



March 3, 2026

Todd Butler  
District Ranger  
Hell Canyon Ranger District  
Black Hills National Forest  
Custer, South Dakota  
Submitted through project portal

Dear Ranger Butler:

This letter and its attachments are submitted as scoping comments on the proposed October Jinx uranium exploration project located at Craven Canyon in Fall River County, South Dakota.

Black Hills Clean Water Alliance is a non-profit group centered in Rapid City, SD. While most of our members live in the Black Hills, we also have quite a few members in Sioux Falls, SD, and across the state. Our organization was founded in 2009, and our Board of Directors is majority indigenous. We focus on public education about water in the Black Hills and work with a number of other organizations throughout the area.

Our comments cover a number of topics, including issues surrounding the project's Plan of Operations (POO), the importance of the Craven Canyon area, conditions in the proposed project area, issues around potential cumulative impacts, and additional issues that are not discussed as part of the previous topics.

#### PLAN OF OPERATIONS ISSUES

Beginning with Plan of Operations issues, there are actually two POOs, the one that was originally submitted, which is dated June 10, 2024, and the one that has been submitted for consideration during the scoping process dated October 24, 2024. (See 6-10-24 POO attached). Some of the differences between these documents include:

- There is different language in the June POO than in the October POO about the Inyan Kara formation. This involves, among other things, a reference to a paper by Cohan that is "included in Appendix 5." At that point, I realized that the October POO posted on the project website did not include Appendix 5. This paper is mentioned several times to support different information. I reserve the right to comment on the material in Appendix 5 and ask that you forward it to me at [edbhcwa@gmail.com](mailto:edbhcwa@gmail.com).
- Under the heading "Stationary" in the section on "Equipment and Vehicles," the references to two items in the June POO have been removed from the October POO without explanation. These items are "Water tank or bladder for water storage" and "Two to three water

recirculation tanks.” Besides this change to the list of “Stationary” equipment, I do not see other references to what is different in the project plan between June and October, or about why this change was made.

- In fact, the October POO has several references to recirculating drilling water. How will this be done, in the absence of “Two to three recirculation tanks”?
- At the beginning of section V.B, fairly extensive information is added about wells in the project area, with the apparent goal of showing that there are no domestic wells near the October Jinx site. This raises three questions. First, just because a well is half a mile from the project does not mean that it will not be impacted by the project – especially when the project involves pumping water from one location to another under pressure, and when the area is known to have improperly plugged drill holes from past exploration (see below). No information is provided showing the speed of groundwater movement in the area, which indicates that there are no studies on that topic. The study from a nearby portion of the Inyan Kara aquifer suggests swift underground water movement. (See Rahn study.) So a foreign company could be given permission to willy nilly pump groundwater around. This is not an indicator that the company is taking protection of groundwater seriously. The Forest Service must stop any further action on this project until the necessary research has been completed to prove that domestic and stock wells in the area would be protected from this project.
- The second issue is that specific wells near the October Jinx project are mentioned to be or assumed to be stock wells. The company apparently didn’t check on this, and the Forest Service has apparently allowed the October POO to go forward without anyone checking on this. Remember that we are talking about materials that are both radioactive and toxic – and that can cause a variety of health issues, including death. This issue should be checked on before the project moves forward. The attached information should be helpful (see attached Giese comment and attachments).
- And third, just because a well may be for livestock does not mean it’s okay to contaminate the water. This could obviously cause problems for the livestock, which would be a problem for both the animals themselves and the ranchers who hope to market them. In addition, uranium bioaccumulates both from water and from plants. This means that the meat from cattle that drink uranium-contaminated water would be more toxic than the original contaminated water. It would not be ethical or smart for the Forest Service to move a project forward that could negatively impact human health without further study of those wells during various seasons before the October Jinx project and, if it was to be approved, after the project commences. This must be added to any POO that the Forest Service might approve.
- In Section V.B.5, there was a change from the June POO to the October POO that could very well impact water quality. The June document says that during the pump test, water would be contained in a “limed sump or water tank.” The October document drops the reference to lining. This is discussed more below.

