ᐊᕙᑎᓕᕆᔨᒃᑯᑦ
Avatiligiyiit
Department of Environment
Ministère de l'Environnement

File No. NWB2BE-IZO

July 31, 2006

Richard Dwyer
Licensing Trainee
Nunavut Water Board

via Email to: licensingtrainee@nwb.nunavut.ca

RE: IZOK PROJECT 2BE-IZO NEW WATER LICENCE APPLICATION

The Department of Environment (DOE) has reviewed Wolfden Resources Inc. Izok and Hood license application and has the following comments.

1. **Hazardous Material Management**

Movement of hazardous waste

All hazardous materials should be removed from the site upon completion of the activity. The proponent is referred to DoE's *Environmental Guideline for the General Management of Hazardous Waste.*

Furthermore, the DOE, Environmental Protection Service (EPS) monitors the movement of hazardous waste, from the generator, carrier to the final disposal, through a tracking document (Waste Manifest). A Waste Manifest must accompany all movements, and all parties must register with EPS. There is no mention of this procedure in the spill plan.

Soil Remediation

On removal of fuel tanks and drill, the area around them will be inspected for hydrocarbon contamination. Soil found to be contaminated with hydrocarbons should be remediated or suitably disposed of. For soils with contamination in exceedance 2500ppm it is not acceptable to simply move them to a landfill, they must be treated to an acceptable level.

2. **Emissions**

Camp incinerator

Nunavut is signatory to the CCME Accord and the Canada Wide Standards (CWS) Agreement. Each CCME member is responsible for implementing CWS in it own jurisdiction and must report to the public on achieving these standards. Emissions to air from this project must comply with these standards

DOE suggests that for camps >10 people and <50 a forced air incinerator can be used to handle wastes, but Wolfden are required to manage their waste streams in order to comply with the emissions targets. Kitchen wastes, cardboard, paper products, and untreated wood wastes are suitable for burning in a forced air incinerator. Industrial wastes and non combustible wastes should be removed from the camp and disposed of at a designated landfill or other approved facility. Under no circumstance should hazardous wastes be managed through burning or incineration.

Green House Gas Emissions

Greenhouse gas emissions and energy efficiency are a primary concern for DOE and form an integral part of the GN cabinet approved Climate Change Strategy.

One of the goals of the government approved Nunavut Climate Change Strategy is to '*encourage Nunavumiut including governmental, non-government, industry and the public to take action to reduce GHG emissions through energy management and alternative energy supply options*'. DOE therefore requests that Wolfden practice energy conservation and efficiency, and also show "good corporate practice" to utilize applicable alternative energy developments in there project where possible, that would contribute towards reduction in greenhouse gas production.

3. Wildlife

Human/ Bear interactions

Bears have been observed in the vicinity of the Ham Lake camp; therefore, DOE recommends that an electric fence be set up around the camp such as to reduce people-bear encounters. In addition, proper food handling and garbage disposal procedures should be followed to reduce the likelihood that bears will be attracted to the operation. Careful planning and attention to details of camp design and maintenance will decrease the attraction of bears to camp.

The applicant should follow procedures outlined in the "Safety in Bear Country Manual". Further information and advice on measures that should be taken to minimize the possibility of bear-people conflicts can be obtained via the following contacts.

DOE Contacts

Manager, Wildlife
- Monica Angohiatok, (867) 982-7441, mangohiatok@gov.nu.ca
Regional Biologist
- Mathieu Dumond, (867) 982-7444, mdumond@gov.nu.ca

Caribou

At certain times of year caribou will likely migrate through the area. DOE recommends that Wolfden be required to cease activities that may interfere with caribou migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.

Furthermore, Mid-May to mid-July is the normal calving season, a time when caribou are particularly prone to human disturbance. The proponent should be vigilant when caribou are present in the area. In the event that caribou cows and calves are present Wolfden should suspend all activities that are likely to transmit noise beyond the perimeter of the camp

Low level flights

Aircraft activity with no specific requirements for low level flying should be restricted to a minimum altitude of 300m above ground level. Concentrations of caribou and muskox should be avoided by low-level aircraft at all times.

Raptor Nesting Areas

This area is likely to contain at least a few raptor nest sites.

The following is a list of general precautions that must be considered when conducting activities near Peregrine Falcon, Gyrfalcon, and other raptor nests (most of these precautions will also apply to all nesting bird species):

1) Disturbance is most harmful early in the nesting period (May and June for Peregrine Falcon and Gyrfalcon, similar for Rough-legged Hawk): *Raptors will attempt to maximize their chances of successfully raising young. If they decide early in the breeding period that their nest is at risk, they may abandon it. If nests are disturbed at this stage of nesting, there may not be sufficient time to re-nest. All disturbances to nests during the early part of the nesting cycle must be avoided (avoid nest sites from late May through to mid-July).*

2) Individuals show variability in their response to disturbance: *Different birds will show different responses to varying levels of disturbance. This may result from the general health of the bird, weather conditions, previous life experiences, and adaptability.*

Therefore, treat all nest sites with equal precaution, regardless of the response of the bird. Do not disturb raptor nests during conditions of poor weather (rain, snow, high winds).

3) Approaching the nest site near the time of fledgling (where chicks fly from the nest) often leads to premature nest departure:
During the last few weeks of nesting, severe disturbance at the nest often causes young raptors to jump out of the nest. This can cause death from exposure, predation, starvation, or trauma from the fall itself. All activity within 100m of a nest site during the latter part of the nest stage (10-20 August for peregrine falcons in this region) must be avoided.

Further details on raptor nests and disturbance mitigation can be obtained from the Wildlife Officer in communities closest to the area of interest, or from the Ecosystems Biologist (Michael Setterington, 867-857-2828).

DOE thanks NWB for the opportunity to comment on this application.

Yours sincerely,

Mike Atkinson
Manager Environmental Assessment and Land Use