comments:

Form 3003
Revision 3 January 2013

Attachment 2.
Monthly Vehicle Trip Ticket Form 2191

Attachment 3. ***Moab UMTRA Project Motor Vehicle Procedure (continued)***

Attachment 2. Monthly Vehicle Trip Ticket Form 2191



Moab UMTRA Project

MONTHLY VEHICLE TRIP TICKET

I certify that my use of this vehicle is for official company business use only.
I further certify that I have in my possession a valid and current state driver's license,
have completed a defensive driving course, and have performed a safety inspection of this vehicle.

Vehicle License: Description:

Month/Year: Assigned to:

Start Mileage: End Mileage: Project No.:

Day of Month	Driver's Name	Employee ID No.	End Mileage	Gas Fill-up Mileage	Gallons	Cost	Org. No.	Project No.	Off Road (y/n)	No. of Pass.

Send all trip tickets to site manager on the first day of the month and start a new record.

Form 2191
Rev 1, September 2010

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MONTHLY VEHICLE TRIP TICKET

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I further certify that I have in my possession a valid and current state driver's license,
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