

**Environmental Assessment to Approve Plan of Operations Amendment  
at La Sal Mines Complex, San Juan County, Utah  
DOI-BLM-UT-Y010-2011-0048-EA**

**APPENDIX B**

**BLM Interdisciplinary Team Checklist**

## INTERDISCIPLINARY TEAM CHECKLIST

**Project Title:** La Sal Mines Complex Plan of Operations Modification  
**NEPA Log Number:** DOI-BLM-UT-Y010-2011-0048-EA  
**File/Serial Number:** UTU-88241  
**Project Leader:** Rebecca Doolittle

**DETERMINATION OF STAFF:** *(Choose one of the following abbreviated options for the left column)*

NP = not present in the area impacted by the proposed or alternative actions  
 NI = present, but not affected to a degree that detailed analysis is required  
 PI = present with potential for relevant impact that need to be analyzed in detail in the EA  
 NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

The Interdisciplinary Team Checklist includes resources and issues considered under this proposal. The resources and issues include the supplemental authorities in Appendix 1 of the BLM handbook H-1790-1.

The following elements are not present in the Moab Field Office and have been removed from the checklist: Farmlands (Prime or Unique), and Wild Horses and Burros.

Determination	Resource	Rationale for Determination*	Specialist	Date
PI	Air Quality Greenhouse Gas Emissions	Emissions inventory is required, along with state permits for radon, etc.	Ann Marie Aubry	12-20-2010
NI	Floodplains	The mine area supports ephemeral (dry) washes that only flow with runoff. Stormwater runoff would be managed in conformance with the UDOGM and the UDEQ stormwater requirements; and controlled with ditches, berms, or other flood control structures. The proposed The Proposed Action and the Plan of Operations includes provisions to avoid adverse effects and incompatible development in areas subject to flooding, including: reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and restore/preserve the natural and beneficial values served by floodplains. The applicant has received a stream alteration permit from the State of Utah, Division of Water Resources. Therefore, the proposed 100-year base flood elevation design criteria for the project meets the minimum federal standards for floodplain management and is consistent with the guidelines for implementing EO 11988 and EO 13690 (FEMA, 2015). For the reasons listed above (e.g. incorporated mitigation measures in the plan) floodplains are not affected to a degree that detailed analysis is required.	David Pals	7/26/2016
PI	Soils	Surface disturbance will impact soils. These impacts are analyzed in the following sections: Management of development rock areas, radiological effects,	Ann Marie Aubry	12-20-2010

Determination	Resource	Rationale for Determination*	Specialist	Date
		disturbance to vegetation and reclamation.		
NP	Water Resources/Quality (drinking/surface/ground)	No surface water resources in or near the project area. No groundwater resources affected by the project due to no shallow water in this area.	Ann Marie Aubry	12-20-2010
NP	Wetlands/Riparian Zones	No riparian resources in or near the project area. No Wetlands occur within the project area.	Ann Marie Aubry	12-20-2010
NP	Areas of Critical Environmental Concern	There are no ACECs in the planning area (see Map 21, Moab RMP ROD, 2008)	Katie Stevens	12-22-2010
NI	Recreation	Very little recreation use occurs in the area of the mine.	Katie Stevens	12-22-2010
NP	Wild and Scenic Rivers	There are no suitable Wild and Scenic Rivers in the planning area (see Map 22, Moab RMP ROD, 2008)	Katie Stevens	12-22-2010
NI	Visual Resources	The area is within VRM Class III, where changes to visual environment may occur; the changes to the surface are expected to be minimal.	Katie Stevens	12-22-2010
NP	BLM Natural Areas	The planning area is not within a BLM Natural Area (see Map 16, Moab RMP ROD, 2008)	Bill Stevens	12-23-2010
PI	Socio-Economics	There will be socioeconomic effects of the mine to state and local taxes, as well as an economic benefit to the community of La Sal.	Bill Stevens	12-23-2010
NP	Lands with Wilderness Characteristics	In compliance with Secretarial Order 3310, the BLM has evaluated the proposed action to determine whether the proposal overlaps any areas that potentially have wilderness characteristics. The BLM has determined that lands in the area clearly lack wilderness characteristics because they do not meet the size criteria and/or they lack the appearance of naturalness due to existing development.	Bill Stevens	3/14/2011
NP	Wilderness/WSA	The planning area is not within a WSA or a Wilderness Area (see Map 23, Moab RMP ROD, 2008)	Bill Stevens	12-23-2010
PI	Cultural Resources	A Class III cultural resources survey was conducted by SWCA in July 2009 for the proposed surface disturbance at the Pandora Mine (SWCA 2009b). The survey was conducted to comply with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and the governing rules found in 36 CFR 800, "Protection of Historic Properties." Findings from the inventory of the expansion area resulted in the identification and documentation of one prehistoric isolated find located within the survey area. The isolate consisted of five flakes found within a 15 x 10-m (49 x 33-foot) area. Isolates, by definition, are not considered eligible for inclusion on the National Register of Historic Places (NRHP). A Class III cultural resources survey was conducted by SWCA in July 2009 for the proposed surface disturbance for vents and exploration on USFS lands (SWCA 2009c). The	Don Montoya	3/16/2011

