Office of Environmental Management – Grand Junction

UMTRA Project

Moab UMTRA Project Supplement Analysis for Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement

August 2013

U.S. Department of Energy

Office of Environmental Management

Prepared by 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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Contents

Table

Acronyms and Abbreviations

ARRA	American Recovery and Reinvestment Act of 2009
BLM	U.S. Bureau of Land Management
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
EIS	Environmental Impact Statement
EM	Environmental Management
EPA	U.S. Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FWS	U.S. Fish and Wildlife Service
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act of 1969
NRC	U.S. Nuclear Regulatory Commission
ROD	Record of Decision
SA	Supplement Analysis
UMTRA	Uranium Mill Tailings Remedial Action

1.0 Introduction

The U.S. Department of Energy (DOE) implemented Title 42 United States Code Section 4321, the National Environmental Policy Act of 1969 (NEPA) early on in the Moab Uranium Mill Tailings Remedial Action (UMTRA) Project. In accordance with "National Environmental Policy Act Implementing Procedures" codified at Title 10 Code of Federal Regulations Part 1021 (10 CFR 1021), DOE prepared this Supplement Analysis (SA) to determine if the Final Environmental Impact Statement (FEIS) for the Moab UMTRA Project (Project) remains adequate, if a new Environmental Impact Statement (EIS) is warranted, or if the existing EIS should be supplemented.

1.1 Background

The Project encompasses two locations: the former Moab uranium millsite and donated land totaling 480 acres, located approximately 3 miles northwest of Moab, and the Crescent Junction disposal site, located approximately 30 miles north of Moab, with 500 acres of DOE-owned land and an additional 936 acres in temporary withdrawal. Both sites are in Grand County, Utah.

1.2 History of the Project Sites

The Moab site is a former uranium ore-processing facility that was owned and operated by the Uranium Reduction Company and later by Atlas Minerals Corporation (Atlas) under a license issued by the U.S. Nuclear Regulatory Commission (NRC). When the mill ceased operations in 1984, a mill-tailings pile of approximately 16 million tons occupying 130 acres of the site remained.

Decommissioning of the mill began in 1988, and an interim cover was placed on the tailings pile between 1989 and 1995. In 1996, Atlas submitted a reclamation plan and an application to the NRC for an amendment to reclaim the tailings impoundment. Atlas filed for bankruptcy in 1998 and was released from future liability before the NRC released its regulatory guide NUREG-1531, "Final Environmental Impact Statement Related to Reclamation of the Uranium Mill Tailings at the Atlas Site, Moab, Utah," which proposed stabilizing the tailings pile in place.

In 2000, Congress enacted the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398), and in October 2001, DOE was given the responsibility for remediation of the Moab site. DOE instituted environmental controls and interim actions at the Moab site to minimize potential adverse effects to human health and the environment.

In July 2005, DOE issued *Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement* (DOE/EIS-0355), and in September 2005, DOE published *Record of Decision for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah* (ROD) to implement the preferred alternatives identified in the FEIS.

By implementing the preferred alternatives, DOE would remove the uranium mill tailings and other contaminated material from the Moab millsite and nearby off-site properties and relocate them to the Crescent Junction site, using predominantly rail transportation, and DOE would remediate contaminated ground water at the Moab site. Necessary infrastructure at the Moab sites was constructed, and in April 2009, shipments of mill tailings began.

The Crescent Junction site is located approximately 1 mile northeast of the junction of U.S. Highway 191 and Interstate 70. Five hundred acres of U.S. Bureau of Land Management (BLM) public domain lands were transferred to DOE for the disposal cell and buffer area, and an additional 936 acres of BLM land were temporarily withdrawn for DOE use to support the disposal cell activities. Infrastructure was constructed, including the first phase of the disposal cell, to accept the mill tailings.

