DOE/EIS-0355 SA-3

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

May 2022

U.S. Department of Energy

Office of Environmental Management

Prepared by the Technical Assistance Contractor under contract number DE-EM0005014
for the U.S. Department of Energy Office of Environmental Management, Grand Junction, Colorado.

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Acronyms and Abbreviations

ARRA	American Recovery and Reinvestment Act of 2009
BLM	U.S. Bureau of Land Management
CBCH	Canyonlands Back Country Horsemen
CEQ	Council for Environmental Quality
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
DOT	U.S. Department of Transportation
EIS	Environmental Impact Statement
EM	Environmental Management
EPA	U.S. Environmental Protection Agency
FEIS	Final Environmental Impact Statement
USFWS	U.S. Fish and Wildlife Service
LCF	Latent Cancer Fatality
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NRC	U.S. Nuclear Regulatory Commission
pCi/g	Pico curies per gram
REM	Roentgen Equivalent Man
ROD	Record of Decision
RRM	Residual Radioactive Material
SA	Supplement Analysis
TAC	Technical Assistance Contractor
UDOT	Utah Department of Transportation
UMTRA	Uranium Mill Tailings Remedial Action
USFWS	United States Fish and Wildlife Service
VP	Vicinity Properties

1.0 Introduction

The Department of Energy (DOE) has prepared this supplement analysis (SA) to evaluate the existing final environmental impact statement (FEIS) (listed below) based on new information that could have a bearing on previously analyzed environmental impacts. Based on the analysis in *Remediation of the Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement* (July 2005), DOE determined that new information regarding estimated mass of tailings, duration of the Project and a new circumstance regarding artwork installation on Project property would be covered in this Supplement Analysis.

The Council on Environmental Quality (CEQ) National Environmental Policy Act (NEPA) regulations direct agencies to prepare a supplement to either a draft or FEIS if the "agency makes substantial changes in the proposed action that are relevant to environmental concerns" or there are "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." (40 CFR 1502.9(d)(1)(i)–(ii)) DOE's NEPA regulations state that when it "is unclear whether or not an environmental impact statement (EIS) supplement is required, DOE shall prepare a Supplement Analysis." (10 CFR 1021.314(c)) This SA provides sufficient information for DOE to determine whether (1) to supplement an existing FEIS, (2) to prepare a new FEIS, or (3) no further NEPA documentation is required. (10 CFR 1021.314(c)(2)(i)–(ii))

Existing FEIS evaluated in this SA:
Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement, July 2005 (DOE/EIS-0355)

Changes to the Proposed Action or New Circumstances or Information
The FEIS states that, "DOE estimates the contaminated material at the Moab site and vicinity properties has a total mass of approximately 11.9 million tons." The FEIS also estimated that the Project would be completed between 2011 through 2014. The 2013 document, *Moab UMTRA Project Supplement Analysis for Remediation of the Moab Uranium Mill Tailings Grand and San Juan Counties, Utah, Final Environmental Impact Statement* (DOE/EIS-O355 SA-1), stated that the project duration would extend from 16 to 19 years from the start date (2025 to 2028) and the estimated total mass of mill tailings was revised from 11.9 to 16.0 million tons. This change was mentioned in the 2013 Supplement Analysis; however, there was no analysis of the resource areas as discussed in the FEIS.

This SA was created to analyze the environmental impacts of the increase in tailings mass and project duration. The most recent estimated weight of total residual radioactive material (RRM) to be relocated from the Moab site to the Crescent Junction disposal site is approximately 16 million tons, however a bounding number of 20 million tons is used for this analysis. The 20 million tons is based on the inherent uncertaintyof future remedial actions prior to final closure. The 16 million tons may slightly underestimate the final total cumulative residual radioactive material removal at completion of the project. Therefore, the 20 million tons bounding condition has been established for this SA. The additional volume accommodates potential additional sub-pile excavation, excavation of contaminated soil outside of the source term area (ex. old mill site and Atlas Building areas) and material that is excavated based on other characterization that will be part of the closure process. Project duration may vary slightly from the analysis that is presented based on completion in 2025-2028. The recent contract award (February 2022) is for 10 years; therefore, the project could last potentially through 2032.

