

Denali Citizens Council



Advocating for Denali's Wilderness, Wildlife and Way of life.

August 18, 2014

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Re: Healy Creek Exploration Project Plan of Operations comments

To Whom It May Concern:

On behalf of the board and more than 300 members of the Denali Citizens Council (DCC), I am submitting comments on the Usibelli Plan of Operations for the 2014-2015 Healy Creek Exploration Project. DCC is a local public interest organization, founded in the Denali Borough in 1974. We have encouraged public education and citizen oversight in activities proposed for shallow gas exploration in the Denali Borough since 2003. Our members have taken a keen interest in proposals by Usibelli Coal Mine, Inc. to explore for gas on lands within the Denali Borough. Thirty-three of our members commented on the Preliminary Best Interest Finding for Healy Gas Exploration in 2005, and several of our members asked for reconsideration when the Final Best Interest Finding in 2010 failed to satisfy concerns around mitigations, setbacks and sensitive lands.

In our comments and suggestions regarding this license, DCC never opposed gas exploration east of the Nenana River (where the currently proposed project is located). However, such activities, conducted on lands owned by all Alaskans, must be conducted according to the requirements of state law and in the Final Best Interest Finding that granted the Healy Gas Exploration License. In addition, we encourage the State of Alaska to provide that extra measure of oversight on these activities that was developed during extensive public process in the *Final Enforceable Standards for Development of State Owned Coalbed Methane Resources in the Matanuska-Susitna Borough (2004)*. While we are aware that these standards were developed for a certain region of the state, we were promised that they would be tailored for the Healy project.

Because coalbed methane exploration and development in Alaska is still relatively new, this particular project will set a standard for adequate oversight and public accountability. For that reason, it is important that the Plan of Operations be clear, comprehensive, accurate and defensible. Our comments have been developed with that vision - not necessarily to oppose gas exploration at Healy Creek, but to be sure it moves forward with the utmost care and scrutiny. As such, we seek to point out where the Plan of Operations is not clear, accurate, comprehensive and defensible, and where it must provide more robust mitigations.

Clarification and Corrections

The following items include references to areas of the Plan that appear to contradict each other. To remedy this, we ask that DOG:

- **Clarify the difference between lease and license.** The applicant is a Licensee for purposes of the Healy Gas Exploration License. The applicant may be a lessee for terms of the Coal Mine, but not for this Plan of Operations. See:
 - Cover Letter: “on their Healy Basin Gas-only *Lease*”
 - The heading of Section 1.3 (Table of Contents, p. 1) of the Plan: “Section 1.3: *Leased* Property Location and Land Status”
 - Numerous references in the permit application (first page of the two-page application).
 - Sections 1.3.1 and 4.1 (p. 2 and 5) of the Plan states that the site is “within active coal UCM leases targeted for future mining.” Our understanding is that Usibelli is permitted to explore for coal in this same area under a “Permit to Conduct Exploration” for the “Healy Valley Coal Exploration Project.” Is there also a lease in place?
- **Update and clarify scheduling.** An amended schedule should be included in the final plan. Schedules seem to conflict in the following areas:
 - Section 1.2 (p. 1) of the Plan suggests, “Exploration would continue for two summer seasons.” Yet for 2014, exploration activities will not begin until the fall.
 - Section 3 (p. 4) of the Plan states: “drilling will begin in early August and run through October of 2014.” Our understanding is that no activities related to gas exploration are permitted until this Plan is approved. Considering the comment deadline of August 18, and the time it will take for the DOG to review public comments, the start date will need to be updated.
 - Section 3 of the Plan also states: “reclamation will be completed by October 31, 2014.” The same date for completion of reclamation is used for 2015. This end date conflicts with a statement made in the Mitigation Measure Analysis (p. 10): “No work will be started between October 15th and April 30.”
 - We assume the intent was to state: “No work will be *conducted within 1/2-mile of known occupied brown bear den sites* between October 15th and April 30.”
- **Clarify the number of drill sites and/or wells this Plan authorizes, and provide their specific location.**
 - The number of holes that will be drilled is unclear.
 - Section 1.2 (p. 1) of Plan states “Activities would consist of drilling exploration *wells...*” but then suggests that only one well is proposed in the following sentence: “The project includes all construction and other activities necessary to access, drill and flow-test *one vertical exploration well...*”

