

**EMCBC/SLA**

**Environmental Checklist**

Project/Activity Title:	NEPA ID Number: Rev. #:0 Date:
Contractor Project Manager:	Phone:
Contractor NEPA Coordinator:	Phone:
DOE EMCBC NEPA Compliance Officer:	Phone:

**A: BRIEF PROJECT/ACTIVITY DESCRIPTION:** (Attach detailed description or Statement of Work, if necessary)

**B. SOURCES OF IMPACTS:** Would the proposed action involve, generate, or result in changes to any of the following?

	<b>YES</b>	<b>NO</b>		<b>YES</b>	<b>NO</b>
1. Air emissions	<input type="checkbox"/>	<input type="checkbox"/>	12. Water Use/Diversion	<input type="checkbox"/>	<input type="checkbox"/>
2. Liquid effluents	<input type="checkbox"/>	<input type="checkbox"/>	13. Water Treatment	<input type="checkbox"/>	<input type="checkbox"/>
3. Solid waste	<input type="checkbox"/>	<input type="checkbox"/>	14. Waterway modification	<input type="checkbox"/>	<input type="checkbox"/>
4. Radioactive waste/soil	<input type="checkbox"/>	<input type="checkbox"/>	15. Radiation/toxic chemical exposures	<input type="checkbox"/>	<input type="checkbox"/>
5. Hazardous waste	<input type="checkbox"/>	<input type="checkbox"/>	16. Pesticide/herbicide use	<input type="checkbox"/>	<input type="checkbox"/>
6. Mixed waste	<input type="checkbox"/>	<input type="checkbox"/>	17. High energy source/explosives	<input type="checkbox"/>	<input type="checkbox"/>
7. Chemical storage/use	<input type="checkbox"/>	<input type="checkbox"/>	18. Transportation	<input type="checkbox"/>	<input type="checkbox"/>
8. Petroleum storage/use	<input type="checkbox"/>	<input type="checkbox"/>	19. Noise levels	<input type="checkbox"/>	<input type="checkbox"/>
9. Asbestos	<input type="checkbox"/>	<input type="checkbox"/>	20. Workforce adjustment	<input type="checkbox"/>	<input type="checkbox"/>
10. Utilities	<input type="checkbox"/>	<input type="checkbox"/>	21. OTHER: _____	<input type="checkbox"/>	<input type="checkbox"/>
11. Clearing or excavation	<input type="checkbox"/>	<input type="checkbox"/>	22. OTHER: _____	<input type="checkbox"/>	<input type="checkbox"/>

Explanation and Qualification of specific "YES" responses:

**Number**                      **Explanation**

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**C. EVALUATION CRITERIA:**

	<b>YES</b>	<b>NO</b>
1. (10 CFR 1021.410 [b] [1]) Does the proposed action <b>fit within a class of actions</b> listed in Appendix A or B to Subpart D of 10 CFR 1021?	<input type="checkbox"/>	<input type="checkbox"/>
2. (10 CFR 1021.410 [b] [2]) Are there any <b>extraordinary circumstances</b> related to the proposal that may affect the significance of the environmental effects of the proposal? Extraordinary circumstances are unique situations presented by specific proposals, such as scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; or unresolved conflicts concerning alternative uses of available resources within the meaning of Section 102 (2) (E) of NEPA.	<input type="checkbox"/>	<input type="checkbox"/>

3. (10 CFR 1021.410 [b] [3]) Is the proposal "connected" (40 CFR 1508.25 [a] [1]) to other actions with potentially significant impacts; or is it **related** to other proposed actions with cumulatively significant impacts (40 CFR 1508.25 [a] [2]); or is it precluded by 40 CFR 1506.1 or 10 CFR 1021.211?
4. (10 CFR 1021, Appendix B to Subpart D, B[1] through B [4][vii]) For a proposed action to be categorically excluded, certain **integral elements** must be included. For example, would the proposed action:
- Threaten a violation of applicable statutory, regulatory or permit requirements for ES&H, including requirements of DOE Orders?
  - Require siting, construction or major expansion of waste storage, disposal, recovery or treatment facilities?
  - NOTE:** proposed action may include categorically excluded facilities.
  - Disturb hazardous substances, pollutants, contaminants or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment, such that there would be uncontrolled or unpermitted releases?
  - Adversely affect environmentally sensitive resources including, but not limited to: structures of historic, archaeological or architectural significance; threatened or endangered species, or migratory birds, amphibians, floodplains or wetlands; wildlife refuges, prime agricultural lands or special sources of water (e.g., sole-source aquifer)? **NOTE:** A "No" response indicates that all reviews and discussions supporting the Agency's determination that the proposed action would not have an adverse effect on the resource will be completed before the proposed action is allowed to proceed.
5. Additional impacts that should be considered during the NEPA evaluation of the proposed action include the following six items. Would the action:
- a. Take place in an area of previous or ongoing disturbance?
  - b. Require any federal, state or local permits, approvals, Etc.?
  - c. Create hazardous, radioactive or mixed waste for which no disposal is available?
  - d. Impact a RCRA-regulated unit or facility?
  - e. Force a low-income or ethnic minority population to shoulder a disproportionate share of the negative environmental impacts of pollution or environmental hazards because of a lack of political or economic strength (i.e., an issue of "Environmental Justice")?
  - f. [for those actions that would involve air emissions] be located within an air pollutant *non-attainment* or *maintenance area* for any of the Criteria pollutants?
  - NOTE:** If "Yes," then additional analysis may be required to determine if emissions would be above *de minimus* thresholds and/or if emissions would be regionally significant. Pending completion of this analysis, requirements stated in 40 CFR 93.158 may be imposed before the proposed action could proceed.