Determination	Resource	Rationale for Determination*	Specialist	Date
NI	Native American Religious Concerns	<p>Face-to-face consultation was held with the Southern Ute Tribal Council on April 8, 2011. BLM representatives Don Montoya and Rebecca Doolittle attended the meeting. The tribal representatives reviewed the documents presented and expressed concerns about air quality.</p> <p>The Hopi Tribe responded with a letter dated March 28, 2011 stating that they support the identification and avoidance of prehistoric archaeological sites and consider them Traditional Cultural Properties.</p> <p>Additional key comments in the Hopi letter:  "...based upon the legacy of past uranium mining that remains largely unaddressed, we oppose uranium mining exploration on public lands pursuant to the 1872 mining Law."</p> <p>"The Hopi Tribe and other tribes have repeatedly stated that past contamination from uranium mining should be cleaned up before any additional uranium mining is approved."</p> <p>"Therefore, we support the No Action Alternative in the Environmental Assessment for this proposal."</p> <p>A similar letter was sent to the Manti La Sal National Forest.</p>	Don Montoya	4/16/2011

Determination	Resource	Rationale for Determination*	Specialist	Date
		No Traditional Cultural Properties have been identified within the project area.		
NI	National Historic Trails	<p>Consultation with Rob Sweeten, Old Spanish National Historic Trail Administrator, On October 29, 2015 at the Red Cliffs Lodge. Telephone Consultation with Al Matheson, Utah Director Old Spanish Trail Association, on Tuesday November 10, 2015 The Old Spanish National Historic Trail (OST) intersects the Energy Fuels Resources (USA) Inc. (Energy Fuels) proposed Plan of Operations Amendment (Plan) for the La Sal Mines Complex, San Juan County, Utah. An assessment was made to consider the undertakings effects on the characteristics for National Register and Historic Trails criteria. Findings were such that the integrity of the property's location, setting, feeling, or association were already adversely affected by paved roads, uranium mining, transmission lines, and existing development. The assessment analysis is such that human activity within the last 150 years has created a new land surface to such an extent as to eradicate locatable traces of the Trail. No further inventory is required due to the following conditions and visual inventory guidelines that apply:</p> <ul style="list-style-type: none"> <li>• Segments of linear historic properties between two definable points no longer retain any physical trace or manifestation;</li> <li>• Noncontributing segments of linear historic properties;</li> <li>• Linear historic properties or contributing segments previously determined to lack integrity of setting.</li> </ul> <p>The Old Spanish National Trail Administrator and Old Spanish Trail Association Utah Director concurred with the determinations and no further action is required.</p>	Don Montoya	11/10/2015
NP	Environmental Justice	The Moab Field Office RMP Final EIS determined that no disproportionate adverse impacts to minority or low income populations would occur. This resource is not carried forward for evaluation in the EA.	Rebecca Doolittle	7/26/2016
NI	Wastes (hazardous or solid)	Radioactive uranium ore would be hauled to the White Mesa Mill for processing. Low grade ore that is too low in uranium to transport to the mill would be placed in the waste rock piles at the mine sites and would be handled in a manner to reduce environmental impacts.	Rebecca Doolittle	7/26/2016
NI	Threatened, Endangered or Candidate Animal Species	Gunnison sage grouse formerly occurred in areas of Utah, Colorado, Arizona, New Mexico, and Oklahoma. The distribution of the species has declined, and it now occurs only in parts of southeastern Utah and southwestern Colorado (UDNR 2015). There is no critical habitat or suitable habitat within the project area. There is	Pamela Riddle	7/26/2016