1.3 Purpose of and Need for SA

Since the publication of the ROD for the Project, several NEPA reviews have been performed. The *Amended Record of Decision for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah*, was published in the Federal Register in February 2008. The Amended ROD provided the flexibility to use either truck or rail for all materials shipped. Other NEPA reviews were conducted for the domestic waterline from Thompson Springs, Utah, and the Green River construction waterline to Crescent Junction. In 2009, a review was performed for Project activities funded by the American Recovery and Reinvestment Act of 2009 (ARRA) (Public Law 111-5). In 2012, an adequacy review of the Moab site General Access Area for the existing maintenance road and proposed biking/hiking trail was performed.

DOE regulations (10 CFR 1021) require a Supplemental EIS to be issued when "there are substantial changes to the proposal" or there are "significant new circumstances or information relevant to environmental concerns." The NEPA reviews in 2008, 2009, and 2012 evaluated projected impacts of the proposed activities on resource areas and determined that the impacts did not substantially change from those identified in the FEIS and the ROD, nor did they represent significant, new circumstances or information relative to environmental concerns. Therefore, the Project issued determinations that there was no need to supplement the FEIS or prepare a new EIS for the Project.

DOE's NEPA implementing procedures require evaluation of a site-wide EIS at least every 5 years through preparation of an SA. This SA document compares the current conditions with the information contained in the FEIS, Amended ROD, and ARRA review of 2009. In addition, this SA considers changes proposed through 2018 and determines if there are substantive changes not included in the bounding analysis as part of the FEIS. In accordance with DOE regulations, this SA provides information to assist DOE with determining if the existing FEIS should be supplemented, a new EIS be prepared, or no further NEPA documentation is required at this time.

2.0 Project Mission, Programmatic, and Operational Changes

This section describes any mission, programmatic, or operational changes that have occurred since DOE issued the FEIS and conducted subsequent NEPA reviews, as well as changes anticipated through 2018.

2.1 Project Mission and Programmatic Changes

There has been no major change in the primary mission of the Project. The following operations are consistent with what was identified in the FEIS and in subsequent NEPA reviews.

- Remediation of the mill tailings and contaminated material from the tailings pile, surrounding areas, and vicinity properties
- Shipping tailings in containers by rail or truck to Crescent Junction
- Off-loading containers and placement of tailings in an NRC-approved disposal cell at Crescent Junction
- Implementing active ground water remediation in the shallow alluvium at the Moab site

Programmatic changes include revising the estimated total mass of mill tailings from 11.9 to 16.0 million tons and extending the estimated Project duration from 7 to 10 years to 16 to 19 years. Although the estimated quantity of tailings has increased by approximately 25 percent, the FEIS recognized "total estimates remain approximate and could increase again after more detailed site characterization is complete." The extended Project duration and larger estimated quantity of mill tailings will slightly increase cumulative impacts, but the disturbed acreage at the disposal site is essentially the same, at approximately 500 acres.

No significant mission or programmatic changes are anticipated through 2018.

2.2 Operational Changes and Projected Activities

Operations conducted by the Project have not changed significantly since the FEIS and subsequent NEPA reviews. These include administration, maintenance of facilities and equipment, testing and quality-assurance oversight of mill tailings for shipment and disposal activities, revegetation of disturbed areas, and air/water environmental monitoring.

No significant changes in these operations are projected through 2018 as excavation, shipping, disposal of tailings, and ground water remediation continue.

3.0 Analysis and Discussion of Changes to Environmental Impacts

The FEIS assessed environmental impacts in detail, including impacts to physical, biological, socioeconomic, cultural, and infrastructure resources that could occur while performing on-site remediation and subsequent off-site disposal utilizing rail and/or truck transportation. The following sections analyze major environmental topics, changes that have occurred since publication of the FEIS, and possible changes through 2018.

