



February 21, 2025

Crystal Hocking

RESPEC

3824 Jet Drive

Rapid City, SD 57703

Redacted

SDCL 1-19A-11.1 Consultation

Project: 240312001S – Clean Nuclear Energy Corp. Uranium Exploration Permit

Location: Fall River

DANR - South Dakota Department of Agriculture and Natural Resources

Dear Ms. Hocking,

Thank you for the opportunity to comment on the above referenced project pursuant to SDCL 1-19A-11.1. SDCL 1-19A-11.1 outlines a specific process that must be followed prior to any governmental action, including the issuance of permits, that may harm any historic property that is included in the National or State Registers of Historic Places. The South Dakota Office of the State Historic Preservation Officer (SHPO) would like to provide the following comments concerning effect of the proposed project on the non-renewable cultural resources of South Dakota.

On March 12, 2024, the SHPO received a cover letter regarding the submission of a Uranium Exploration Permit Application to the South Dakota Department of Agriculture and Natural Resources (DANR) from Mike Blady of Clean Nuclear Energy Corp. as well as the Uranium Permit Application itself as a notification of the above-referenced project to conduct exploratory drilling for uranium ore at Township 7S, Range 2E, Section 36. A letter from DANR was received on March 20, 2024 which acknowledged the receipt of the aforementioned Uranium Exploration Permit Application.

On March 22, 2024, SHPO requested an abbreviated case report to investigate potential direct, indirect, and cumulative effects of the proposed exploratory drilling on the nearby historic properties. On October 29, 2024, SHPO received the abbreviated case report titled, "Black Hills National Forest Craven Canyon Rock Art Abbreviated Case Report VPS #SD24-7 Fall River County, South Dakota Section 31, Township 7 S, Range 3 Section 25, Township 7 South, Range 2 E Section 30, Township 7 South, Range 3 September 9, 2024" prepared by Corinne Headley and Jana Morehouse of Vantage Point Solutions and a cultural resource inventory report for the portions of the project located on State lands titled, "Cultural Resource Inventory for the Clean Nuclear Energy Craven Canyon Uranium Exploration Project VPS #SD24-7 Fall River County, South Dakota Township 7S, Range 2E, Section 36 September 6, 2024 SD State Permit # SP-24-009" prepared by Will Alexander, Sydney Russell, and Jana Morehouse of Vantage Point Solutions. Additional Information clarifying the project scope was received on December 6, 2024. Further information, including the on-site Plan of Operations (PoO), was received on January 13, 2025. GIS shapefiles of the drilling locations on state land was received by SHPO on January 24, 2025.

Based upon the information provided, the proposed drilling project consists of up to 50 drill platforms on State-owned land, each creating a vertical exploration hole with a maximum depth of 213 m (700 ft). Each drill hole will require approximately two weeks to complete exploratory drilling activities and abandon. Drilling will occur on a 18.3-meter by 18.3-meter (60-feet by 60-feet) drill pad with 335 square meters



(0.08 acres) or less of disturbance per site. A recirculation mud pit measuring approximately 3.05-meter by 1.52-meter by 1.83-meter (10-feet by 5-feet by 6-feet) will be excavated on each site.

The abbreviated case report indicated that of the twelve rock art and petroglyph sites within the 1-mile study area, four rock art sites [REDACTED] will be partially visible within the viewshed of the project area. Additionally, one drill pad (Pad 33) is within the boundaries of a suspected burial site [REDACTED]. Given the nature of the site, this drill pad should be moved to another location or removed from the project entirely. Given the distance, geology of the area, and the delicate nature of the archaeological sites potentially affected by the proposed drilling, a case report was requested to further assess potential visual, fluid, vibratory, and auditory effects.

The abbreviated case report indicated that vibratory effects from drilling are difficult to detect past 50 meters from the drilling equipment, with the nearest site being over 260 meters away from the drill site. As such, the risk of damage to these sites is low, given their distance from the drilling equipment.

The abbreviated case report also indicated that while dust created during operations is unavoidable, the dust's effects to the sites will be mitigated by following OSHA guidelines for protecting drill crews from silica dust, which includes ground saturation by a water truck during dry and high wind conditions, wet drilling, wet dust suppression of drill exhaust, and use of extended drill shrouds. Fluid impacts will be managed by the creation of a berm lined with a geomembrane around the fuel storage area, which will be designed to accommodate a 110% spill. Additionally, spill absorbing material will be on site for use in the event of a petroleum spill. Once drilling is completed, the drill solids will be buried in a sump lined with a biodegradable liner or a plastic liner, and the entirety of that will be removed. Once the sump is closed, the ground will be mulched and seeded.

There will be temporary effects to the sites during drilling operations which may consist primarily of auditory and visual effects, but may include particulate effects during dry and windy conditions. These effects, however, should only last during drilling activities.

Therefore, SHPO has made the following determination that the proposal will not encroach upon, damage, or destroy a historic property which is included in the National and State Registers of Historic Places, pursuant to SDCL 1-19A-11.1, provided that the twelve listed rock art sites are inspected pre- and post-construction by qualified personnel, a report documenting the condition of the sites will be submitted to SHPO within forty-five days after drilling has concluded, the environmental mitigation measures outlined in the case report are followed, and site [REDACTED] is avoided by all drilling activities.

The credentials and work experience of the inspection candidate can be submitted to SHPO for review. Previous experience in identifying and documenting rock art is preferred.

During the pre-construction inspection, there must be significant background research of the sites identified. Background research should include details of the sites from previous reports, site files, the original National Register of Historic Places (NRHP) nomination forms, or other available forms of previous documentation of these sites. During the inspection, these sites must be identified, mapped with accurate geospatial data (including the rock art panels themselves), and rigorously documented with sketches as well as National Register quality photos (at least 2000x3000 pixels and 300dpi, submitted in TIFF format). These photos must be submitted to SHPO via hard disk along with the final report. Scans of previous sketches may be used to document any changes that have happened between the original sketch and the pre-construction sketch. Then, any post-construction changes should be documented relative to their pre-construction condition.

The post-construction inspection will document any changes in the integrity of the sites after the drilling has completed. In the final report, the condition of the sites pre- and post-construction will be compared in





order to assess any effects to the sites or deterioration which may have occurred during work. This includes, but is not limited to, increased dust coverage, stone layers peeling-off the rock face, or hydraulic extrusion through or over the canyon walls. SHPO must respond within thirty days of their receipt of this final report, to acknowledge that the stipulations were followed, and to assess effects to these sites.

Additionally, if any tribes with an interest in this project wish to participate in the inspections, reasonable and good-faith accommodations should be made to facilitate this.

Finally, if any pertinent information is discovered during public meetings or hearings, or if specific concerns regarding effects to Historic Properties are brought forth by the public, SHPO would like the opportunity to comment on these concerns.

Should you require additional information or clarification on these stipulations or SHPO's comments on this project, please contact Jozef Lamfers at Jozef.Lamfers@state.sd.us or at 605-773-6004. Your concern for the non-renewable cultural heritage of our state is appreciated.

Sincerely,
Garry Guan
State Historic Preservation Officer

Jozef Lamfers
Review & Compliance Archaeologist

CC:
Katie Lamie - Archaeological Research Center
Lynn Griffin - Archaeological Research Center
Megan Ostrenga Fabricius - Archaeological Research Center
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