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Our file: 4703 002 006 NWB file: 3BL-AWL

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Via email: licensing@nunavutwaterboard.org

RE: Canadian Arctic Holidays Ltd. - 3BL-AWL - Arctic Watch Lodge Water License Application

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 the Canadian Environmental Protection Act, Section 36(3) of the Fisheries Act, the Migratory Birds Convention Act, and the Species at Risk Act.

Canadian Arctic Holidays Ltd. has applied for a Water License from the Nunavut Water Board for the operation of Arctic Watch Lodge. This lodge is located in Cunningham Inlet on Somerset Island on federally leased land. The lodge is operated seasonally between June and August for recreational purposes with a maximum capacity of 45 people.

Environment Canada provides the following comments and recommendations for the Nunavut Water Board's consideration:

Camp

- The proponent shall not deposit, nor permit the deposit of any fuel, 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 should include a map of the project location with the application.
- The application states that at Arctic Watch Lodge garbage will be incinerated. Please note that EC has developed a Technical Document for Batch Waste Incineration, and is available at the following web link:

http://www.ec.gc.ca/drgd-wrmd/default.asp?lang=En&n=82401EC7-1

The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting. This information should be incorporated into an incineration management plan for the Arctic Watch Lodge. EC would like the opportunity to review this plan prior to implementation

- All sumps used for the disposal of grey water and sewage shall be located above the high water mark and in such a manner as to prevent the contents from entering any waterbody frequented by fish. Further, all sumps shall be backfilled and contoured to match the surrounding landscape upon completion of the project.
- Sumps should be inspected regularly to ensure there is no erosion or leaching.
 Appropriate mitigation measures are to be taken if deleterious substances are not being adequately contained.

Fuel storage/Spill Contingency Plan

- All fuel caches shall be located above the high water mark of any waterbody and in such a manner as to prevent the contents from entering any water body frequented by fish.
- Drip pans, or other similar preventative measures, should be used when refueling equipment on site.
- EC recommends the use of secondary containment, such as self-supporting instaberms, for storage of all barreled fuel rather than relying on natural depressions to contain spills.
- The Fuel Spill Contingency Plan should contain a map of the project, the map should include locations of all spill kits or clean up equipment and fuel caches.
- Please note that any spill of fuel or hazardous material, adjacent to or into a
 waterbody regardless of quantity, shall be reported immediately to the 24-hour Spill
 Line (867)920-8130.

Wildlife and Species at Risk

- Section 6 (a) of the Migratory Birds Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. If active nests are encountered during project activities, the nesting area should be avoided until nesting is complete (i.e., the young have left the vicinity of the nest).
- Environment Canada recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) be made inaccessible to wildlife at all times. Such items can attract predators of migratory birds such as foxes, ravens, gulls, and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on the local bird populations.
- Section 5.1 of the *Migratory Birds Convention Act* prohibits persons from depositing substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.
- In order to reduce aircraft disturbance to migratory birds, EC recommends the following:
 - o Fly at times when few birds are present (e.g., early spring, late fall, winter)
 - As flight times cannot be schedules when few birds are present, plan flight paths that minimize flights over habitat likely to have birds and maintain a minimum flight altitude of 650 m (2100 feet).
 - Minimize flights during periods when birds are particularly sensitive to disturbance such as migration, nesting, and moulting.
 - Plan flight paths to avoid known concentrations of birds (e.g., bird colonies, moulting area) by a lateral distance of at least 1.5 km. If avoidance is not possible, maintain a minimum flight altitude of 1100 m (3500 feet) over areas where birds are known to concentrate.
 - Avoid the seaward side of seabird colonies and areas used by flocks of migrating waterfowl by 3 km.
 - Avoid excessive hovering or circling over areas likely to have birds.
 - Inform pilots of those recommendations and areas known to have birds.
- 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.

Terrestrial Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
Red Knot (islandica subspecies)	Endangered	Pending	EC
Peary Caribou	Endangered	Pending	Government of Nunavut
Polar Bear	Special Concern	Pending	Government of Nunavut

¹ The Department of Fisheries and Oceans has responsibility for aquatic species.

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. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the Species at Risk registry at www.sararegistry.gc.ca for information on specific species.
- o 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.
- Monitoring should be undertaken by the proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of Species at Risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested
- For species primarily managed by 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 recovery strategies and action/management plans
- 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



² 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.

³ The *anatum* subspecies of Peregrine Falcon is listed on Schedule 1 of SARA as threatened. The *anatum* and *tundruis* subspecies of Peregrine Falcon were reassessed by COSEWIC in 2007 and combined into one subpopulation complex. This subpopulation complex was listed by COSEWIC as Special Concern.

contractors) conducting operations in the field. Environment Canada recommends that all field 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 and Species at Risk, but will not necessarily ensure
 that the proponent remains in compliance with the Migratory Birds Convention Act,
 Migratory Bird Regulations, and the Species at Risk Act. The proponent must ensure
 they remain in compliance during all phases and in all undertakings related to the
 project.
- The proponent should be advised that permits are required to access Migratory Bird Sanctuaries.

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 paula.c.smith@ec.gc.ca

Yours truly,

Original signed by

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