Other issues with the October POO include the following:

- In Section IV.C, the POO downplays the impacts that the October Jinx project might have on the Inyan Kara aquifer. It says that the drilling and aquifer text would “penetrate only the Inyan Kara Group” and that some wells in the area already have contamination. This does not, however, mean that it’s okay to further fracture the aquifer, take the risk of aquifer cross-contamination in an area with old poorly-plugged drill holes, or further contaminate any water. A project that is put forward by either a company or the Forest Service should just plain not contaminate groundwater in any form. It is virtually impossible clean up polluted groundwater.

Water quality may vary over short distances. In a semi-arid area, contaminating or further contaminating water – on purpose – is criminal.

- The proposed discharge pit for the aquifer testing program is estimated to hold 130,000 gallons of water. First, there is no evidence indicating how this figure was calculated, so no evidence that a 50' x 50' x 4- to 6-foot-deep pit would be adequate for a constant pumping rate of 30 gallons per minute over 3 days. If information on whether this pit would be lined is present in the October POO, I can't find it, but the difference between the June POO and the October POO on this issue, referenced above, indicates that it would not be lined. If information on the reclamation of the discharge pit is present in the POO, I can't find that either. What would be the fate of these 130,000 gallons of potentially contaminated water? This information is needed to determine the potential impacts of the project.
- Similarly, the amount of water to be used for the drilling process is unclear. Where would it come from? The POO just says "private or public sources." How much would be used? The POO says "5,000 to 10,000 gallons per day" with the possibility of up to 1,000 gallons per hour. Typically, POOs say how many gallons would be used by each drill rig per day. This POO is unduly vague.
- The POO is also vague in its descriptions of how many wells will be open for how long. The POO explains (if that term can be considered adequate) that it may "leave all, some, or none of the proposed wells open." To be blunt, there is a difference between zero and 17. The company further says that the pump test could take 3 days or up to six days. The company needs to be specific about how many wells will be left open and how long the pump test would take.
- In Section V.B.2, the October POO says that "erosion and surface water runoff are not anticipated." Clearly, this foreign company has not spent much time in the southern Black Hills. Floods are fairly common here and, according to National Weather Service records, have become more common over time. One rainstorm at the nearby Dewey-Burdock site about 15 years ago created flooding that pushed a train locomotive and some train cars off their tracks.
- The company's current plan for emergency flooding is that it would dig another sump downhill from the primary pumps. Would this even be possible in a timely fashion when flooding hit the area? Those of use who live here know that it's not unusual for heavy rainfall to come up unexpectedly and/or in a very short time. This company better come up with a better plan for this possibility.
- In the section on Solid Wastes, V.C, says that solids resulting from the drilling process will be buried. Will these wastes be tested first, or is the company potentially talking about burying radioactive and toxic materials in a pit that could be compromised by flooding, animals, or other circumstances?
- The October POO only counts the actual drill pads in measuring the size/impact of the project. This ignores the impacts from vehicle movement to, from, and between drill pads, moving equipment and material to and from the Section 36 laydown, and potential dispersed underground water impacts.
- The POO is also not clear on the level of impacts from the drilling. It says the project would involve drilling during either 1 or 2 shifts a day and for 5 to 7 days a week. What would the reality be – 12 hours for 5 days a week, or 24 hours for 7 days a week?
- Section V.E fails to include all protected species that might be impacted by the drilling project. It also fails to say what would happen if protected species were found during drilling, making only the very vague statement that they "would be appropriately managed." Additional possibilities are indicated in a Game, Fish and Parks/Department of Agriculture and Natural Resources document (see attached), but it is not clear if the suggested surveys have been done or have been done thoroughly.