- Sections 2 and 5.1.2 (p. 4 and 7) of the Plan mentions that *1-3 additional exploration wells* may be drilled in 2015 included in this plan of operations, or will there be an additional Plan of Operations?
 - In Section 12 (p. 17, Table 4), a reference is made to “drilling of *two* exploratory wells.”
 - Whether or not any activities would occur outside of a single 150’x150’ well pad is unclear.
 - Section 1.3 (p. 1) of the Plan states “The proposed exploration activities would take place on a 150 ft. by 150 ft. footprint...”
 - Sections 1.4 and 2 (p. 3 and 4) of the Plan reference *two sites*, the “Healy Creek site” and “Cripple Creek” site. What is the Cripple Creek site?
 - Section 4.2 of the Plan states: “The well *pads* for both the 2014 and 2015 programs will be staked by the project engineer on an existing fill area previously used as an airstrip...” Yet the rest of the paragraph refers to a single well pad.
- **Update references to the now defunct Tanana Basin Area Plan (pages 1, 2, and Table of Contents).** There is a revised state plan, adopted on Jan 3, 2014, entitled the Yukon-Tanana Area Plan (YTAP), which identifies preferred “surface uses” in this area.
 - This particular area is classified in the YTAP as both Coal and Habitat. The “multiple use” classification (as referenced in Section 1.3.2, p. 2, of the Plan of Operations) is not a classification that is part of the YTAP hierarchy of classifications.
 - The YTAP classification applies to surface uses only, and the entire plan acknowledges that Oil and Gas subsurface use is present and cannot be prevented except by legislative designation. That is different from “allowing” that use, since land classification under this plan does not deal with subsurface uses and cannot “allow” or “disallow” them. This is an important distinction that should be clarified in the language of the Plan of Operations (page 2).
- **Update references to the Denali Borough Code.** It should be understood that the Denali Borough does not have a complex land management system. Its only ordinance on gas development contains a setback stipulation with respect to gas development infrastructure’s separation from private land. There are no “prohibited areas” (see p. 2 of this Plan) for gas exploration within the license area west of the highway. These were removed from Denali Borough Code in 2008.
- **Clarify the intent for disposal of produced water.** There are conflicting statements regarding produced water and wastewater disposal. We are opposed to surface disposal or other recycling of produced water, and provide additional comments related to this below.
 - The Mitigation Measure Analysis (p. 4) states: “There is no surface discharge of produced water. Produced water will be stored until the end of operations and then re-injected into the same formation.”

- Section 8.2.2.1 (p. 12) of the Plan states: “Production water will be stored until drilling is completed and re-injected into the same formation.”
 - Section 8.2.4 (p. 13) of the Plan states: “There is no surface discharge of produced water. Produced water will be stored until the end of operations and then re-injected into the same formation.”
 - Table 3 (p. 14) of the Plan states that production water will be: “Recycled for drilling muds or dust control and/or reinjection into the formation at the end of drilling.”
 - It is unclear what differentiation is made between Production Water and Produced Wastewater. Please explain.
 - The Healy Basin Final Best Interest Finding (p. 8-4) states, “Surface disposal of produced water is not allowed unless ADEC determines the discharge will meet state water quality standards. An NPDES permit would also be required for surface disposal.” Yet we did not see any reference to an ADEC determination of water quality or a NPDES permit.
 - A water management plan is required to be in the Plan of Operations if surface disposal of produced water is proposed (A.1.a.vii, p. 4 of Mitigation Measure Analysis). Yet the Mitigation Measure Analysis suggests that this is not needed, because no surface disposal is being proposed.
- Correct spelling errors in Section 1.2 (p. 1): “Activities” should be “Activities”; Section 1.6 (p. 3, p. 12 of Mitigation Measure Analysis): “cross county” should be “cross country”; Section 5.1 (p. 6): “on an previously” should be “on previously”; Section 5.2 (p. 7): “a existing” should be “an existing”; Section 6.2 (p. 9): “form the mine” should be “from the mine”; 8.1.2 (p. 11): “remained” should be “remainder”; 9.5.1 (p. 15): “personell” should be “personnel.”