**Explanation and Qualification of specific "YES" responses:**

<b>Number</b>	<b>Explanation</b>
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D. RECOMMENDATION AND DETERMINATION

**EMCBC NEPA Compliance Officer's Recommendation:**

- The proposed action described in this checklist (EMCBC-2007-01) involves the land transfer of approximately 3953.03 acres from the U.S. Department of Energy to the Department of Interior, U.S. Fish and Wildlife Service. Specifically, this land transfer action for formal establishment of the Rocky Flats National Wildlife Refuge falls within the bounds of the categorized exclusion B1.25 (10 CFR 1021.410):

Signature:           Pete Gerace           Date: \_\_\_\_\_  
EMCBC NEPA Compliance Officer

U.S. Department of Energy  
Environmental Management  
Consolidated Business Center  
Moab UMTRA Project: Burn Box Usage

Categorical Exclusion Determination Form

***Proposed Action Title: Moab UMTRA Project: Burn Box Usage***

***Program or Field Office:*** Grand Junction Field Office

***Location(s) (City/County/State):*** Moab, Utah

***Proposed Action Description:***

The purpose of the burn box usage at the Moab UMTRA Project is to minimize landfill waste (vegetative debris from organic material that has grown on-site) and to use the ash to supplement the Project's compost area and amend soil.

The work will take place in the Moab UMTRA Project well field in an area that has been remediated and cleared of vegetation.

The work will be conducted in compliance with the DOE Order (O) 420.1C, "Facility Safety," the *Moab UMTRA Project Wildland Fire Management Plan* (DOE-EM/GJ2150), and *The Moab UMTRA Project Controlled/Open Burning Procedure for Vegetative Debris Management at the Moab Site* (DOE-EM/GJ2086), and the Integrated Work Plan/Job Safety Analysis 013 *Vegetative Debris Management*.

***Background:***

The site consists of 135 acres of remediation and revegetated land. After remediation, many areas are lacking top soil and the necessary nutrients to support healthy plant growth. To encourage native plant growth, weed removal has been a priority of the Revegetation Program. On occasion, material such as cottonwood limbs and shrubs may be removed to allow for better access for weed removal. In the past, this vegetative debris (consisting of organic material that has grown on the site) has been sent to the Moab Landfill for disposal.

As opposed to disposing of the vegetative debris off site, a burn box (Photo 1) will be used to reduce the amount of waste produced. A burn box is a device designed to contain the burning of vegetative debris. It resembles a large dumpster with double walls, ports for ventilation, and a lid. A burn box presents several advantages to a prescribed burn. Containment of burned materials is the most notable advantage. The unit is not forced air but it still increases the

combustion temperature leading to a more complete burn, producing less smoke and lower emissions. A higher combustion temperature is achieved by adjusting air inlet ports near the base of the unit and adjusting sliding roof panels to draw more air through the burn chamber. The result is an ash that will be added to the compost area. Any ash and unintended charred material will be used as a soil amendment on-site. The Moab Project Revegetation Subject Matter Expert has recommended using burn boxes as a method to reduce vegetative debris on-site and to help create soil amendments (Dohrenwend, 2020).

Use of the burn box is considered an open and controlled fire. Open burning involves any flame-based combustion of materials in an open environment. Controlled burning is any fire intentionally ignited to meet specific land management objectives, such as to reduce flammable fuels, restore ecosystem health, etc.



*Photo 1. The Burn Box that will be used at the Moab Project*

***Procedure:***

The pre-burn, burn, and post burn procedures, and roles and responsibilities are referenced in the *Moab UMTRA Project Controlled/Open Burning Procedure for Vegetative Debris Management at the Moab Site* (DOE-EM-GJ2086).

***Resource Areas Evaluated:***

***Air Quality***

Prior to burning, the Open/Controlled Burn Work Permit/Checklist (attached in DOE-EM-GJ2086) will be completed and reviewed with all involved personnel.

Authorization to burn is required by Utah Administrative Code (UAC) R307-202, “Emission Standards: General Burning,” and R307-204, “Emission Standards: Smoke Management,” and is obtained from the Grand County Sheriff’s Office as the local jurisdiction. This authorization is normally available during two periods of the year, from March 1 to May 30 and from September 15 to November 15.

The Clearing Index shall be monitored to ensure a measurement of greater than 500 exists on the day of the burn. An air index of less than 500 invalidates any authorization to burn. The Clearing Index can be monitored at <http://www.wrh.noaa.gov/slc/projects/ifp/html/clrindx.php>.