- The section on Cultural Resources leaves out a lot of critical information – information that goes directly to this area’s lack of qualification for a categorical exclusion and the requirement of an Environmental Assessment or an Environmental Impact Statement. This section suggests study, but a lot is already known about the Craven Canyon area. For example, part of it is protected under the National Register of Historic Places (see attached). The archeologist who has done the most study in this area, Dr. Linea Sundstrom, has reported that sites of importance are located both in the Canyon and on its rim. She also outlines a few of the potential impacts of this type of project from her point of view (see attached; note that two numbers are omitted).
- For this place that the Forest Service itself said is so important that its importance cannot be overstated (see attached EA), the “records search” suggested in the POO is totally inappropriate. This is a living sacred place of history, culture, and ceremony for indigenous peoples. Rather than just looking at paperwork, there needs to be both broad and deep consultation and free, prior, and informed consent by indigenous peoples before this project would be allowed to move forward (see attached UNDRIP document). The nature of these activities should be planned, designed, and implemented by the individuals selected by indigenous communities, not by the Forest Service, the company, or a contractor that has not been approved by tribal leaders.
- The POO also fails to address the real impacts of the company’s project. The company makes a blanket statement that the project “will not encroach upon, damage, or destroy any historic property within Craven Canyon,” but that an “abbreviated case report will be required.” There are at least three problems here. One is that they limit their consideration to sites “within” Craven Canyon, when the expert on the area from an archeological standpoint says that there are sites of historical and/or cultural importance on the rim of the Canyon. The second is that they offer no evidence to support their blanket statement of no harm. Drilling causes a good deal of vibration and noise. It creates holes in rock that did not exist before and the possibility that something unexpected could result. They propose using large lights, if they drill at night. All of these would impact “historical properties” in the Canyon, as they are still in use for prayer and ceremony. Third, while what we observe with our senses can disrupt religious/spiritual practices, the Canyon is also important for things that cannot be observed with our senses. Having a drilling rig or a drilling crew in the general environs is itself disruptive of the cultural practices that take place there.
- Section V.G.3, which is supposed to talk about spill prevention, containment, notification, and cleanup does not include information on cleanup. The company mentions creating a “Health and Safety Plan” that will “include spill control,” but spill control does not include cleanup. The Plan is also not included in the project materials provided to the public on the Forest Service’s website for this project, so we have no way to know whether this plan will actually accomplish the things that are needed to truly solve problems related to hazardous and toxic releases into the environment.
- How will the “approximately three vehicles per shift” get in and out of the area? Three vehicles per shift are unlikely to be able to move the projected six to 8 people per shift both in and out of the area. And then there are the water trucks. If a Forest Service or state staff member who needed to regulate the site or a corporate director came to the site, they would apparently be part of the “approximately.” So would the “subleases, contractors, subcontractors, or renter”, as mentioned in section V.K. The company’s estimates need to be more realistic, if we are to know the actual number of trips into and out of the site and their impacts.
- Besides the company’s access to a drilling site, there are other important public access considerations. Would the public be routed through – and trampling -- sensitive areas when the company restricted access and “interference” with its project. Another critical public access that is not dealt with in the POO is that, according to people who have lived in the immediate

area for decades, more people going into the Craven Canyon area has always meant more vandalism of the 7000+ year old historical and cultural sites. The company should be careful to keep its “employees, subleases, contractors, subcontractors, or renters” from doing damage to the world-class cultural resources in the area.

- Section V.M says that the Forest Service and the company “will agree on a schedule of inspections.” This is ridiculous and allows the company to clean up any problems before the Forest Service inspectors arrive. Forest Service and State inspectors should clearly have access to exploration drilling sites at any time to insure that – for example – drilling is taking place at the place, angle and depth that the company has said it would drill.
- Some spaces are not completed in Section VII.B. Why was the information on bonding left blank? This is an issue that the public has every right to know and to comment on, given the poor track record of mining activities – including mining activities directly in the Craven Canyon area.
- And finally, Section VII.F says that the POO “has been approved for a period of 5 years and 7 months until 12/15/2029.” [underlining in original.] Other text in this POO indicates that this will be a project lasting under year. This offers an entirely different story. Which is it? Again, the public has a right to know what is proposed and to comment on the actual plan for the project. If this project is to last less than a year, anything beyond that is clearly improper, and potentially illegal, as it would mean that this project would not be appropriate for a categorical exclusion.

#### IMPORTANCE OF CRAVEN CANYON AREA

As mentioned above, the Craven Canyon area has very deep and very ancient importance. This is evidenced by the land itself, reports from cultural and ceremonial experts, archeologist reports, and the National Historic site nomination mentioned above. It is also evidenced by the many efforts to protect the area over decades.

While indigenous peoples have protected the canyon area for thousands of years, some of the more recent arrivals have also worked to protect it. One was George Hey, who died in 2017 at the age of 99-1/2. A story of George, his life, his family, and the prize he won in 2011 from the Forest Service and the SD State Historical Society for his efforts to protect the area is attached. It says that, in early 2018, “The Forest Service still works with Native groups, colleges and others for limited vehicle access for educational and spiritual purposes” to the Canyon. Something has certainly changed in recent years, when a drilling company is allowed to consider drilling in the canyon area.