Additional Information Required by Mitigations and Healy Basin Final Best Interest Finding

Several conditions required in the Healy Basin Final Best Interest Finding (Final BIF) are inadequately covered in this Plan. In addition the Final BIF (p. 7-2) states: “*When it considers a plan of operations, ADNR often requires stipulations, in addition to the mitigation measures developed through the best interest finding. These additional stipulations address site-specific concerns directly associated with the proposed project. The license stipulations and the terms and conditions of the license are attached to the plan of operations approval and are binding on the licensee.*” We hope that the DOG will consider our comments and questions in comparison to the promises in the Final BIF, and consider additional mitigations as necessary.

Provide the distance between other areas of interest in Relative Distances of Interest (p. 2 and Figure 2).

- How far is the site from Healy Creek and Cripple Creek?
- Have the flood plains of these creeks been identified? How far is the site from the flood plains of these creeks?
- How far is the site from residential property or recreational cabins?
- How far is the site from prehistoric, historic or archaeological sites?

Clarify details on waste and waste disposal.

- Where exactly will drilling waste (including treated muds and cuttings) be disposed of? We support the use of existing infrastructure and solid waste disposal sites, but it is unclear where drilling muds and cuttings will ultimately end up.
 - The Solid Waste Permit #SWZA046-15, approved in 2010, “authorizes the disposal site to be located at different places with the Poker Flats and Two Bull Ridge mining areas.” We assume this is the “landfill” that is referred to by this Plan, but are unclear on whether this meets the standards outlined in 18 AAC 60.430.
 - How will or have these sites been reported, and how may the public request these reports and locations of drilling waste disposal sites?
- Will the “enclosed containers” for inert waste (Section 8.2.1, p. 12) be bear proof?
- What is the capacity for storage of produced water? If the amount exceeds the capacity of tank storage before end of project, is there a contingency plan?
- Will secondary containment be used for tanks used to store produced water on site, as has been proposed for drilling mud and cuttings? We would like secondary containment to be used.
- What is the capacity for storage of drilling mud and cuttings? If the amount exceed the capacity on-site, is there a contingency plan?
- Are Material Safety Data Sheets available to be appended to the Plan or referenced at an online source, rather than simply being posted at the site?

Clarify status of surface and subsurface ownership in areas that exploration activities would occur (including access routes and water withdrawal sites).

At a Denali Borough Assembly meeting (August 13, 2014), a map was presented that showed detailed surface ownership (including Alaska Mental Health Trust Land). It would be helpful if that, more detailed, map could be included in this Plan.

- This map identified the section where drilling is proposed (F012S006W, Section 16) as Public School Trust Land. It would be helpful if the state could provide a description of what this status means and what (if any) differences exist in the management of Public School Trust Lands.

Clarify the status of access along the road that travels up Healy Creek.

According to mitigation measures (A.1.a.ii), analysis of access issues should include: “Consideration of public access granted under RS 2477 and other established rights-of-way.” Yet there is no specific information on established right-of-ways included in this Plan.