3.1 Land Resources

There have been minor, but notable, changes to land resources as a result of Project activities. There were numerous temporary disturbances of land resources during infrastructure construction. The installation of the Green River construction waterline was notable. More than 38 percent of the mill-tailings pile has been shipped and placed in the disposal cell. More than 130 acres of on-site contaminated soil areas have been remediated and reclaimed. Approximately 3 acres of remediated land near the Colorado River has been graded and seeded with wetland species. In addition, 40 acres of private land southeast of the tailings pile were transferred to DOE ownership following remediation of the property. This land transfer was not anticipated when the FEIS was issued. No significant change has occurred in planned contaminated acreage for the tailings pile or DOE off-pile areas.

The FEIS concluded land dedicated to the disposal cell would be unavailable for any other uses in perpetuity, and that remains the case. No significant change to the planned acreage for the disposal-cell footprint has occurred since publication of the FEIS.

Although the FEIS estimated that 98 vicinity properties would require remediation, only 15 properties have met the criteria for remediation, 12 of which have been completed.

Other than continued relocation and disposal of tailings, no significant changes in land resources are anticipated through 2018.

3.2 Air Quality

There have been minor changes in the air quality at the Project sites since DOE issued the FEIS. Increased levels of radon gas, direct gamma, and radioparticulates close to the tailings excavation, conditioning, and disposal activities have occurred as predicted in the FEIS. No public health guidelines have been exceeded. Both sites operate under Fugitive Dust Control Plan permits issued by the state of Utah, which limit dust-creating activities to 20 percent opacity.

The FEIS recognized “emissions of particulate matter would occur during construction and excavation operations and would require dust control measures.” Also, “operation of vehicles and construction equipment would result in emissions of criteria air pollutants.” Dust control at both sites has been stressed, and response to dusty conditions has been prompt and effective. The FEIS concluded National Ambient Air Quality Standards or Prevention of Significant Deterioration increment limits would not be exceeded, and that has been the case at both sites.

The Project does not anticipate any significant impacts to air quality through 2018.

3.3 Water Resources

Several site-related contaminants were identified in ground water at the Moab site, but ammonia is the main constituent of concern. Contaminated ground water discharges to the Colorado River and potential effects on surface water quality were evaluated in the FEIS.

3.3.1 Ground Water

DOE's proposed action in the FEIS was to implement active ground water remediation to intercept and control discharge of contaminated ground water from the Moab site to the Colorado River and apply ground water supplemental standards in accordance with 40 CFR 192, Subpart C, "Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings, Implementation." In 2003, DOE initiated a ground water interim action system that currently includes eight extraction wells designed to protect surface water quality and to recover contaminants before discharge to the river.

Interim action ground water remediation has been successful in limiting contamination that could reach the river. More than 200 million gallons of ground water have been extracted to date, preventing more than 785,000 pounds of ammonia and almost 4,000 pounds of uranium from reaching the river. Extracted ground water is pumped to a lined evaporation pond or to forced-air evaporators. In addition, freshwater (i.e., diverted river water) is injected through wells to reduce the discharge of contaminated ground water. DOE will continue to monitor and evaluate the effectiveness of the interim action system, which will likely become part of the final ground water remedy at the Moab site.

No ground water affects were anticipated at the Crescent Junction disposal site in the FEIS, and none have been noted. Monitoring will continue through 2018.

3.3.2 Surface Water

Degradation of surface water quality is of concern because of the potential effects on aquatic species in the Colorado River. If necessary, the ground water interim action system allows diversion of surface water (i.e., freshwater) into the adjacent backwater channels to assist with reducing ammonia concentrations in suitable habitat areas. The locations of suitable habitat areas in the river have changed since the FEIS, and the Project has adjusted its interim action to accommodate these changes. Monitoring of surface water has verified that DOE's interim action has been successful in limiting the impacts of contamination. DOE will continue to monitor the river and will implement surface water diversion as needed.

With the exception of ephemeral streams and impoundments, no surface water exists on either Project site. Storm-water design for the sites is to control and contain runoff per storm-water regulations. Structures and practices have been implemented as described in the FEIS.