The total mass of the tailings pile has not changed. The original estimate of 11.9 million tons was not accurate. The *Remedial Action Plan and Site Design for Stabilization of Moab Title I Uranium Mill Residual Radioactive Material at the Crescent Junction, Utah, Disposal Site* (DOE/EMGJ1547, 2008) included a calculation based on the best information available at the time. This number incorporated characterized tailings, interim cover, off-pile materials, sub pile materials and vicinity properties with a final water weight representing the material after drying for optimal compaction in the disposal cell. Sources of the discrepancies include the fact that the amount of vicinity property (VP) material is much less than original estimates; although, the VP amount is a small part of the total. Off-pile material is likely to be larger than estimated because off-pile estimates were based on 40 CFR, Part 192, Subpart C cleanup criteria of 15 picocuries per gram (pCi/g). We now know that remediation will be performed to 5 pCi/g (plus background, 2pCi/g). Therefore, more material will be excavated and placed in the Crescent Junction Disposal Cell than originally estimated.

The differences resulting from the projected mass of tailings and the anticipated duration of the Project impacts some associated environmental impacts that have not been assessed until this Supplement Analysis.

New Circumstance

The Moab Site's northeastern site property boundary is shared with Arches National Park and encompasses a portion of the Old Spanish Trail, a National Historic Trail. The Canyonlands Back Country Horsemen (CBCH) group, located in Moab, Utah, has asked DOE for permission to install four metal art sculptures, also known as silhouettes, to commemorate the trail along a public recreational path that crosses DOE Property (Figure 1).

This portion of the property which is located along U.S. Route 191 (Figure 2) across from the tailings pile was remediated in 2006 by the DOE. The location was chosen because it is easily accessible, and it is near the Courthouse Wash Parking area which is on DOE Property within the Utah Department of Transportation (UDOT) Right-of-Way. This parking area contains several kiosks including one that describes the history of the Old Spanish Trail. Further, the Moab Canyon Recreational Pathway is stamped with "Old Spanish Trail" markings on the pavement. Installation of the proposed art would be consistent with the use of the DOE property in this area.

The Grand County UMTRA Project Liaison, who supports communication between the DOE and associated stakeholders, has received letters of support from Arches National Park, the Utah Department of Transportation, and Grand County.

The proposed project is consistent with other projects approved in this specific area of the DOE property. In addition, implementation of this proposed project will continue to support fostering existing relationships between the DOE site and local stakeholders. When a request to access DOE property is received from a member of the public, the request is sent to the Federal Cleanup Director for consideration. If the request is approved, staff members then coordinate a Memorandum of Understanding or a Real Estate license with the parties, complete a NEPA review, finalize legal review and initiate an Environmental Checklist.

The scope of the work includes coordinating approval of a Real Estate License with the CBCH and installing the four silhouettes. Prior to starting the work, a line locate will be conducted. All of the work will be completed by CBCH volunteers. The silhouettes are light enough to be carried by two people. The installation procedure received from CBCH includes:

1) Parking in the Courthouse Wash Public Parking Lot to transport (walk) supplies over to the location of the art installation.
2) Eight holes will be hand-excavated (24" deep and 9" in diameter) and filled with Quikcrete cement that will be hand mixed with water in a plastic tub.
3) The 18" mounting tangs will be placed in the ground. Wooden stakes will be placed in the ground as bracing for the silhouettes.
4) The soil from the excavation will be raked out into the surrounding 30 ft.
5) Once the cement is dry, the bracing stakes are removed.
6) Any maintenance on the art is the responsibility of the CBCH.