- Is access on the road (via the bridge over Healy Creek) to Healy Site #1 or travel through and past the site along the road to Cripple Creek limited, restricted, or allowed? Will this status change at times?
- According to the Alaska Mapper program there are no easements that travel directly to these airstrips where Healy Site #1 would be located. Please specify the status of access, including easement or right-of-way permit numbers.
 - Matanuska Telephone Association holds ADL 47986 (1969), which is the closest right-of-way to the Healy Site #1 on the state's public database, but even this does not connect with the airstrip.
 - Usibelli holds ADL 24520 (1964), but this route stays north of Healy Creek, and according to the case file, was assigned to DNR to manage for public access in 1984.
 - Usibelli also holds ADL 23976 (YEAR), which is along the road where access is restricted by gate (marked as Mental Health Trust), which according to the case file was assigned to DNR for public use in 1984.
- The Healy Valley Coal Exploration Project Exploration Permit (#E-0603, dated August 6, 2013, condition 11) states: "It has been brought to the attention of DMLW that there are questions regarding valid surface access to the lease area. If needed, appropriate legal right-of-way access must be acquired prior to accessing the site for road based exploration projects." What were these surface access questions, and how were they legally resolved?
- What is the "UCM Land Use permit" (mentioned in Section 4.1, p. 5), that "covers road maintenance activities"?

Clarify status of archaeological surveys in the area.

Although mitigations (#7) require different information for prehistoric, historic and archaeological sites, it is unclear whether there are any known sites of this nature in this area. Although we understand that this site uses existing roads for access, and the well pad is being constructed on or adjacent to the airstrip, surely there have been surveys of the area that document where archaeological resources exist. It would be helpful to identify these areas in this Plan in order for the public to fully understand the status of the site, whether or not it is in an area that has been previously disturbed by mining activities.

Include a Monitoring Plan to address Mitigation Measure requirements.

According to the Final BIF (p. 4-1), "Numerous environmental baseline studies have been conducted for UCM surface mining permits. These permits contain extensive public information on pre-mining soils, ground water, surface water, vegetation, wildlife, archeological resources, and cover significant portions of the license area...**This information should be considered in future permitting.**" We would like to see a monitoring plan that incorporates the existing baseline information (which has already been compiled), and plans to monitor during and after gas exploration.

One mitigation measure (A.1.a.v) clearly states that: “A monitoring plan will be tailored to the specific situation and potential impacts of proposed activities.” This includes potential impacts to water quality and quantity, potential noise or visual impacts, proximity to sensitive habitats or use areas, and potential impacts to fish or wildlife populations. In addition, the Final BIF and the YTAP define further standards (see below). Yet in the Mitigations Review Analysis (p. 4) it is proposed that such a monitoring plan is not necessary. Whether or not a monitoring plan is applicable to this project is not adequately presented in the text of the plan, and we maintain that a monitoring plan should be included, and will not likely be onerous because of the data that has already been collected and is being collected near this site. It should not matter whether or not this is in an area that has been previously disturbed by mining activities.

Also, to suggest that noise impacts are not applicable if there are not concentrations of people nearby is to presume that the impacts of noise are only significant in the human context. Yet the YTAP (p. 2-18) states: “Uses that are likely to produce levels of acoustical or visual disturbance sufficient to disturb calving, rutting, or post-calving aggregations that cannot be seasonally restricted should not be authorized in these areas. Uses may be authorized in these areas at other times of the year. **DNR authorizations shall include seasonal restrictions on activities that would produce significant acoustical or visual disturbance during sensitive periods.**” In the Unit Description for this parcel (P-51), it states: “The area is an important caribou wintering ground and it is also important for moose calving, rutting, and wintering habitats.” The Final BIF echoes this, showing that caribou use this area in the winter (Map 4.3, p. 4-17), that moose use this area in the winter and for calving and rutting (Map 4.4, p. 4-18). These are sensitive periods that YTAP requires the state to address; yet no visual or acoustic monitoring is included in this Plan.

