

U.S. Department of Energy Office of Legacy Management National Environmental Policy Act Environmental Checklist

Project/Activity: Install wells and boreholes at the Old Rifle, CO, Processing Site

A. Brief Project/Activity Description

The Environmental Remediation Sciences Program (ERSP) proposes to install 36 wells and 5 boreholes on the Old Rifle, CO, Processing Site. A combination of 13 injection wells, 18 monitoring wells, 5 multi-chambered wells, and 5 boreholes would be installed using a sonic rotary drill rig. Five of the wells would be used for U.S. Department of Energy (DOE) Office of Legacy Management (LM) groundwater monitoring purposes and the remainder (31 wells and 5 boreholes) would be installed in a single gallery (Super 8) to be used for research and monitoring purposes by the ERSP (e.g., injection and groundwater monitoring). With the exception of five multi-chambered wells, the inside diameter of the wells and boreholes would be either 2 or 4 inches. The wells and boreholes would be drilled through alluvial sediments to the top of the Wasatch Formation, which is expected at a depth of 18 to 21 feet (ft).

Surface disturbance would occur over an approximate 25 ft² area surrounding each well. Once the wells have been drilled, the drill cuttings would be spread over adjacent areas.

The ERSP gallery would be located southeast of the existing research trailer; three of the DOE LM wells would be located along the south property boundary of the site, and two wells would be located northeast of the trailer and gallery. The Old Rifle Processing Site is within the 100- and 500-year floodplain of the Colorado River; none of the proposed wells would impact the floodplain. No protected resources would be affected by the proposed actions.

B. Environmental Concerns

Evaluate the following elements and indicate by checking "yes" or "no" if any phase of the project/activity would result in a change or impact that is subject to regulatory permits, controls, or plans or that would require additional evaluation. If the "yes" column is checked, provide a brief explanation below and attach sheets with additional detail as necessary or appropriate.

Element	Yes	No	Element	Yes	No
Air emissions/air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Exposure/impacts to public or workers	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Need for public awareness/involvement	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Solid waste generation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transportation/traffic control required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mixed waste management	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Access to/use of DOE property	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Chemical storage on site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Visual resources impacted	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pesticide/herbicide use	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cultural/archaeology resources present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Toxic substances management	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Wetland/floodplain impacted	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Regulated quantities of petroleum used or stored on site	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Protected species present: federal, state, or tribe listed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Radioactive materials/soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Migratory birds breeding or nesting	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface (ground) disturbance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Wild/scenic rivers impacted	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface water use/contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Prime/unique farmlands present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface water quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Groundwater use/contamination	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Groundwater quality affected	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other considerations	<input type="checkbox"/>	<input checked="" type="checkbox"/>

C. Explanation and Qualification of All “Yes” Responses

Air emissions/air quality: Fugitive dust is expected to be generated as a result of the drilling activities. If necessary, dust would be controlled through use of a surfactant.

Noise: The use of a sonic drilling rig would create noise that would be limited to the area and to the period of the drilling operation.

Solid waste generation: Miscellaneous trash would be associated with the proposed actions and would be disposed of appropriately. Large City recycling trash containers are located adjacent to the site.

Surface (ground) disturbance: Surface disturbance related to the Super 8 gallery would occur over an area of approximately 5400 ft². An additional 125 ft² of surface disturbance would be related to the LM wells. The area is highly disturbed by past actions related to the ERSP.

Groundwater quality affected: There would be short-term temporary changes to the existing groundwater quality related to the use of injectates. At no time would the changes in groundwater quality affect public water sources or the Colorado River.

Groundwater use/contamination: Groundwater monitoring is expected to occur on a quarterly basis, which would result in the use of groundwater.

D. Eligibility/Conditions

The proposed action fits within a class of actions listed in Appendix A or B to Subpart D of Title 10 *Code of Federal Regulations* Part 1021 (10 CFR 1021). DOE has determined that these classes of actions do not individually or cumulatively have a significant effect on the human environment (see 10 CFR 1021.410). No extraordinary circumstances are related to the proposed action that may affect the significance of the environmental effects of the proposed action, and the proposed action is not "connected" to other actions with potentially significant impacts. Finally, the action is not related to other proposed actions with cumulatively significant impacts and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

E. Recommendation

The proposed action of installing wells and boreholes at the Old Rifle, CO, Processing Site would be considered categorically excluded from further environmental evaluation under 10 CFR 1021, Appendix B to Subpart D, B 3.1 “Onsite and offsite site characterization and environmental monitoring,...”

- Meets Criteria Does Not Meet Criteria Unsure





F. NEPA Determination

The scope of actions proposed under Section A of this Environmental Checklist, and the information relevant to the potential for environmental impacts in Section B have been reviewed, and the following has been determined:

- The proposed actions meet the criteria for categorical exclusion.
- The proposed actions do not meet the criteria for categorical exclusion; therefore, I recommend that the LM NEPA Planning Board be convened based on my recommendation (see attached rationale) to complete:
 - an Interim Action an Environmental Assessment
 - an Environmental Impact Statement a Supplemental Analysis

Concurrences

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LM Site Name Old Rifle Processing Site	LM Site Programs UMTRA Title I and Office of Science (ERSP)	
Contractor NEPA Coordinator Sandy Beranich	Signature 	Date 04-13-2010
Contractor Project Manager Richard Dayvault	Signature 	Date Apr 13, 2010
LM Site Manager Richard Bush	Signature 	Date 4/15/10
LM NEPA Compliance Officer Richard Bush	Signature 	Date 4/15/10

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