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Via e-mail

RE: NWB 2BE-CRA – Committee Bay Resources Ltd. – Crater Lake Project - Renewal

On behalf of Environment Canada (EC), I have reviewed the information submitted with the above-mentioned application. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act,* and the *Species at Risk Act*.

Committee Bay Resource Ltd. is applying for a type "B" water license for water use and waste disposal associated with exploratory drilling and camp operations for the Crater Lake Project. The purpose of the project is to evaluate the potential for economic concentrations of minerals within the project area. Activities will include sampling, mapping, prospecting, claim staking, geophysics and diamond drilling on Inuit Owned Land (IOL) and federal lands. Drilling will likely be required at selected high priority target areas. Currently, several drill-ready targets have been identified but other occurrences may be brought to the drill-ready stage during the 2007 summer program.

Committee Bay Resources Ltd. maintains four camps (Hayes, Bullion, Ingot and Crater camps) along the Committee Bay Greenstone Belt to support exploration activities. The camps will be occupied off-and-on between March and September. Exploration activities will be supported by snow machines, helicopters and Twin Otter aircraft that can land on the frozen lakes at all four camps. An ice strip will be constructed on the lake at Hayes camp in order to accommodate larger fixed-wing aircraft for the purpose of mobilizing larger pieces of equipment and supplies and to demobilized 2006 empty fuel drums and miscellaneous equipment.

Environment Canada recommends that the following conditions be applied throughout all stages of the project:

- The proponent shall not deposit, nor permit the deposit of any fuel, drill cuttings, chemicals, wastes or sediment into any water body. According to the *Fisheries Act, Section 36(3),* the deposition of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water, is prohibited.
- The proponent shall ensure that any non-combustible and hazardous materials, including waste oil, receive proper treatment and disposal at an approved facility.

- All fuel caches shall be located above the high water mark of any water body. Further, EC recommends the use of secondary containment, such as self-supporting insta-berms, when storing barreled fuel on location.
- Committee Bay Resources indicated that they may establish remote fuel caches for company use. EC requests that the locations of all fuel caches be forwarded to EC as soon as they are known. Further, the Spill Contingency Plan should reflect that it applies to all fuel storage sites the proponent establishes.
- **All** remote fuel caches and drill sites should have a spill kit available.
- The proponent indicated that a list of spill kits, their location and contents are listed in Section 8 of the Spill Contingency Plan. This information has been omitted from the plan. EC recommends that the plan be up-dated to include these missing details.
- Drip pans, or other similar preventative measures, should be used when refuelling equipment on site. Secondary containment should be of adequate size and volume to contain and hold fluids for the purpose of preventing spills (the worst-case scenario). Appropriate spill response equipment and clean-up materials (absorbents, containment devices, etc) must be on hand during any transfer of fuel or hazardous substances and at vehicle-maintenance areas.
- Transfer operations should be attended by trained personnel at all times.
- **All spills**, regardless of quantity, must be documented and reported to the NWT Spill Response Line at (867) 920-8130. The contact number for Environment Canada is incorrect. The Plan should be up-dated to include Jim Noble as the EC contact in the event of a spill. Mr. Noble can be reached at (867) 975-4644. Alternately, EC operates a 24-hour pager monitored by Emergencies and Enforcement personnel, which can be reached at (867) 920-5131.

Drilling

- EC recommends that biodegradable mud and non-toxic additives be used. Environment Canada would like to inform the proponent that the *Canadian Environmental Protection Act* has listed CaCl as a toxic substance. The proponent shall therefore ensure that if CaCl is used as a drill additive, all sumps containing CaCl are properly constructed and located in such a manner as to ensure that the contents will not enter any water body.
- The application indicates that no 'on-ice' drilling will occur. If this changes the proponent is to submit the number and location of all holes to be drilled. Drilling additives or mud shall not be used in connection with holes drilled through lake ice unless they are re-circulated or contained such that they do not enter the water, or demonstrated to be non-toxic.
- Land based drilling should not occur within 30 m of the high water mark of any water body. Drill cuttings from land based drilling shall be disposed of properly such that the contents do not enter any water body.
- Any sumps created for the disposal of drill wastes shall be located above the high water mark of any water body and in such a manner as to prevent the contents from entering any water body frequented by fish. Further, all sumps shall be backfilled upon completion of the field season and contoured to match the surrounding landscape.
- Any exposed drill casings should be removed or cut off at of below the surface of the ground.
- All drill areas should be kept orderly and any garbage is to be removed daily from the area to an approved disposal site.
- The proponent shall not store materials on the surface ice of lakes or streams, except that which is for immediate use.
- EC recommends that that if artesian flow is encountered, the drill holes be immediately plugged and permanently sealed.

Waste Disposal

- Environment Canada recommends the use of an approved incinerator for the disposal of combustible camp wastes. A variety of incineration devices are available and selection of the most appropriate will depend on considerations of technical and economical feasibility for each situation. Installation of an incineration device capable of meeting the emission limits

established under the *Canada-wide Standards (CWS) for Dioxins and Furans* and the *CWS for Mercury Emissions* is required (both the Government of Canada and the Government of the Nunavut are signatories to these Standards and are required to implement them according to their respective jurisdictional responsibility). The proponent should review the incineration options available and provide justification for the selected device to the regulatory authority.