Specifically, this monitoring should include:

- Baseline acoustical data and noise monitoring (see Final BIF, p. 8-2: “the licensee is required to prepare a monitoring plan that considers potential noise.”)
- Surface water quantity and quality should be reported, both baseline data, and monitoring data during and after exploration activities. Reporting should also include the quantity of water used for exploration activities, timing and location.
- The Final BIF (p. 8-6) states, “AOGCC also requires that a coalbed methane operator conduct baseline testing of potentially affected wells and establish a monitoring program. The data is available to the public.” It seems logical to include this groundwater monitoring as part of this monitoring plan, and we assume that there is already extensive water monitoring conducted at nearby existing wells that could easily be incorporated here.
- It seems prudent to include monitoring of seismic activity in order to identify any increase in seismic activity that could be related to gas exploration or future development activities.

- Monitoring should occur until reclamation is complete, and after reclamation for a defined period of time to ensure that any changes to conditions or resources are fully understood and recorded.

Permits and scheduling must comply with state statute and code.

Our understanding is that activities related to oil and gas development should not be undertaken until a Plan of Operations has been approved. The Final BIF (p. 7-1) states: “These require the licensee to prepare plans of operations that must be approved by DO&G before the licensee may commence any activities. Except for uses and activities appearing on the list in 11 AAC 96.020, the licensee must prepare a plan of operations and obtain all required approvals and permits for each phase of exploration, development, or production before implementation of that activity.” This was not the case, with at least one well pad area cleared as early as spring of 2014. Generally allowed uses include brushing of up to 5 feet wide for trails or survey lines, but certainly this large of an area would not generally be allowed.

Water should not be appropriated or disposed of under permits obtained for coal exploration. It is inappropriate to obtain water for a gas exploration project under existing coal mine permits. Usibelli should be required to acquire permits for water use separate from those already authorized for coal exploration and mining activities. If water currently authorized for use associated with coal mining is to be used for gas exploration, we request that DNR condition approval for this Plan on formal amendments to existing water authorizations (related to mining) before water is used from these sources for coalbed methane exploration activities. Otherwise we do not see how using this water complies with authorized use.

Geophysical Hazards should be more thoroughly described.

The Plan’s only mention of Geophysical Hazards is that there are no geophysical hazards in the area (p. 3 of Plan, p. 2 of Mitigation Measure Analysis). Yet the Healy Creek Fault is identified as 1.5 miles away. We assume there has been extensive geophysical data collected in this area related to coal mining operations, although none of this data is presented in the plan. Earthquakes in a growing number of states have been linked to wastewater reinjection wells and wells that are being hydraulically fractured. Recent requirements passed in Ohio include the installation of seismic monitoring equipment for sites located within 2 miles of an active fault. Although Alaska has no such rule, it may be a good practice to consider, particularly during reinjection of produced water, or at later phases if hydraulic fracturing is introduced. This would allow for wells to be shut down during times of seismic activity, and improve the safety of workers at the site. We understand this may be considered unnecessary at this time, but should be something that the operator and state consider, particularly if seismic activity increases.

Surface disposal of produced water should not be allowed.

As explained above, the Plan is contradictory about whether produced water (or produced wastewater) will be reinjected, recycled, or disposed of at the surface. Neither a water management plan nor an NPDES permit have been referenced in this application, but the

Final BIF (p. 8-4 and Mitigation Measure # A.1.a.vii) states that they are required. Thus, surface disposal should not be authorized.

There is an immense body of evidence¹ that produced waters can contain “potentially harmful pollutants, including salts, organic hydrocarbons (sometimes referred to simply as oil and grease), inorganic and organic additives, and naturally occurring radioactive material (NORM).” This report also points out that, “applying wastewater onto land surfaces increases the risk that pollutants will be washed into nearby water bodies or leach into groundwater.” This risk increases when application rates are high, or if application takes place close to rainfall events or snowmelt.

Considering the potential pollutants contained in produced water, and the numerous streams that Usibelli roads traverse, we urge the state not to allow surface disposal. If the state chooses to allow surface disposal, in our understanding is that it must require a water management plan, a water quality monitoring program, a description of the treatment of produced water, and NPDES permit.