3.3.3 Floodplains and Wetlands

The FEIS noted 100-year or larger flood events could release additional contamination to ground and surface water as a result of partial inundation of the tailings pile; however, impact on the river would be short-term. In addition, surface remediation would eliminate the potential for future catastrophic events associated with river flooding. Since the FEIS, remediation of the pile is 38 percent complete, but the potential for a catastrophic event will still exist until the pile is completely removed. No 100-year flood events have occurred since the FEIS was issued.

The FEIS identified 4.7 acres of wetlands and concluded that the wetlands and the floodplain could be adversely affected by surface remediation at the Moab site. Remediation has been performed in the floodplain and near wetlands, and it appears remediation impacts to date and in the future will be minimal to none. There are no floodplains or wetlands at the Crescent Junction site.

3.4 Biotic Ecology

3.4.1 Terrestrial Vegetation and Wildlife

The FEIS recognized short-term land disturbance would occur at both sites; however, disturbance was in sparse or poor habitat for wildlife. Refer to Section 3.4.3 for impacts on threatened and endangered species. Impacts of physical disturbance have been avoided or minimized by conducting site-specific investigations of vegetation and wildlife before any disturbance and have not identified the presence of any species of concern.

Revegetation has minimized the wildlife- and land-disturbance impacts, and numerous species of wildlife (e.g., deer, rabbits, coyotes, bobcat, fox, mountain lion, songbirds, turkeys, hawks) have been observed. At Moab, land disturbance during the next 5 years will be mainly limited to the tailings pile, with most of the surrounding area remediated. At Crescent Junction, further construction of the disposal cell will disturb additional land as predicted in the FEIS, but expansion will be conducted in phases, so potential impacts should be minimized.

3.4.2 Aquatic Wildlife

The FEIS estimated that contamination of the Colorado River from ground water discharge would be reduced to levels that would be protective of aquatic species within 5 to 10 years after implementation of active ground water remediation. Although a final ground water remedy has not been determined, results of DOE's interim action system have demonstrated contaminant concentrations have been reduced in backwater channels within the 10-year estimate. DOE anticipates that water quality and protection of aquatic species will be maintained through 2018.

3.4.3 Threatened and Endangered Species

DOE prepared a Biological Assessment, and the U.S. Fish and Wildlife Service (FWS) prepared a Biological Opinion for the Project. In its Biological Opinion, FWS determined that excavation at the Moab site, disposal at the Crescent Junction site, and active ground water remediation at the Moab site "may affect," but is "not likely to adversely affect," the threatened bald eagle, the endangered southwest flycatcher, the threatened Mexican spotted owl, the endangered black-footed ferret, the candidate yellow-billed cuckoo, and the candidate Gunnison sage grouse.

In addition, FWS determined that there would be no effect for the threatened Jones' cycladenia, the threatened Navajo sedge, and the endangered clay phacelia, as these species are not known to occur in the Project areas. Of the potentially endangered or threatened species, only the bald eagle has been observed as an occasional visitor on the Project sites to date. The bald eagle was removed from the endangered species list in 2007.

The Biological Opinion reviewed the Project's impact to four endangered fish species and concluded that the Project would not likely jeopardize the continued existence of the Colorado pikeminnow, humpback chub, bonytail, and razorback sucker and is not likely to result in destruction or adverse modification of critical habitat. DOE has implemented interim ground water remediation and has reduced negative effects associated with ground water contamination of the Colorado River, and DOE plans to continue that remediation.

3.5 Cultural Resources

Field surveys were conducted at the Moab and Crescent Junction sites and along the water pipelines. The FEIS concluded that cultural resources would probably be adversely affected in these areas. Memorandums of Agreement (MOAs) were prepared for the Moab and Crescent Junction sites with the Utah Division of State History, Utah Department of Transportation, BLM, and the Uintah-Ouray Ute Tribe. The cultural resource sites identified during field surveys have been avoided or mitigated per the MOAs. Monitoring of cultural resources and reporting mitigation results continue to be performed. No additional cultural resources or concerns have been noted during the extensive construction and remediation. During the next 5 years, there is a low probability of discovering additional cultural resources.