Another effort began in 1979, when the Black Hills Alliance (BHA) was formed by area Lakota leaders, ranchers, and environmentalists. This group worked to stop uranium mining in the Black Hills, where exploration and attempts to restart uranium mining were booming, including attempts by Union Carbide Corp. to get mining going in Craven Canyon. The company said it was exploring, but it actually began mining in the Canyon wall. It did not have a mining permit. Local residents alerted the BHA to the fact that large equipment was moving into the Canyon, and the organization’s attorneys filed to stop the mining. A lawsuit followed, which eventually reached the SD Supreme Court. The company lost in 1981 and, around the same time, packed up and left the Black Hills. (court decision attached).

A few years later, in 1991, area citizens applied for a special, exceptional, critical, and unique lands (SECUL) designation for some of the area covered by this Plan of Operations, as well as additional nearby areas. This State designation protects an area from mining. At this time, the E 1/2 NE ¼ Section 25 of

T7S R2E and the W ½ NW ¼ Section 30 of T7S R3E are covered by a SECUL designation. (see attached files)

The October POO, in Figure 1, also shows a mineral withdrawal in the center of the map, which is indicated by an almost square hatched area that is on portions of both of the sections that are proposed to be drilled in this project. A second mineral withdrawal was proposed for this area by the Forest Service, with the final Environmental Assessment published by the Hell Canyon District in 2011. (see attached.) Alternative 2, the proposed action for the withdrawal project, included all of one of the sections involved in the current project (T7S R3E 30) and most of the second (T7S R2E 25). It is not clear why this withdrawal was dropped or exactly who in the Forest Service stopped it, but it was cancelled by the Forest Service in 2015.

Apparently, the word did not get around well. A 2023 email from the SD Minerals, Mining and Superfund program – part of the Department of Environment and Natural Resources (DANR) to the Forest Service asks about the status of this proposed second mineral withdrawal. In this email, the State employee asks the Forest Service employee about the status of the second withdrawal due to activity in the area by Basin Uranium (the predecessor to Nexus Uranium, of which the current applicant is a subsidiary). The email notes the activity in section 36, which is immediately south of one of the sections under consideration in this proceeding, and says that if “there is no mineral withdrawal, feasibly they could drill under the USFS lands from the state lands.” (Email is attached.) This, of course, could also be said of drilling around or near the rim of Craven Canyon or within the Canyon reaching to greater depths or additional aquifers, a possibility that the POO does not consider.

This is not the time to destroy an area that has been so carefully protected for so many years by people of all backgrounds in western South Dakota. The Craven Canyon area must be protected.

#### PROPOSED PROJECT AREA CONDITIONS

The area around Craven Canyon was drilled in the first round of uranium exploration in the area – between the 1950s and 1972. Unfortunately, the results of that activity have not been properly cleaned up. Three documents offered here provide information on problems in this area. These issues need to be considered not only as potential cumulative impacts to the current project. They should also be considered because the fact that past exploration drilling and mining were not cleaned up properly – if at all – creates dangers for water, livestock, vehicles, and humans. (See attached Hall study.)

When new drilling is done in an area with past drilling and mining that have not been cleaned up, there is also a risk of cross-contamination of aquifers, of unexpected artesian flows, and of wastage of water – which is a precious resource in this semi-arid area. While Dr. LaGarry’s study looked at the Dewey-Burdock site, which is a few miles west of the current proposal, it provides relevant context about uranium drilling in the area. His study looked at a sample of 4177 out of 7515 old exploration hole drilling logs in the Dewey-Burdock project area. (Attached.) Among other things, he found:

- 140 open, uncased holes
- 16 previously cased, redrilled open holes
- 4 records of artesian water
- 13 records of holes plugged with wooden fenceposts
- 6 records of holes plugged with broken steel
- 12 records of faults within or beside drilled holes
- 1 drawing of 2 faults and a sink hole within a drilled transect

- 7 notations “do not record this value on drill hole maps”
- 2 notations “do not return this to landowner”
- 63 redacted borehole logs

This gives some idea of what circumstances could be found at the October Jinx project site.