The purpose of this Supplement Analysis is to investigate how the new information and new circumstance impact the environmental resource areas that were discussed in the FEIS.

Figure 1. CBCH Silhouette Artwork

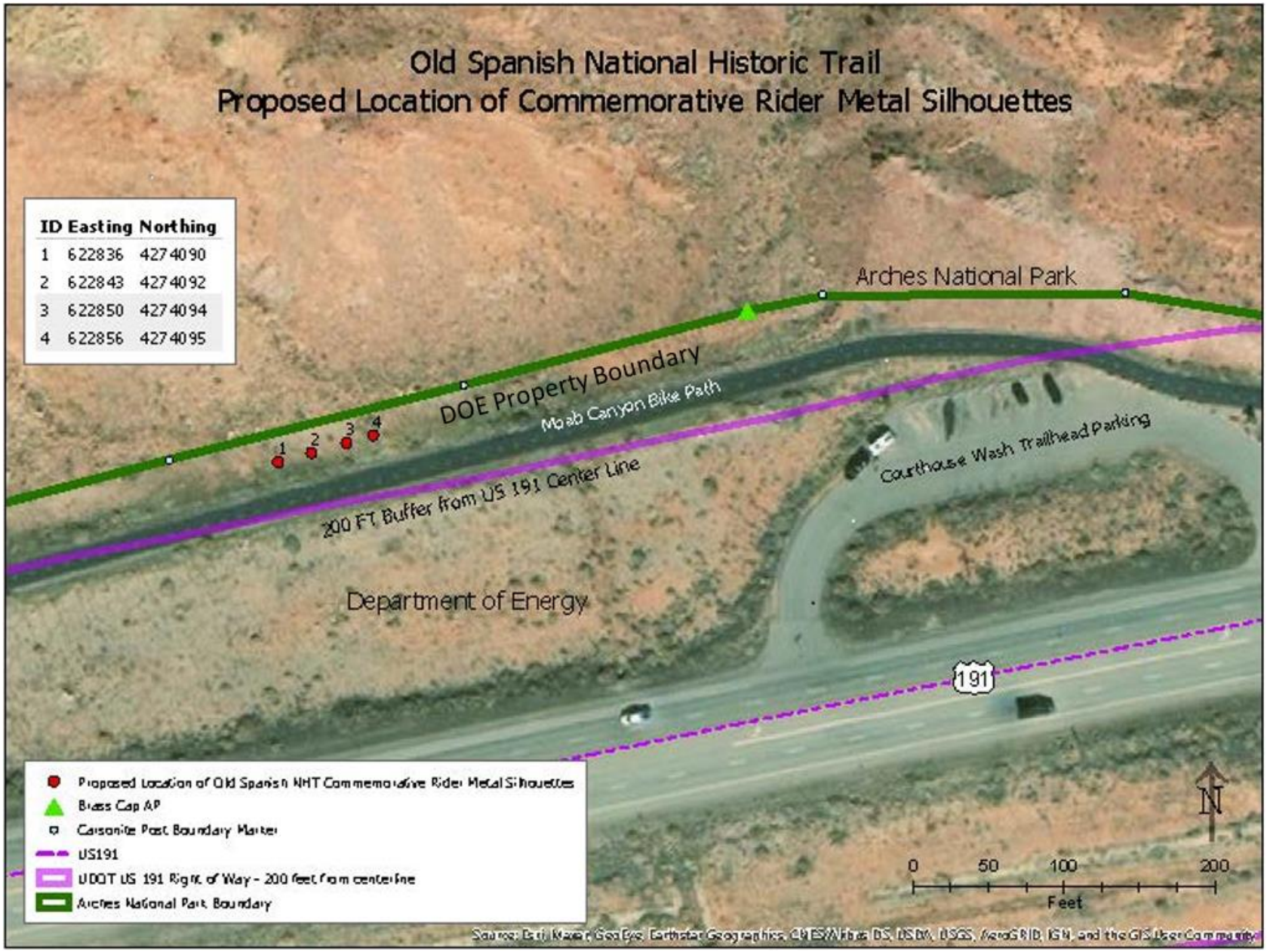

Figure 2. Location of the Proposed Artwork

1.1 Background

The FEIS (2005) was prepared to evaluate whether the uranium tailings pile and associated material would be left on-site or transported to an engineered disposal cell in one of three locations (White Mesa, Klondike Flats, and Crescent Junction) and to evaluate the most appropriate mode of transportation of the contaminated material (truck, rail, or slurry pipeline). In addition, the FEIS documented the potential effects of the tailings on the groundwater and surface water at the Project location. The *Record of Decision of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah* (2005) stated that the preferred alternative was to transport the tailings via rail to Crescent Junction, UT. An Amended Record of Decision of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah (2008), allowed for some oversized material to be transported via truck.

This Supplement Analysis examines the resources areas that were originally discussed in the FEIS to determine if there is a significant environmental impact related to the increase in estimated tailings mass and project location and the installation of silhouette artwork on Project property.

Section 2.0 summarizes the resources areas that not significantly impacted, and Section 3.0 summarizes the resource areas that are impacted by the new information.

2.0 Resource Areas Not Analyzed in Detail in This SA

DOE screened other activities analyzed in detail in the Final EIS that are not analyzed in detail in this SA. The following resource areas are not analyzed because they are not significantly affected by the new information:

Table 1. Resource Areas Not Analyzed in Detail in this SA

Resource Area Not Analyzed in Detail in this SA	Basis
Air Quality	The FEIS states that no criteria air pollutant emission concentrations would exceed National Ambient Air Quality Standards as a result of construction and operations at the Moab and Crescent Junction Sites. Fugitive dust will continue to be monitored by personnel with EPA Method 9 opacity training and in compliance with the *Moab UMTRA Project Moab Site Fugitive Dust Control Plan* (DOE-EM/GJ2072) and the *Moab UMTRA Project Crescent Junction Fugitive Dust Control Plan* (DOE-EM/GJ1235).
Geology	No impacts to geology identified were identified in the FEIS.
Climate and Meteorology	No impacts to climate and meteorology were identified in the FEIS.