3.6 Visual and Acoustic Resources

The FEIS predicted that removal of the tailings pile would result in beneficial visual impacts at the Moab site, and disposal at the Crescent Junction site would have a negligible visual impact, depending on the viewing location. Short-term, negative impacts at the Moab and Crescent Junction sites were predicted during remediation and disposal; long-term impacts at the Crescent Junction site were predicted due to contrast of the disposal cell with the surrounding landscape for most observers traveling Interstate 70. Efforts have been implemented to mitigate nighttime lighting with amber light directed downward. During the next 5 years, the same visual impacts are expected to continue during remediation and disposal.

Noise generated by construction and operations were estimated during the FEIS process to be lower than 65 A-scale decibels at any permanent receptor location. The one exception in the FEIS was remediation activities at vicinity properties in Moab. To date, measurements have indicated the noise level has been within the predicted range. Noise levels during the next 5 years will continue to be within the FEIS levels.

3.7 Infrastructure

3.7.1 Waste Management

Estimated mill tailings quantities have increased by approximately 25 percent due to more detailed characterization, but disturbed and disposal-cell acreage is similar to FEIS predictions. Contaminated ground water quantities remain within FEIS estimates and continue to be eliminated through evaporation or by being sprayed on the pile. Estimates of solid waste remain lower than the predicted 1,040 cubic yards generated annually; local landfills can accommodate this volume.

Most of the sanitary waste is directed to leach fields, with small amounts transported to local facilities. Used oil and batteries are recycled. Waste streams will continue at current rates during the next 5 years. DOE green initiatives and sustainability practices reduce waste by recycling plastic bottles, aluminum cans, paper, and cardboard. A Waste Management Plan that provides guidelines for waste management has been prepared.

3.7.2 Electrical Power Supply

The demand for electrical power has been met with minimal upgrades to local capacity. At the Moab site, power was available on site, and at Crescent Junction, a 1-mile power line was constructed. Generators produce relatively small amounts of electricity at remote sites. Electrical usage will continue to be accommodated by existing facilities.

3.7.3 Water

Pump inlet stations on the Colorado and Green Rivers supply the Project sites with water for non-potable purposes using DOE water rights. The Moab site utilizes an existing on-site pump station; however, a 20.5-mile pipeline, several pump stations, and a storage pond were constructed for the Crescent Junction site. Water usage is only a small portion of the water rights DOE owns. Potable water is hauled to the Moab site from the Moab municipal water system, and Crescent Junction is supplied by the Thompson Springs municipal water system. Water infrastructure systems are in place, and no changes are anticipated.

3.8 Transportation and Traffic

Transportation predominantly by rail was the preferred alternative selected in the FEIS and implemented for the Project. A small portion of the tailings-pile material was expected to be oversized, and trucks could be used to transport less than 10 percent of the pile volume to Crescent Junction. In 2008, an Amended ROD was issued, allowing DOE flexibility to transport mill tailings by either rail or truck. To date, the vast majority of material has been transported by rail. In the next 5 years, excavation of oversized material is expected and will be transported primarily by trucks; however, the majority of tailings will continue to be transported by rail.

Truck/vehicle traffic in central Moab was expected to increase by 2 to 3 percent due to remediation of vicinity properties and transportation of workers and borrow material. Traffic increases of less than 10 percent on U.S. Highway 191 were projected in the FEIS. To date, those estimates have proved to be high, and future traffic volume and its impact will remain lower than estimated.

3.9 Socioeconomics

Socioeconomic costs and benefits (e.g., annual cost, output of goods and services, labor earnings, job generation) were similar or less during infrastructure construction and double shifts during ARRA than estimates in the FEIS. The current level of Project activity and shipments of mill tailings have resulted in lower annual socioeconomic costs and benefits than evaluated in the FEIS, but reduced activity has extended the Project duration and will, therefore, increase the overall socioeconomic costs and benefits. The expected level of Project activity during the next 5 years will continue to be lower than FEIS projections.