We do support the recycling of produced water during drilling, or the reinjection of produced water after operations have concluded, so long as the depth of its use is proven to not be in proximity to freshwater aquifers, and that the movement of injected fluids into freshwater sources will not occur.

Plans for Rehabilitation

According to 11 AAC 83.158 (d)(3), an application for a plan of operations must include “plans for rehabilitation of the affected leased or licensed area after completion of operations or phases of those operations.” Our understanding of this language is that the licensee will identify in the Plan of Operations what is eventually planned to restore the site after each phase, including exploration. We realize that reclamation or rehabilitation will depend on the results of exploration, but think that it is reasonable to require more details on the expectations for rehabilitation.

Improvements to the Public Process

Provide comprehensive information along with the permit application.

Numerous plans and permits were referenced in the Plan of Operations, and included in the permit application to the DOG. Yet the DOG failed to provide copies of these permits and plans as part of the public notice. DCC has requested copies of these various plans from the Department of Fish and Game, Department of Environmental Conservation, Division of Mining, Land and Water (Water Resources), and Alaska Oil and Gas Conservation Commission. Following is a list of documents referenced in this Plan but not provided to the public:

- **ADEC Treatment and Temporary Storage of Drilling Waste Plan**

¹ For a thorough review see “In Fracking’s Wake,” NRDC Document May 2012, D: 12-05-A, accessed at: <http://www.nrdc.org/energy/fracking-wastewater.asp>.

- **ADNR Temporary Water Use Permit Application** for Healy Creek, Cripple Creek, and Hangar Pond
- **ADNR water authorizations** for Poker Creek, the UCM Camp Well and UCM shop/office complex
- **ADF&G Title 16 Fish Habitat Permit** for Healy Creek, Cripple Creek, Poker Creek and Hanger Pond
- **ADF&G Public Safety Permit Application**
- **ADEC Spill Prevention Control and Countermeasures Plan** (for UCM)
- **ADEC Temporary Waste Disposal Plan**
- **ADEC Air Quality Minor Permit** (MG1)

These documents discuss details that were not available in the Plan of Operations. Instead, these topics (including drilling waste management and rehabilitation or reclamation) were deferred to these other various plans and permits. Leaving these details out of the Plan, and making the attachments to the Plan unavailable to the public shrouds this project in secrecy. If the State of Alaska would like its own citizens to trust that it is making decisions that are indeed in the Best Interest of the state and its residents, there should be no reluctance to share this information.

Expand opportunities for public involvement.

Future Plans should include a public meeting, scheduled in Healy, and noticed at the time that the Plans are noticed. This comports with best practice in the Enforceable Standards developed for Mat-Su CBM (including notice to municipal governments, local libraries and post offices), and goes a long way to ensure public trust. In the case of the Plan of Operations for Healy Creek, no meeting was scheduled at the time of notice. After several requests that it happen, a representative of Usibelli appeared at a Borough Assembly meeting in Anderson, not the best place for a meeting dealing with activities near Healy. Prior to this, the operator appeared content with notifying the Borough Assembly and Planning Commission and promising a “tour” of the facility after the Plan of Operations approval.

It is important to consider that although this is a relatively limited project on lands already disturbed by prior activities, it still takes place on state lands, which under the Alaska Constitution are owned by all citizens and subject to the best interests of all citizens. This is a high bar, and all we ask here is that the Plan of Operations respect this high bar by being as scrupulous, accurate and clear as possible.

A list of stakeholders is referenced in the Mitigation Measure Analysis. Please add us to the list using the contact information provided on the first page of comments.

Thank you for the opportunity to provide comments on the Healy Creek Exploration Project Plan of Operations. Please keep in mind that these comments have been developed not to oppose gas exploration at Healy Creek, but with a vision to be sure it moves forward with the utmost care and scrutiny.

Sincerely,
 /s/ Hannah Ragland, DCC President
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