- The use of appropriate waste incineration technology should be combined with a comprehensive waste management strategy (especially waste segregation) that is designed to reduce and control the volumes of wastes produced, transported, and disposed of. EC recommends that incineration technology be combined with a Waste Management Plan.
    - The Waste Management Plan Waste should consider and include:
        - Purchasing policies that focus on reduced packaging,
        - On-site diversion and segregation programs (i.e. the separation of non-food waste items suitable for storage and subsequent transport and disposal or recycling).
        - Commitment to recycling where possible
        - If incineration is required, ensure diligent operation and maintenance of the incineration device and ensure appropriate training is provided to the personnel operating and maintaining the incinerator.

<u>The objective should be to ensure that only food waste and food-contaminated waste is burned</u> (the use of paper, cardboard and clean wood as supplementary fuel is acceptable).

- Used absorbent materials, oily or greasy rags, and equipment servicing wastes (such as **used engine oil**, antifreeze, hydraulic oil, lead acid batteries, brake fluid and other lubricants) should be safely stored and transported in sealed containers and safely transported to a facility that is authorized for the treatment and disposal of industrial hazardous wastes.

Airstrip

Environment Canada requests additional information on the construction of the ice airstrip including location, size and materials being used in its construction. The application has failed to mention if an alternative landing strip will be used in the summer months. If an alternative airstrip is being contemplated additional information regarding its construction should be submitted to Environment Canada prior to construction.

The Canadian Wildlife Service of Environment Canada has reviewed the above-mentioned submission and makes the following comments and recommendations pursuant to the *Migratory Birds Convention Act* (the *Act*) and *Migratory Birds Regulations* (the *Regulations)*, and the *Species at Risk Act* (SARA).

- Section 6 (a) of the Migratory Birds Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. Therefore, Environment Canada recommends that all activities in which there is a risk of disturbing or destroying nests or eggs be conducted outside the migratory bird breeding season, which extends from approximately May 15 to July 31. These dates are approximate, and if active nests (i.e. nests containing eggs or young) are encountered outside of these dates the proponent should avoid the area until nesting is complete (i.e. the young have left the vicinity of the nest).
- If activities are permitted to occur during the breeding season, Environment Canada recommends that the proponent confirm there are no active nests (i.e. nests containing eggs or young) in the vicinity of their operations before activities commence. If active nests of migratory birds are discovered, the proponent should halt all activities until nesting is completed (i.e. the young have left the vicinity of the nest).
- In order to reduce disturbance to nesting birds, Environment Canada recommends that aircraft used in conducting project activities maintain a flight altitude of at least 610 m during horizontal (point to point) flight.

- In order to reduce disturbance to resting, feeding, or moulting birds, Environment Canada recommends that aircraft used in conducting project activities maintain a vertical distance of 1000 m and minimum horizontal distance of 1500 m from any observed concentrations (flocks / groups) of birds.
- Environment Canada recommends that camp waste be made inaccessible to wildlife at all times. Camp waste can attract predators of migratory birds (e.g., foxes and ravens) to an area if not disposed of properly.
- Section 35 of the *Migratory Birds Regulations* states that no person shall deposit or permit to be deposited, oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds.
- All mitigation measures identified by the proponent, and the additional measures suggested herein, should be strictly adhered to in conducting project activities. This will require awareness on the part of the proponents' representatives (including contractors) conducting operations in the field. Environment Canada recommends that all field operations staff be made aware of the proponents' commitments to these mitigation measures and provided with appropriate advice / training on how to implement these measures.
- Implementation of these measures may help to reduce or eliminate some effects of the project on migratory birds, but will not necessarily ensure that the proponent remains in compliance with the *Migratory Birds Convention Act* (the *Act*) and *Migratory Birds Regulations (*the *Regulations)*. The proponent must ensure they remain in compliance with the *Act* and *Regulations* during all phases and in all undertakings related to the project.
- The following comments are pursuant to the Species at Risk Act (SARA), which came into full effect on June 1, 2004. Section 79 (2) of SARA, states that during an assessment of effects of a project, the adverse effects of the project on listed wildlife species and its critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This section applies to all species listed on Schedule 1 of SARA. However, as a matter of best practice, Environment Canada suggests that species on other Schedules of SARA and under consideration for listing on SARA, including those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), be considered during an environmental assessment in a similar manner.

Species at Risk that may be encountered	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility [1]
Peregrine Falcon (subspecies tundrius)	Special Concern	Schedule 3	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

[1] Environment Canada has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the *Migratory Birds Convention Act* (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Thus, for species within their responsibility, the Territorial Government is best suited to provide detailed advice and information on potential adverse effects, mitigation measures, and monitoring.

Impacts could be disturbance and attraction to operations.

Environment Canada recommends:

- Species at Risk that could be encountered or affected by the project should be identified and any potential adverse effects of the project to the species, its habitat, and/or its residence noted. Refer to the Species at Risk registry at www.sararegistry.gc.ca for information on specific species.

- If Species at Risk are encountered or affected, the primary mitigation measure should be avoidance. The proponent should avoid contact with or disturbance to each species, its habitat and/or its residence.
- The proponent should record the locations and frequency of any observations of Species at Risk and note any actions taken to avoid contact or disturbance to the species.
- For species under the responsibility of the Territorial Government, the Territorial Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize effects to these species from the project.
- Mitigation and monitoring measures must be taken in a way that is consistent with applicable status reports, recovery strategies, action plans, and management plans.

If there are any changes in the proposed project, EC should be notified, as further review may be necessary. Please do not hesitate to contact me with any questions or comments with regards to the foregoing at (867) 975-4631 or by email at cindy.parker@ec.gc.ca.

Yours truly,

Original signed by

Cindy Parker
Environmental Assessment Technician

cc: (Colette Spagnuolo, Environmental Assessment & Contaminated Sites Specialist, Environment Canada, Iqaluit)