In addition, the temperature and wind speed will be monitored. Burns will not be performed when the temperature is below 30 °F or above 75 °F or if the wind speed exceeds 15 mph.

The material to be burned must be thoroughly dry and no trash, rubbish, tires, or oil are included in the material to be burned, used to start fires, or used to keep fires burning.

On the day of the burn, the Grand County Sheriff's Office must be notified that the burn is planned. The Sheriff's Office will authorize the burn based on information provided to them by the Southeastern Utah Health Department.

The Grand County Sheriff's Office must be notified once the burn has been completed.

A burn box helps increase the combustion temperature of the fire leading to a more complete burn resulting in less smoke and emissions to the environment. The burn temperature will be regulated by adjusting vent ports on the bottom of the unit and by adjusting the sliding lids on the top of unit (IWP/JSA 013). Once the fire is lit adjustments will be made to draw sufficient air into the unit to reduce smoke emissions.

### ***Surface Water***

All of the ash will be placed over 200 feet from the Colorado River and over 600 feet from the Moab Wash.

According to the Construction General Permit and the *Moab Storm Water Pollution Protection Plan* (DOE-EM-GJ1475), a 50 foot buffer must be present between any potential non-approved storm water discharge and waters of the state. The burn box and the compost area is greater than 50 feet from the Colorado River and the compost area contains a berm that would prohibit any storm water from entering the river.

### ***Floodplain***

The ash will be placed within the compost area of the well field, over 200 feet from the Colorado River and 600 feet from Moab Wash. This area is bermed and has remained dry during peak runoff and Moab Wash floods for the last 20 years.

The elevation of average peak flow of 27,500 cfs (which typically occurs from April to July) does not reach the composting area. Because the flow has been altered upstream by water diversions, the floodplain is not accessed by a 5 year or less flood event.

### ***Infrastructure***

At least one fire extinguisher shall be available for use for fire suppression and consist of a 20-pound dry chemical ABC portable type. This extinguisher shall be located where it is easily

accessible to Fire Watch Personnel without putting personnel at risk to reach it and shall be no further than 50 feet away from the open burn area (IWP/JSA-013).

Pressurized water is an acceptable extinguishing agent for a Class A fire. A water source will be established and available for use before open burning activities. Application of water for fire suppression may consist of a portable water tank, irrigation hydrant, freshwater injection hydrant, fire extinguisher, or hand tools. When using a hydrant, personnel shall ensure flow is sufficient and available to the hydrant. The source of the water will be the on-site freshwater pond that is also used for revegetation, dust suppression, and groundwater interim action.

There are no above ground utilities in the vicinity of the burn box and the closest structure is a pump house shed 350 feet away.

### ***Human Health***

The IWP/JSA-013 reviews the work tasks, associated hazards, concerns, potential incidents, and controls and preventative measures for pre-burn, burning, and post burn activities.

The vegetative debris that is placed in the burn box will come from the remediated areas and not from the Contamination/Exclusion Zone. Approximately 90% of the radioactivity remains in the roots of plants, so possible tumbleweeds that may have traveled through the contaminated area are not considered an issue (Daily, 2020). Personnel will notify the RadCon and Environmental Compliance prior to burning to ensure that there are no concerns.

The burn location is a substantial distance from the highway and any public access, therefore public safety is not an issue.

Personnel will be assigned Fire Watch duties that are defined in the *Moab UMTRA Project Controlled/Open Burning Procedure for Vegetative Debris Management at the Moab Site*.

All individuals shall be trained to the *Moab UMTRA Project Controlled/Open Burning Procedure for Vegetative Debris Management at the Moab Site* and the following documentation and training:

- *Moab UMTRA Project Fire Safety* (DOE-EM/GJ1555)
- *Moab UMTRA Project Emergency/Incident Response Plan* (DOE-EM/GJ1520)
- *Moab UMTRA Project Portable Fire Extinguisher Training* (HS304)
- *Wildland Fire Management Plan*
- TAC IWP/JSA 013, "Vegetative Debris Management"

In addition, the Burn Supervisor will also be trained to a minimum of S-190 training (Introduction to Wildland Fire Behavior), presented by the National Wildfire Coordination Group.

### ***References***

Daily, Ronald, Moab UMTRA Radiation Control Manager, Personal Communication, 2020.

Dohrenwend, Kara, Moab UMTRA Revegetation Subject Matter Expert, Personal

Communication, 2020.

***Categorical Exclusion(s) Applied:***

B1.3 Routine Maintenance

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of 10 CFR Part 1021.

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

All questions were answered with a “concur,” allowing the NCO to document that the proposed project has been reviewed and a final NEPA determination will be concluded.

**Concur:** The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

**Concur:** There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.

**Concur:** The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

Based on my review of the proposed action, as NEPA Compliance Officer I have determined that the proposed action fits within the specified classes of actions, the other regulatory requirements



set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

4/30/2020

**X** Pete Yerace

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Pete Yerace  
EMCBC NEPA Compliance Officer  
Signed by: Department of Energy