Table 1. Resource Areas Not Analyzed in Detail in this SA "continued"

Groundwater	Groundwater remediation continues as a best management practice, removing contaminant mass from the groundwater system that discharges into the Colorado River. Observation wells located near the extraction well field have displayed contaminant concentration gradual decreases over the past 10 years. The extraction system, in combination with the freshwater injection and surface water diversion systems, have proven effective in reducing the ammonia concentrations that discharge into Colorado River side channels adjacent to the site. Depending upon Colorado River flows, these side channels may develop into suitable habitats for endangered fish species. The Project plans to continue operation of extraction as a mitigation measure as long as the tailings pile remediation continues. In addition, the Project is scheduled to complete a draft of the Groundwater Compliance Action Plan, which will include the long-term strategy for groundwater remediation at the site. The increase in tailings mass and Project duration and proposed artwork installation will not impact the groundwater remediation system.
Surface Water	Based on the FEIS (Section 2.3.1.4), consultations with U.S. Fish and Wildlife Service (USFWS) concluded that an elevated concentration of site-related groundwater contaminants (ammonia) reaching the Colorado River posed immediate risk to endangered fish and critical habitat. 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. Surface water monitoring has verified that DOE's interim action has successfully limited the impacts of contamination. DOE will continue to monitor the river and will implement surface water diversion as needed. The increase in tailings and the longer duration of the project will not have a significant impact on the surface water. Compliance with the Biological Opinion will continue through the duration of the project. The proposed artwork installation will not have an impact on surface water.
Floodplains and Wetlands	The 100-year floodplain for the Moab Wash and Colorado River and the 500-year floodplain of the Colorado River occupy more than one-third of the Moab Site. The increase in tailings and the longer duration of the project will not impact the direct footprint of the area remediated at the Moab Site. The *Moab UMTRA Project Flood and Drought Mitigation Plan* (DOE-EM-GJTAC1640) describes the action levels and protective measures taken to avoid damage and an interruption in operations. There are no floodplains or wetlands at the Crescent Junction Site. The proposed artwork installation will not be located in a floodplain or wetland.