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		historic habitat identified by UDWR (UDWR 2014) as vacant-unknown but this area has not supported birds for several decades and therefore no sage grouse or habitat will be impacted by the project.		
PI	Migratory Birds	Surface disturbing activities during nesting will impact birds and may create a permanent loss of habitat.	Pamela Riddle	3/17/2011
NI	Utah BLM Sensitive Species	Gunnison prairie dog & burrowing owl - no known of the Gunnison prairie dog. No prairie dog activity indicates low potential for burrowing owl presents.	Pamela Riddle	7/26/2016
PI	Fish and Wildlife Excluding USFW Designated Species	Habitat loss & disturbances to general wildlife and winter range for deer & elk.	Pamela Riddle	3/17/2011
NP	Threatened, Endangered or Candidate Plant Species	Navajo sedge is only known to occur on the Navajo Nations, within Coconino County, Arizona and in the Natural Bridges area of Juan County, Utah. It occurs in seeps and springs derived from Navajo Sandstone, Cedar Mesa, De Chelly, and Kayenta sandstone formations. These formations are not found in the vicinity of the project therefore Navajo sedge is not be present in the project area.	Pamela Riddle	7/26/2016
NI	Livestock Grazing	Livestock grazing occurs within the project area. The proposed action will not affect livestock grazing.	Kim Allison	12-20-2010
NI	Rangeland Health Standards	Rangeland health standards will not be affected by this project.	Kim Allison	12-20-2010
NI	Invasive Species/Noxious Weeds	<p>A weed management plan has been developed to prevent and control the spread of noxious weeds and invasive plants during and following construction, operations and reclamation. Denison and its contractors will be responsible for carrying out the methods described in this plan.</p> <p>Weeds and invasive species are spread by a variety of means including humans (e.g., workers, hikers and recreationalists, etc.), vehicles, construction equipment, construction and reclamation materials, livestock, and wildlife.</p> <p>Implementation of preventive measures to control the spread of noxious weeds and invasive plants is the most cost-effective management approach. The following preventive measures have been implemented and will be continued to prevent the spread of noxious/invasive plants during construction and future operations and maintenance activities:</p> <ul style="list-style-type: none"> <li>• Prior to construction, Energy Fuels and its contractors will be trained on methods for cleaning equipment, identification of problem plant species in the project area, and procedures to follow when an invasive or noxious weed is located. To assist in identification, the contractor will be supplied with a list and pictures of</li> </ul>	Jordan Davis	3-25-2011

