

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

**Project/Activity:** Drill one exploratory borehole on Lease Tract 15A by Golden Eagle Uranium

### A. Brief Project/Activity Description

Golden Eagle Uranium LLC proposes to drill one 5-inch-diameter exploratory borehole on U.S. Department of Energy (DOE) lease tract C-SR-15A, located in western San Miguel County, Colorado. The drilling would be completed by a truck-mounted rotary drill rig capable of boring to 1,000 feet (ft) below ground surface (bgs). The proposed location of the borehole is in a previously disturbed area and is adjacent to a two-track dirt road. Access to the site would be on existing dirt roads.

The drilling would be completed dry to an estimated depth of 600 ft bgs. Once data are collected, the hole would be plugged in accordance with Colorado Division of Reclamation, Mining, and Safety regulations. After the borehole is advanced to the desired depth, cuttings showing uranium mineralization would be returned to the borehole first, and the remaining materials would be placed in the hole to a depth of 7 ft bgs. Polyurethane foam or concrete would be used to fill the next 5 ft, and the final 2 ft would be filled with native soil. If groundwater is encountered, bentonite pellets would be used to plug the saturated zone and thereby restrict groundwater movement and potential cross-contamination. Groundwater is not expected to be encountered during the drilling.

The drill site would occupy an area of approximately 20 ft by 50 ft, and a mud pit approximately 10 ft by 10 ft by 3 ft deep would be excavated to contain the drill cuttings and topsoil. All topsoil materials would be segregated from the cuttings and used to reclaim the site. Reclamation of the site after completion of all activities would include grading of all disturbed areas and seeding with an approved native plant mixture.

It is expected that less than 200 gallons of diesel fuel and 55 gallons of motor oil and hydraulic fluids would be needed for equipment operation; these fluids would be stored in appropriate containers on the beds of support vehicles.

The area was evaluated for the presence of cultural resources and none were identified. The work is planned to be conducted after migratory bird season, although there are no breeding or nesting birds known to be present on the site. No wetlands are present.

### 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		
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 type="checkbox"/>	<input checked="" 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/archaeological 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"/>

Element	Yes	No	Element		
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 type="checkbox"/>	<input checked="" type="checkbox"/>
Groundwater quality affected	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other considerations	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**C. Explanation and Qualification of All “Yes” Responses**

Air emissions/air quality: The dry drilling operation would likely generate fugitive dust. If necessary, water would be used as a dust suppressant and applied by a water truck brought to the location.

Noise: Anticipated noise levels would be commensurate with the use of a drilling rig. Noise would be limited to the duration of the project.

Surface (ground disturbance): Surface disturbance would consist of the borehole and excavation of a mud pit. All disturbed areas would be reclaimed after completion of the drilling. Less than an acre would be disturbed.

**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). There are no extraordinary circumstances 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 drilling of one borehole is an allowable activity under Criterion B3.1 (f) of Appendix B to Subpart D of 10 CFR 1021: “Sampling and characterization of water, soil, rock, or contaminants.” The proposed reclamation of the disturbed area after drilling is completed is an allowable activity under Criterion B1.3 (k) “Erosion control and soil stabilization measures (such as reseeding and revegetation).”

- Meets Criteria                       Does Not Meet Criteria                       Unsure



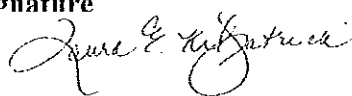

**F. NEPA Determination**

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

**Project/Activity:** Drill one exploratory drill hole on Lease Tract 15A by Golden Eagle Uranium

<b>LM Site Name</b> Golden Eagle LLC Lease Tract 15A	<b>LM Site Program</b> Uranium Lease Program	
<b>Contractor</b> <b>NEPA Coordinator</b> Sandy Beranich	<b>Signature</b>  2010.05.24 11:44:48 -06'00'	<b>Date</b>
<b>Contractor Site Lead</b>  Ed Cotter	<b>Signature</b>  2010.05.24 12:22:25 -06'00'	<b>Date</b>
<b>LM Site Manager</b>  Laura Kilpatrick	<b>Signature</b>  Laura E. Kilpatrick DOE LM - Rocky Flats 2010.05.24 17:30:09 -06'00'	<b>Date</b>
<b>LM NEPA</b> <b>Compliance Officer</b> Richard Bush	<b>Signature</b> 	<b>Date</b> 6/15/10

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