Table 1. Resource Areas Not Analyzed in Detail in this SA "continued"

Aquatic Ecology	The Biological Opinion in the FEIS states the potential Incidental Take of juvenile endangered fish species due to ammonia contaminant discharge on the Colorado River adjacent to the Project. With the increase in tailings estimate and the longer duration of the Project, there is an increased potential of incidental take (since the extent of take anticipated is on a per-year basis). Groundwater monitoring will continue, and the Reasonable and Prudent Measures listed in the Biological Opinion will be conducted for the length of the Project and possibly longer depending on the final outcome of the Groundwater Compliance Action Plan. There are no aquatic ecology issues at the Crescent Junction Site. There are no aquatic ecology impacts associated with the proposed artwork installation.
Terrestrial Ecology	The FEIS recognized short-term land disturbance would occur at both sites. However, disturbance was in sparse or poor habitat for wildlife. Impacts of physical disturbance have been avoided or minimized by conducting site-specific investigations of vegetation and wildlife before any disturbance. Land disturbance will be limited to the tailings pile, with most of the surrounding area remediated. Since the increase in tailings mass is related to a discrepancy in the original estimate, the actual amount of tailings removal is the same as was anticipated. The FEIS Biological Assessment states that at Crescent Junction it is unlikely that any species of concern (bald eagle and black-footed ferret) would be adversely affected, and potential adverse effects would be considered discountable. There are no terrestrial ecology impacts associated with the proposed artwork installation.
Land Use	The footprint of the disposal cell and associated facilities is small in comparison to the surrounding area. The footprint of the disposal cell will increase incrementally, but there are no significant impacts noted with the increase. The proposed artwork installation meets the current recreational land use of the Moab Canyon Pathway.
Cultural Resources	A Memorandum of Agreement (MOA) with the Utah Division of State History, Utah Department of Transportation (UDOT), the Bureau of Land Management (BLM), and the Uintah-Ouray Ute Tribe states that cultural resources will be monitored before and during excavation of the disposal cell. Annual monitoring has not identified any damage to the neighboring cultural sites. The incremental increase of the Crescent Junction disposal cell footprint will not extend into areas with cultural resources. The Moab Project Cultural Resources Management Plan (GJO-2002-390-TAC) identifies Old Highway 160 as a historical feature. The Moab Canyon Pathway was constructed along the old highway. There were no other features noted in the vicinity of the proposed art installation.

Table 1. Resource Areas Not Analyzed in Detail in this SA "continued"

Noise and Vibration	The FEIS did not recognize any significant impacts on noise and vibration at the Moab or Crescent Junction Sites. Noise generated at the Moab Project and Crescent Junction sites were within the 65 A-weighted decibel standards. The increase in tailings mass and project duration will increase noise and vibration incrementally. The proposed artwork installation would not create any significant impacts on noise and vibration since all of the work would be done by hand.
Environmental Justice	No adverse impacts were noted in the FEIS, with the increase in tailings mass and duration, nor the proposed artwork installation.

3.0 Resource Areas Analyzed in Detail in this SA

The resource areas shown in Table 2 are analyzed in detail in this SA.