3.10 Human Health

3.10.1 Workers

No construction-related fatalities from industrial accidents were predicted in the FEIS, and none have occurred; however, remediation activities were estimated to result in the exposure of workers to very small amounts of radiation that would result in about one latent cancer fatality among the total worker population.

An extensive Radiation Protection Program has been established to monitor worker exposure, and results indicate worker-protection guidelines established by the U.S. Environmental Protection Agency (EPA) and DOE have not been exceeded. The Project maintains more stringent goals for worker exposure than EPA or DOE guidelines; these goals will be maintained for the next 5 years.

3.10.2 Public

The FEIS predicted latent cancer fatalities from exposure to all sources of Project-related radiation for members of the public were approximately one latent cancer fatality associated with the Moab site; lower rates were associated with the Crescent Junction site and vicinity properties. DOE Order 458.1, "Radiation Protection of the Public and the Environment," establishes guidelines for atmospheric emissions of radon-222, gamma radiation, and radioparticulates. The Project monitors public exposure through a network of stations on the site perimeters, the closest residents, and remote background locations. No public exposure limits or guidelines have been exceeded to date, and public exposure is expected to be maintained below limits and guidelines during the next 5 years.

3.11 Cumulative Impacts

The Moab and Crescent Junction sites are located in rural areas with no other major industrial or commercial centers nearby. No past, present, or reasonable future actions are anticipated to result in cumulative impacts when considered with the preferred alternatives in the FEIS. However, seasonal tourism in and around Moab and, to a lesser extent, at Crescent Junction, could have a cumulative impact on traffic congestion in central Moab. Due to the extended Project life beyond the FEIS estimate, minimal increased tourist traffic and public exposure will also be extended, but are of insignificant impact.

4.0 Operating Basis

The Project has progressed through three phases since the FEIS was issued: design, construction, and transportation and disposal.

The significant design features included the mill tailings handling and transportation system, Moab hillside road/rail bench, lidding facility, Crescent Junction disposal cell, disposal-cell cover, Crescent Junction rail configuration, Crescent Junction construction-water source, and upgraded rail crossings. The majority of the design was accomplished in less than 1 year.

Construction of the Project infrastructure and mobilization of equipment and containers were performed over approximately 1 year.

Shipment of mill tailings began in April 2009. Transportation of mill tailings started with trains of 88 containers, each containing approximately 33 tons, with one train shipment daily, 4 days a week. During ARRA, transportation increased to 144 containers per train, each carrying between 33 and 39 tons, with two train shipments daily, 5 days a week.

Since ARRA funding has been expended, transportation has dropped to trains of 136 containers, with one train shipment daily, 4 days a week. Excavation and conditioning of mill tailings occur at the Moab site; transportation is primarily by rail to the disposal cell at Crescent Junction, where containers are off-loaded, and material is dumped into the cell. The empty containers are then returned to Moab. The mill tailings are compacted in layers in the cell, and a cover of soil and rock is placed on top. The following table provides a summary of the Moab Project's transportation operating basis in terms of tons of mill tailings shipped and disposed.

Table 1. Transportation Operating Basis

Fiscal Year	2009	2010	2011	2012	2013*
Tons of Tailings	334,302	2,015,505	2,195,560	1,031,995	690,000

*Estimate

The 2009 NEPA review evaluated the increased rate of shipments that would result from ARRA work performed in fiscal years 2009 to 2011. This rate was found to be within the bounds of the FEIS. The Project's operating basis during the next 5 years will be transportation and disposal at a rate of approximately 650,000 tons per year. This rate is lower than what was estimated in the FEIS.

5.0 Conclusion

The Moab UMTRA Project's FEIS, subsequent Amended ROD in 2008, and ARRA review in 2009 evaluated the potential impacts of Project activities. This SA compared conditions since publication of the FEIS with impacts projected in the FEIS and evaluated potential impacts between 2013 and 2018 to determine if the impacts identified in the FEIS remain valid.