Determination	Resource	Rationale for Determination*	Specialist	Date
		<p>noxious and invasive species that may exist within the project area.</p> <ul style="list-style-type: none"> <li>• Prior to any construction disturbance, all known weed populations will be flagged so that they may be avoided.</li> <li>• Equipment, materials, and vehicles will be stored at specified work areas or construction yards. All personal vehicles, sanitary facilities, and staging areas will be confined to a limited number of specified weed-free locations to decrease chances of incidental disturbance and spread of noxious weeds and invasive plants.</li> <li>• Disturbed areas will be promptly seeded following completion of activities to reduce the potential for the spread and establishment of noxious weeds and invasive plants. Seeding should occur as soon as possible following construction and during the optimal time period. Only BLM, USFS, and UDOGM approved mixture(s) of certified "weed-free" seed will be used. All other introduced construction materials used, such as straw and fill, shall also be certified weed-free. Vegetation treatments using Pesticide/herbicide will be used as outlined in the Record of Decision for Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (Sept. 2007 and as amended) Pesticides/herbicides may be utilized to promote healthy, native vegetation, and prevent the spread and proliferation of noxious weeds.</li> </ul>		
NP	Vegetation Excluding USFW Designated Species	No BLM sensitive plant species occur within the project area.	Dave Williams	12-20-010
NI	Woodland / Forestry	<p>There would be some removal of Pinion and Juniper at the proposed location but not to a degree that would affect the value of the woodlands or restrict the use of the trees as firewood. The use of the site is temporary and following the use, the site would be revegetated and PJ's would come back.</p> <p>PJ woodlands have existed throughout the area; during the past decade fire suppression has allowed these woodlands to increase in density and size. The proposed disturbance could be construed as a positive impact opening the canopy and after use a reseeding allowing for establishment of more desirable vegetation to establish on site. Due to the size of the overall project it is deemed as a No Impact to the</p>	Jordan Davis	3-25-2011

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NP	Fuels/Fire Management	woodlands as not many of the trees would be expected to be impacted (they are dispersed throughout the area). No fuels treatments are currently proposed for the area.	Brian Keating	12-20-010
NI	Geology / Mineral Resources/Energy Production	<p>The La Sal Mines Complex project is located in the Paradox Basin south of the La Sal Mountains. Oil and gas resource in this part of the basin occur in the Fractured Interbed, Buried Fault Block and Salt Anticline Plays within the Pennsylvanian Hermosa Group. These plays have a high potential for development in the area of the proposed project (BLM, 2004). Currently, there are two oil and gas leases overlying the proposed project area, but there is no oil and gas development. The proposed waste rock pile expansion and exploration would not interfere with any future oil and gas development because the oil and gas targets are deeper than the uranium-bearing deposits and drilling and production facilities could be site outside the active areas of the mining operation.</p> <p>The uranium deposits within the La Sal Mines Complex occur primarily in channels of the Salt Wash Member of the Morrison Formation. This area of San Juan County provides other opportunities for extraction of uranium resources. The La Sal Mines Complex proposal could have a positive impact for the energy minerals industry by potentially increasing the understanding of ore deposition. For the extraction of every 100,000 tons of uranium ore there would be a yield of approximately 600,000 lbs of U3O8 and constitute an irretrievable loss of the same.</p>	Rebecca Doolittle	1/25/2011
NI	Lands/Access	There are no issues regarding lands related transactions or conflicts with rights of way related to this proposal.	Jan Denney	1/25/2011
NI	Paleontology	<p>Paleontological resources are not expected to be encountered during exploration and are not present in the expansion area of the waste rock pile. The following standard stipulation applies for surface disturbing activities: 43 CFR 3809. 420 (8) Cultural and paleontological resources. (i) Operators shall not knowingly disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building or object on Federal lands.</p> <p>(ii) Operators shall immediately bring to the attention of the authorized officer any cultural and/or paleontological resources that might be altered or destroyed on Federal lands by his/her operations, and shall leave such discovery intact until told to proceed by the authorized officer. The authorized officer shall evaluate the discoveries brought to his/her attention, take action to protect</p>	Rebecca Doolittle	1/25/2011

Determination	Resource	Rationale for Determination*	Specialist	Date
		<p>or remove the resource, and allow operations to proceed within 10 working days after notification to the authorized officer of such discovery. (iii) The Federal Government shall have the responsibility and bear the cost of investigations and salvage of cultural and paleontology values discovered after a plan of operations has been approved, or where a plan is not involved. Underground mine development and production operations would occur in the Salt Wash Member of the Morrison Formation. Vertebrate fossils are known to occur in this member. Vertebrate fossils may be encountered during mining; however, in the event of an unanticipated discovery, the mine operator would be required to temporarily stop work in the immediate vicinity of the find and notify the BLM so that a BLM specialist could assess the situation and take appropriate action.</p>		

Final Review:

Reviewer Title	Signature	Date	Comments
Environmental Coordinator			
Authorized Officer			