Table 2. Resource Areas Analyzed in Detail in this SA

Comparison of Potential Environmental Impacts					
	Summary of Potential Impacts in the FEIS	**Increase in Tailings/Soil**		**Artwork Installation**	
Resource Area Analyzed	Summary of Potential Impacts in the FEIS	Summary of Potential Impacts as a Result to Changes to the Proposed Action	Difference in Potential Impacts	Summary of Potential Impacts as a Result to New Circumstances or Information	Difference in Potential Impacts
Soils	The FEIS stated that the soil would be remediated to 15 pCi/g, however 40 CFR 192.12 states that the top 6-inches of soil must be remediated to 5 pCi/g over background unless 6-inches of backfill topsoil (of 5 pCi/g over background or less) is placed. The FEIS states that the Crescent Junction disposal cell will be 420 to 435 total acres and 10 to 20 ft below grade.	It is not anticipated that backfill will be brought onto the site. This will increase the amount of soil remediation necessary to complete the Project. Thus, extending the life of the Project. With a total of 20 million tons of tailings, the estimated area of the disposal cell is 308 acres. The disposal cell will extend up to 25 ft below grade.	Due to different clean up standard, more material will need to be removed than originally estimated in the FEIS. The disposal cell design would need to be changed to accommodate more tailings. No significant changes to impacts. The total acreage of the disposal cell with 20 million tons is less than what was originally estimated in the FEIS. The cell will extend 5 ft further below grade that what was anticipated in the FEIS, however this does not present a significant impact due to the extent (over 4,000 ft thick) of the Mancos Shale, which acts as an aquitard.	The location where the art would be installed was remediated by the Project in 2006. To install the artwork, eight holes would be hand dug to a depth of 24 inches by 9 inches wide. Excess soil would be placed in the barren areas adjacent to the installation area. A utility survey will be conducted prior to excavation activities.	Eight holes will be dug for artwork installation, with minimal impacts to soil in that location.

Infrastructure	Section 4.2.12.1 of the FEIS estimates that the potable water use will be 12,500 gallons per day and non-potable use was estimated to be 70 acre-feet per year.	Current estimates potable water use is approximately 2,325 gallons per day and non-potable water use is approximately 123 acre-feet per year.	The current usage is far below the DOE existing water right of 4,560 acre-feet per year.	The CBCH will supply the water to mix the "Quikcrete". Inaddition, they will supply theirown hand tools to install the artwork and all construction materials will be fully funded by CBCH. It was determined and documented by Grand County maintenance crew that the artwork will not interfere with any maintenance issues on the pathway.	No significant impacts.

Table 2. Resource Areas Analyzed in Detail in this SA (continued)

Resource Area Analyzed	Summary of Potential Impacts in the FEIS	Summary of Potential Impacts as a Result to Changes to the Proposed Action	Difference in Potential Impacts	Summary of Potential Impacts as a Result to New Circumstances or Information	Difference in Potential Impacts
Waste Management	Section 4.2.13 of the FEIS estimated 1,040 cubic yards of solid waste per year.	Current estimates for solid waste are approximately 243 cubic yards per year.	The solid waste total is lower than originally estimated in the FEIS since the project duration has increased (lower output over a longer period of time) and is sustainable for the City of Moab through the duration of the project.	All waste generated from the proposed art installation will be disposed of by CBCH in the municipal trash.	No significant impacts.
Transportation	Transportation 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. Traffic increases of less than 10 percent on U.S. Highway 191 were projected in the FEIS.	The current estimate is that it will take approximately 12,838 shipments to move 20 million tons. This estimate is much lower than the 30,116 shipments stated in the FEIS due to additional railcars and acquisition of larger containers. According to the Utah Department of Transportation, U.S. Route 191, has had an increase in annual average daily traffic from 2,900 vehicles in 2005 to 11,000 vehicles in 2019.	Increase in traffic since the start of the Project. No significant changes to impacts.	The Courthouse Wash parking lot, located approximately 400 ft from the area of installation, will be used as a staging area and three to four vehicles will utilize the lot during installation. No impacts identified.	No significant impacts.