These analyses indicate that for the period evaluated in this SA (2005 to 2013), the current plan is essentially the same as that evaluated and identified in the FEIS, Amended ROD, and ARRA review. Project estimates for increased tailings volume and extended completion date, which exceed the bounds of the FEIS, do not result in substantial changes from the FEIS, nor do they present significant new circumstances or information relative to environmental concerns. In addition, there have been no significant changes to operations or mission and only very small changes to the environment.

Based on the evaluation herein, the conclusion of this SA is that identified and projected impacts, including cumulative impacts, have been and will continue to be within the bounds of those identified in the FEIS. Therefore, there is no need either to supplement the FEIS or prepare a new EIS.

6.0 NEPA Determination

The U.S. Department of Energy (DOE) Office of Environmental Management (EM) Moab Uranium Mill Tailings Remedial Action (UMTRA) Project (Project) has prepared this Supplement Analysis (SA) to determine if the *Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement* (FEIS) remains adequate, or if additional documentation under the National Environmental Policy Act (NEPA) is required. This SA has been prepared in accordance with DOE requirements under Title 10 Code of Federal Regulations Part 1021.330 (d) (10 CFR 1021.330 (d)) "National Environmental Policy Act Implementing Procedures, Programmatic (including site-wide) NEPA documents," which requires the evaluation of site-wide Environmental Impact Statements at least every 5 years, and 10 CFR 1021.314, "National Environmental Policy Act Implementing Procedures, Supplemental environmental impact statements," which outlines the type of information to be presented in an SA.

The Record of Decision (ROD) for the Moab Project FEIS, published in September 2005, announced DOE's decision to implement the preferred alternatives evaluated in the FEIS by (1) removing the uranium mill tailings and other contaminated materials from the Moab millsite and nearby off-site properties (vicinity properties) and relocate them at the Crescent Junction site, using predominantly rail transportation; and (2) implementing active ground water remediation at the Moab site. An Amended ROD was published in February 2008 that allowed DOE to use either rail or truck to transport the materials. This SA compared the current conditions with the information contained in the FEIS, Amended ROD, and ARRA NEPA review of 2009. In addition, this SA considered changes proposed through 2018 to determine if there are substantive changes not included in the bounding analysis as part of the FEIS. A Notice of Availability of this SA will be published in local newspapers, posted on the Project website, distributed to the Moab Tailings Project Steering Committee, and made available in the Public Reading Room.

Based on the analysis of the information presented in this SA, and with the concurrence of counsel, the undersigned hereby determine that the current conditions of the Moab UMTRA Project do not constitute a substantial change from the FEIS or result in significant new circumstances or information relevant to environmental concerns in accordance with 40 CFR 1502.9, "Environmental Impact Statement, Draft, final, and supplemental statements." Therefore, pursuant to 10 CFR 1021.314, no further NEPA documentation is required. Should there be a change in the information upon which this analysis is based, a revised SA must be submitted and approved.

E Gabrielle Rose — October 1, 2013

EM Consolidated Business Center Counsel — Date

Donald R Metzler — August 30, 2013

Donald R. Metzler — Date
Moab Federal Project Director

10/1/13

Jack Craig — Date
EM Consolidated Business Center Director

7.0 References

10 CFR 1021 (Code of Federal Regulations), "National Environmental Policy Act Implementing Procedures."

40 CFR 192 (Code of Federal Regulations), Subpart C, "Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings, Implementation."

40 CFR 1502.9 (Code of Federal Regulations), "Environmental Impact Statement, Draft, final, and supplemental statements."

42 USC 4321 (United States Code), National Environmental Policy Act of 1969.

DOE (U.S. Department of Energy), *Amended Record of Decision for the Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah*, February 2008.

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DOE (U.S. Department of Energy), Order 458.1, "Radiation Protection of the Public and the Environment."

NRC (U.S. Nuclear Regulatory Commission), NUREG-1531, "Final Environmental Impact Statement Related to Reclamation of the Uranium Mill Tailings at the Atlas Site, Moab, Utah," March 1999.

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

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