As the POO notes, some water has been contaminated by radioactive materials in the area of Craven Canyon. It is also important to know that there are about 169 old uranium mines and prospects in the southwestern Black Hills, according to US Environmental Protection Agency records. Only a handful of these sites have been cleaned up. Most of them, including the mile-square Darrow Pits project, remain open to wind and water. One of the results has been uranium contamination in the Cheyenne River, which is only a few miles downstream from the proposed drilling area. A 2016 study found elevated uranium in stream sediment in the river as far downstream as the entrance to Angostura Reservoir. (See Stone et al study.) The addition of additional radioactive and toxic contamination to the watershed would potentially be dangerous for all those who live nearby, recreate in the Reservoir or along the river, or pump irrigation water for crops and livestock.

## CUMULATIVE IMPACTS

As mentioned above, the impacts of past exploration and mining in the southwestern Black Hills should be considered cumulative impacts for purposes of considering this project. There are also other current uranium projects in the several miles around this proposed project. These include 3 other projects proposed by Nexus Uranium, the parent company of this applicant. These include the state lands portion of the Chord Project, the Dead Horse Project, and the Wolf Canyon Project. (See attachments.) The article about the increase in the size of the Chord Project also shows a fifth uranium project, the Dewey-Burdock Project, which is a few miles west. It is currently controlled by enCore Energy, although it has not achieved mine start-up, which was originally planned for 2009.

The company also has the Dewey Terrace uranium project, which is just across the Wyoming border – and likely hydrologically connected to the Dewey-Burdock project. enCore has expressed its wish to use its uranium processing facilities at Dewey-Burdock as the hub of uranium activities over a broad area, but it has not identified the locations of those other activities. There is, however, the possibility that uranium will be transported via truck from other places in Wyoming or Nebraska – where there is uranium mining -- to a facility a few miles from Craven Canyon. Any transportation should be considered a cumulative impact of this project, including transportation of any mined uranium or uranium wastes that result from this project from the project area to other locations.

While any start date for the Dewey-Burdock Project is speculative, it is also important because enCore intends to use the Inyan Kara aquifer for an in situ leach mining project. This is the same aquifer involved in the current project. The Dewey-Burdock Project has applied to the SD Water Management Board for rights to over 8,500 gallons of Inyan Kara water per minute for the life of its mine and attempted reclamation. To date, I am not aware of any research on the potential impacts of this pumping outside the permit boundary for the Dewey-Burdock Project, but that is a lot of pumping. As Dewey-Burdock is close to the project considered here, and as both projects would use the same aquifer, research on this issue is needed before either project continues.

There are substantial uranium activities in the area of the October Jinx Project. These activities and planned activities should be considered as cumulative impacts in any decision on this project.

## ADDITIONAL ISSUES

There are two additional issues related to the October Jinx Project. For one, the computer link on the page where one writes comments on this project that is labeled “Go back to main project page” has been broken through at least most of the public comment period. This – at least – inconveniences people who want to look at project information while they make their comments and – at most – could cause someone to give up on submitting comments at all. (See attached samples.) It is still broken today, the last day of the comment period. The NEPA process is designed to educate and involve the public, and this situation falls far short of that goal.

The other issue we have considered in writing these comments is the lack of Black Hills National Forest personnel, compared to a year ago. With notably fewer staff, will BHNF be able to truly read and consider people’s comments? This is not a situation in which AI should be used to summarize people’s ideas, as AI is frequently inaccurate – and incapable of translating words, phrases, or paragraphs from Lakota to English. The need for human consideration of almost 900 comments (at this hour) means that there is a need for more Forest Service personnel. We support re-building the Black Hills National Forest staff.

The comparative lack of Forest Service personnel also concerns us because there is a question about whether there are still enough personnel in the Black Hills to observe exploration projects carefully and regulate them properly. This is a must for a project that would involve radioactive and toxic materials, as well as a 7000+ year old partially protected ceremonial and historical site. As we have publicized the need for comments about this project, we have remained aware of the fact that what we do can cause vandalism in the canyon. We make it a point to avoid describing the project location or tell people how to get into the Canyon. We hope the Forest Service will help keep people out of that area by preventing drilling personnel from entering that space. And we hope you will stop this dangerous project.

Thank you for the opportunity to provide these comments.

Sincerely,

A handwritten signature in blue ink that reads "Lili Jones Jarding". The signature is fluid and cursive, with the first name "Lili" being more prominent.

Lili Jones Jarding, Ph.D.  
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