Table 2. Resource Areas Analyzed in Detail in this SA (continued)

Resource Area Analyzed	Summary of Potential Impacts in the FEIS	Summary of Potential Impacts as a Result to Changes to the Proposed Action	Difference in Potential Impacts	Summary of Potential Impacts as a Result to New Circumstances or Information	Difference in Potential Impacts
Socioeconomics	The annual spending over the disposal period is estimated to be $49.4 million. Goods and services are estimated at $65.1million. Supplying 335 jobs with annual labor earnings of $16.1 million.	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. Current estimates put the annual cost at $35.7million. Goods and services are estimated at $47.1 million. Supplying 177 jobs with annual labor earnings of $11.6 million.	Reduced activity in some years has extended the Project duration and will increase the overall socioeconomic costs and benefits [over / in] the region. The total Project cost is much higher due to the projected completion date of 2032. No significant changes to impacts.	No impacts identified	No significant impacts.
Workers: Construction and Operations at the Moab Site and Crescent Junction Site	The total construction fatality rate listed for the rail option in the FEIS was 0.39 and would employ about 137 workers.	The new calculated fatality rate total of 0.52 includes104 employees overthe equivalent of 2,340-person years.	No significant changes to impacts	No impacts identified	No significant impacts.

Table 2. Resource Areas Analyzed in Detail in this SA (continued)

Resource Area Analyzed	Summary of Potential Impacts in the FEIS	Summary of Potential Impacts as a Result to Changes to the Proposed Action	Difference in Potential Impacts	Summary of Potential Impacts as a Result to New Circumstances or Information	Difference in Potential Impacts
Workers: Latent Cancer Fatality Calculations	The total latent cancer fatality risk to the worker on the mill tailings pile would be 1.2×10^{-3} per year of exposure of activities at the Moab site. Assuming that the radon and external radiation levels were comparable at the Crescent Junction site, this would also be the latent cancer fatality risk at the Crescent Junction site.	Based on radiological data collected from 2008, the latent cancer fatality (LCF) risks for the completion of the Moab UMTRA Project are well below the expected levels when compared to other radiological material cleanup activities (1.4×10^{-4})	Current calculations would make the excavation and conditioning process a higher risk factor (0.38 rem/yr) then what was stated in the FEIS, which stated that the train inspector would be the individual with the highest dose (0.44 rem/yr or 2.2E-4 LCF). No significant changes to impacts.	No impacts identified	No significant impacts.
Public: Latent Cancer Fatality Calculations	The total LCF for the public with the rail transportation option was 5.4×10^{-5}	The current estimate is 5.5×10^{-6}	No significant changes to impacts	No impacts identified	No significant impacts.
Impacts from Severe Accident Analysis	The FEIS, *Impacts from Severe Transportation Accidents*, gives a severe accident scenario in which DOE assessed the consequences of severe transportation accidents, known as maximum, foreseeable transportation accidents. These severe accidents have a probability of about 1×10^{-7} per year.	The accident scenario in Section H4.3 remains the same, however the dose and latent cancer fatality rates have been reevaluated to reflect the increase in shipment inventory. The severe accident probability is about 6.24×10^{-7}	These dose and latent cancer fatality rates are similar to what was first calculated in the FEIS, resulting in no significant changes to impacts.	No impacts identified	No significant impacts.

Table 2. Resource Areas Analyzed in Detail in this SA (continued)

Resource Area Analyzed	Summary of Potential Impacts in the FEIS	Summary of Potential Impacts as a Result to Changes to the Proposed Action	Difference in Potential Impacts	Summary of Potential Impacts as a Result to New Circumstances or Information	Difference in Potential Impacts
Visual Resources	The FEIS states that the BLM land surrounding Moab is classified as Class II Objective, which means the level of change to the characteristic landscape should be low. Crescent Junction is classified as Class III, which means the level of change to the characteristic landscape should be moderate.	The visual resources will be impacted over a longer duration of time, however, as the tailings pile is relocated, the visual resources will improve. No adverse impacts were noted in the FEIS for Crescent Junction.	No significant changes to impacts	The proposed artwork will be visible from U.S. Route 191, on a portion of the Dinosaur Diamond Prehistoric Highway National Scenic By-way that encompasses 500 miles through Utah and Colorado. Scenic By-ways are subject to 23 US Code 162, "National Scenic By-ways Program."	No significant impacts

4.0 Mitigation

Based on this analysis, DOE will continue to implement measures discussed in the FEIS. No new mitigation measures were identified as a result of the Supplement Analysis. The mitigation measures identified in Section 4.7 of the FEIS are still relevant to the new circumstances.

