

Athabasca Denesuline Né Né Land Corporation

18 August 2014

AREVA Resources Attn: Barry McCallum 9204 – 817 – 45th Street West Saskatoon, SK S7K 3X5

RE: AREVA KIGGAVIK URANIUM PROJECT – ATHABASCA DENESULINE, NIRB FILE #09MN003

Mr. McCallum,

We have conducted a preliminary review of the information that was forwarded to us on May 28th, 2014 (via email) regarding the questions we raised in our letters dated December 4th, 2013 and January 14, 2014. After review, it is quite clear that there remains numerous unanswered questions, and the need for more clarification regarding our concerns.

One of the main concerns we have is that although the *Technical Appendix 10A – Transportation Risk Assessment* deals directly with the transportation of yellowcake, it does not include an assessment of impacts other than in the area near Baker Lake. For example:

- 1. The assessment did not use culturally or ecologically significant species for the Athabasca Region. *E.g.* the use of arctic ground squirrel and tundra swans is fine within the tundra, however, there is a need to consider species below the treeline as well. Especially since most of the flight path would be directly over this area. This is a major oversight.
- 2. There are no mention of the increased risk to Wollaston Lake, Hatchet Lake or Lake Athabasca in the discussion of impacts to large lakes.
- 3. There was no consideration of species that live in the area that are not migratory and semi-aquatic, e.g. beavers, muskrat, etc. The assessment assumes that a spill would occur in the tundra environment, and that the species would not be in the area for a longer term than four months, as discussed regarding tundra swan.

Email: rrobillard@adnlc.ca or tgiroux@adnlc.ca Chief Joseph Custer Reserve # 201

Mailing address: Box 23126 South Hill PO, Prince Albert, Sask. S6V 8A7

Phone: (306) 765-2560 Fax: (306) 763-2973

- 4. In various calculations on the predicted release frequency on roads, AREVA used only numbers from the Kiggavik mine site to the airport in Nunavut (i.e. only 343 trucks per year over 10 km of road). In reality, there needs to be calculations based on Points North to La Ronge, SK in order to understand the increase frequency of risk in the Athabasca Denesuline (AD) territory.
- 5. There will be numerous water crossings on the road from Points North to La Ronge that needs to be considered. Currently, the risk assessment states that "there will be no water crossing on this road".
- 6. There is also a need to include estimated frequency of release, fire and explosion during transportation of fuel and reagents via trucks for the Saskatchewan portion of the transportation. Not just for the Nunavut base.
- 7. Information on the storage location of containers at Points North is not included in the assessment.
- 8. There is no flight path shown in the assessment. How can flight corridors, and estimates on frequencies for crash of aircrafts into water be made (with a 1 km corridor) when no path is shown?
- 9. The assessment states that the highest risk is for an accident occurring during takeoff and climb. What about landing at Points North during inclement weather? Both Hatchet Lake Denesuline First Nation and Black Lake Denesuline First Nation are in the vicinity of the airport, however, there is no discussion on the increased risk to these communities.

The second major concern is of <u>impacts to large and small lakes following a yellowcake</u> spill:

- 1. The assessment states that the Uranium concentrations would exceed the Canadian Water Quality Guidelines for uranium, 3 times in the case of a moderate spill. AREVA proposes a drinking water advisory to prevent exposure until such time as the environment fully recovers. The AD fully understand the difficulty in cleaning up and remediating such a spill. In fact, yellowcake still seeps into Lake Athabasca at the former Uranium City mine, and the area is still radioactive. If lake, sediment and land clean-up were so easy, this area would have been cleaned up years ago, and the current attempt at clean-up would not be so difficult and onerous.
- 2. The AD are very concerned that the assessment states that a spill "could potentially affect the populations of aquatic plants, benthic invertebrates and fish species."
- 3. Also, the assessment states that "small lake water quality will deteriorate to the extent that the water body loses its value as a habitat and will need remediation." This is of major concern since it would impact on the AD use of the water and adjacent land.
- 4. AD are also concerned that "access of wildlife to the lake will be restricted if an accident occurs until a time when the water and sediment have been properly remediated."
- 5. Exposure resulting from contaminated sediment was assumed to be of a long-term duration as residual yellowcake will persist in sediment for a long period of time. The SI values were exceeded in all scenarios for all aquatic species with respect to the lower reference dose. For higher reference doses, the SI values were exceeded in all cases for aquatic plants (leaves and roots) and benthic invertebrates. There was however no assessment of risk to non-migratory, semi-aquatic species, such as beavers and muskrats. These are of major cultural and ecological significance in the Athabasca Region.

The information on the <u>crash and clean-up of yellowcake is also questionable</u>.