5.0 Conclusion

This SA compared conditions since publication of the FEIS with impacts projected in the FEIS and evaluated potential impacts of the estimated increase in tailings mass from 11.9 to a 20 million ton bounding calculation and the project completion from 2014 to 2032. In addition, this SA evaluated the environmental impacts associated with the proposed installation of Old Spanish Trail artwork across the highway from the Moab UMTRA Project, on DOE Property.

These analyses indicate that the estimated increase in tailings mass and the longer duration for Project completion and the installation of the proposed artwork do not lead to a significant environmental impact. In addition, there have been no significant changes to operations or mission and only 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 to either supplement the FEIS or prepare a new EIS.

6.0 NEPA Determination

The U.S. Department of Energy Office of Environmental Management (EM) Moab Uranium Mill Tailings Remediation Action (UMTRA) 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 NEPA is required. This SA has been prepared in accordance with DOE requirements 10 CFR 1021.314, "National Environmental Policy Act Implementing Procedures, Supplemental Environmental Impact Statements," which outlines the type of information to be presented in a 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 mill site and nearby off-site properties (vicinity properties) and relocate them at the Crescent Junction site, using predominantly rail transportation; and (2) implementing active groundwater remediation at the Moab site. An amended ROD was published in February 2008 that allowed DOE to use either rail or truck to transport materials. This SA compared the current conditions with the information contained in the FEIS, Amended ROD, and American Recovery and Reinvestment Act (ARRA) NEPA review of 2009. In addition, this SA considered new information 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, 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.

Pete Yerace Digitally signed by Pete Yerace Date: 2022.05.06 10:19:23 -04'00' 5/6/2022

Pete Yerace Date
EMCBC NEPA Compliance Officer

JOHN ZIMMERMAN Digitally signed by JOHN ZIMMERMAN Date: 2022.05.06 10:48:28 -04'00' 5/6/2022

John P. Zimmerman Date
EMCBC 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."

23 USC 162 (United States Code), National Scenic By-ways Program.

40 USC 2011 (United States Code), Atomic Energy Act of 1954.

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*.

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

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DOE (U.S. Department of Energy), *Moab UMTRA Project Supplement Analysis for Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Final Environmental Impact Statement* (DOE/EIS-O355 SA-1)

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

DOE (U.S. Department of Energy), *Moab UMTRA Project Radiation Protection Program* (DOE-EM-GJ610)

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

DOE (U.S. Department of Energy), *Moab UMTRA Project Crescent Junction Site Storm Water Pollution Prevention Plan* (DOE-EM/GJ1238)

DOE (U.S. Department of Energy), *Moab UMTRA Project Moab Site Storm Water Pollution Prevention Plan* (DOE-EM/GJ1475).

DOE (U.S. Department of Energy), *Moab UMTRA Project Remedial Action Plan and Site Design for Stabilization of Moab Title I Uranium Mill Residual Radioactive Material at the Crescent Junction, Utah, Disposal Site* (DOE/EMGJ1547)

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DOE (U.S. Department of Energy), *Moab Project Cultural Resources Management Plan* (GJO-2002-390-TAC).

Golder (Golder Associates, Inc.), 2005. *Materials Handling Evaluation Study for the Moab Tailings Impoundment, Moab, Utah*, Report to S.M. Stoller, Lakewood, Colorado, September 21.

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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.