- 1. There is no information on how weather would be a factor increasing aircraft crashes, it was only considered for truck crashes.
- 2. There is no information on how weather would delay responding to crashes and the spread of the yellowcake on the tundra (e.g. winds, storms).
- 3. There is no information on how yellowcake would be dispersed through a violent crash resulting in an explosion of the aircraft. The yellowcake would be airborne and subsequently dissipated throughout the area. The AD need to know how this would be remediated, and how far the yellowcake would be expected to travel in such a case.
- 4. How would an impact breaking through the lake ice and depositing yellowcake affect remediation efforts?

There is no information on how a spill would <u>impact on the AD way of life and use of the</u> land, i.e. ability to hunt, trap, fish, gather, and practice cultural activities.

- 1. There are numerous impacts to the environment that are described in the assessment, however, the AD are not considered.
- 2. AREVA needs to revise the Transportation Risk Assessment in order for it to be comprehensive and accurate. Impacts to the AD need to be considered.

The assessment of <u>impact to caribou is not complete</u>.

- 1. There is no information on the impact of inhalation of yellowcake powder by caribou when feeding. What would be the risk of radiation in this case? How does this impact the meat?
- What about consuming lichen that has taken up radiation/uranium. Lichen is known to absorb all nutrients from the air, including radioactivity. This is the caribou's primary food source, however there is no mention of this. There is only mention of caribou exposed by ingesting soil.
- 3. How is dispersion of yellowcake powder over the landscape monitored? This would influence the number of days that the caribou would be in contact with the radiation.
- 4. The assessment does not address possible changes in caribou behaviour, migration route, stress impacts, etc. that a spill, remediation, quarantine may have on the caribou.

The risks and impacts associated with a transportation accident are far greater than what we are willing to risk. Our land and environment is priceless and necessary for our way of life. Therefore, the AD do not support the transportation of yellowcake from Kiggavik mine to Points North, as referenced by the Motion (12 December 2013) by the Denesuline Né Né Land Corporation Board of Directors, and by the Resolution (13 December 2013) passed by the Athabasca Denesuline Negotiation Team, comprised of Elders, Leaders, and land-users. In addition to these resolutions, a new motion was passed at the Prince Albert Grand Council - Athabasca Region Sector Meeting, held in Wollaston Lake on July 4th, 2014. This motion is attached and was passed by representatives from all three Athabasca Denesuline communities and one Manitoba Dene community.

If you have any questions please do not hesitate to contact me at (306) 765-2560 or email: rrobillard@adnlc.ca.

Regards,

Ron Robillard

President – Athabasca Denesuline Né Né Land Corp.

Cc:

Diane Martens – AREVA Resources Canada Inc.
Tammy Van Lambalgen, AREVA Resources Canada Inc.
Caroline Ducros, Canadian Nuclear Safety Commission
Earl Evans – Chair BQCMB
Chief Earl Lidguerre – Fond du Lac Denesuline First Nation
Chief Rick Robillard – Black Lake Denesuline First Nation
Chief Bart Tsannie – Hatchet Lake Denesuline First Nation
Hugh Ikoe – Baker Lake Hunters Trappers Organization
Chief Felix Lockhart – Lutsel K'e Dene First Nation
Chief Leo Denttanikkeaze – Northlands First Nation (Lac Brochet, MB.)
Ryan Barry – Nunavut Impact Review Board
Vice-Chief Joseph Tsannie Jr. – Prince Albert Grand Council

ATHABASCA SECTOR GATHERING HATCHET LAKE DENESULINE NATION

JULY 03 & 04, 2014

KIGGAVIK

RESOLUTION #01 – 2014:

WHEREAS the Denesuline First Nations of Hatchet Lake, Black Lake, Fond du Lac, SK and Lac Brochet, MB are signatories to Treaties #8 and #10

WHEREAS, the Denesuline historically and presently use land North of 60 and have asserted and recognized Rights in these areas

WHEREAS, the Denesuline culture, history, and way of life are highly dependent on the health of the land and water.

WHEREAS, the Denesuline have a deep understanding of the Uranium mining industry

WHEREAS, the proposed transportation of yellowcake from the Kiggavik Uranium mine by Baker Lake, NU to Points North, SK is of significant concern to the Denesuline

WHEREAS, the risk of one of these aircrafts crashing onto land or water would be critically and irreversibly destructive to the entire ecosystem of the area

WHEREAS, the Denesuline are seriously concerned how the barrenground caribou populations would be adversely affected if such a catastrophe would occur.

THEREFORE BE IT RESOLVED, that the Denesuline oppose the transport of uranium from the proposed Kiggavik Uranium Mine to Points North, SK by air and ground transport.

FURTHERMORE BE IT RESOLVED, that AREVA Resources meaningfully consult the Denesuline communities.

Moved by: Billy Adam

Seconded by: Madeline Denechezhe

All in Favour: 62

Against: 0

Resolution Carried:

Date: 07-04-14