



Indian and Northern
Affairs Canada

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et du Nord Canada

INAC Field Operations
P.O. Box 100, Building 918
Iqaluit, NU X0A 0H0

File: Bathurst Inlet Lodge
CIDM #424754

Sept 20, 2010

Boyd Warner
Bathurst Inlet Lodge
PO Box 820, Yellowknife, NT, X1A 2N6
Phone: (867) 873-2595
Facsimile: (867) 920-4263
E-mail: boydw@bathurstinlet.com

Re: Bathurst Inlet Lodge Inspection Conducted on July 22, 2009 and Non-compliance Issues under the Nunavut Waters Act

Dear Mr. Warner:

Please find enclosed the 2009 Letter of Inspection for the Bathurst Inlet Lodge and 2010 Records Review, which notes the incidences of non-compliance and specific actions that need to be taken. Also included for your information:

- (1) Inspection Photographs
- (2) Water Use Inspection Report 2009

Site observations with respect to issues of non-compliance under the Nunavut Water and Nunavut Surface Rights Tribunal Act have been identified and require the attention of your company before the Lodge can continue to operate.

Please note this report encompasses the main Bathurst Inlet Lodge site and does not include other Bathurst Inlet properties/ventures, also unlicensed, such as the Burnside River and Pellatt Lake Camps.

Should you require more information or clarification please contact the undersigned. If you have any questions please do not hesitate to contact our office.

Sincerely,

//Original signed by//

Peter Kusugak, Manager of Field Operations
Indian & Northern Affairs Canada, Nunavut Regional Office
E-mail: Peter.Kusugak@inac.gc.ca
Ph: (867) 975-4295
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Enclosures: Letter of Inspection /Inspection Photographs /Water Use Inspection Report 2009

Cc:

Lou-Ann Cornacchio – Manager of Water Resources, Indian & Northern Affairs Canada
Jeff Mercer – A/Manager of Land Administration, Indian & Northern Affairs Canada
Phyllis Beaulieu – Manager Licensing, Nunavut Water Board



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INAC Field Operations
P.O. Box 100, Building 918
Iqaluit, NU X0A 0H0

File: Bathurst Inlet Lodge (Unlicensed)
CIDM #424754

Sept 20, 2010

Boyd Warner
Bathurst Inlet Lodge
PO Box 820, Yellowknife, NT, X1A 2N6
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Re: 2009 Bathurst Inlet Lodge Inspection and 2010 Records Review

The following report combines the observations and issues identified during the July 22, 2009 inspection of the Bathurst Inlet Lodge (herein referred to as “the Lodge”), as well as a more recent records review of the land use associated with Lodge activities.

While in June 2009, a water licence application was received by the Nunavut Water Board (NWB), which is currently under review, many of the issues and concerns identified on site previously in 2008 remained unaddressed in 2009.

Bathurst Inlet Lodge operates several other unlicensed sites (as per the Nunavut Waters and Nunavut Surface Right Tribunal Act or NWNSTA), specifically the Burnside River Camp and the Pellatt Lake Camp. Inspections and records reviews of those sites are not included in the scope of this report.

The inspection was conducted by Water Resource Officer (WRO) Melissa Joy; assistance was provided by Lodge representative and employee, Sam Kapolak. An aerial view of the Bathurst Inlet site is provided in Photograph 1. During the inspection the following observations were made.

Water Supply

INAC has concerns from a human health perspective with the lack of procedures in place to ensure safe drinking water is supplied to staff and guests of the Lodge. Also, fuel is stored within the 30 metres of the water source.

Water Source:

- The raw water intake (intended for potable use) is positioned along the Burnside Delta, at approximately N66° 50' 26" and W108 ° 02' 28".
- This area is identified on Crown Lands, outside the boundaries indicated by the KIA and Crown lease parcels held by the Lodge.
- Water is pumped from the Burnside Delta location, to another pump located in a shed near the main Lodge building (a distance of several hundred metres), and into one of three storage tanks.
- No records are kept of water usage.



Sources of potential contamination:

- A gas-powered water intake pump was located on a wooden stand several metres from the water. Refer to Photograph 2 and 3. Note: Photograph 3 (provided by the Environmental Consultant/INAC representative from August 5, 2010) shows the pump is no longer on stand.
- A jerry can without secondary containment was observed sitting beside the intake pump on the sand.
- Fuel (and other items) should not be located within 30 metres of the high water mark and should have appropriate spill containment in place.

Drinking Water Protocols and Procedures:

- There are no written protocols or procedures in place to ensure that the drinking water is routinely tested and treated to ensure a consistently secure supply to the Lodge.
- Water is “treated” by adding chlorine bleach into a glass jar (with two measurement lines) and manually adding it to one of three storage tanks (each of unknown capacity). There are no records to confirm that this provides an adequate residual chlorine concentration or residual time.
- There are no records or Manufacturer’s specifications which confirm the storage tanks used are appropriate for potable water storage. Refer to Photographs 4-7.
- There are no signs posted near sinks (in cabins and main Lodge) to indicate whether the water is potable. This has been noted and remains as an outstanding concern from the 2008 inspection.
- Sample results taken by Environmental Consultants on behalf of INAC (August 5, 2010), from the raw water intake site and from a guest cabin confirmed the presence of Total Coliforms and E.coli. A notification was sent to the Lodge, Government of Nunavut Chief Medical Officer and the Kitikmeot Inuit Association (KIA) on August 12, 2010. No response has been received to date on whether any corrective action has been taken either in terms of posting the water is not potable or in terms of invoking appropriate disinfection procedures.

Grey water Disposal

No sumps were observed on site; grey water from sinks, showers and laundry facilities are discharged either directly outside of each building or under it. No confirmation was provided by the Lodge as to whether a grease-trap is used for grey water coming from the kitchen. Refer to Photograph 8.

Sewage Disposal

The current method of sewage disposal is unacceptable: a reclamation plan and a more environmentally responsible method of disposal are to be implemented by the Lodge.

- Sewage waste is collected in honey bags and transported by boat to an area known as Garbage Island, located at approximately N66° 50' 35" W108° 01' 46".
- Garbage Island is identified on Crown Lands, outside the boundaries indicated by the KIA and Crown Lease parcels held by the Lodge.
- Honey bags are placed in shallow sandy pits, well within the 30 meter high water mark of the island, and eventually covered over with sand when the pit is full of bags. Half-



buried honey bags and other garbage debris were observed at various places along the shore. Refer to Photographs 9 and 10.

Solid Waste Disposal

The current methods used for solid waste disposal are unacceptable. A reclamation plan is required for existing wastes; other methods of treatment and disposal, which are to include appropriate interim storage and regular monitoring, are to be implemented by the Lodge.

- Note that open burning of wastes is allowable only under very specific conditions on approval of the NWB.
- Hydrocarbon, chemical products and hazardous wastes must be disposed of properly (at an approved facility) and stored appropriately in the interim. These items are to be placed inside appropriate spill, or secondary, containment and must not be located within 30 metres of the high water mark.

Garbage Island:

- The majority of garbage is transported to Garbage Island, where it is burned in shallow pits and eventually buried in the sand. Several newer pits were located within 30 meters of the high water mark. Garbage and debris are also scattered along the shoreline, most likely spread by wind and erosion.
- Large amounts of garbage and debris, including fuel drums, batteries, and bulky debris such as old skidoos, wooden sleds and large appliances are scattered in heaps throughout the island.
- Most surface debris is visible despite the well established vegetation (in the central part of the island); however, erosion has exposed many of the older garbage burial sites.
- There are several large patches of dark stained soil, which are most likely due to hydrocarbon contamination based on the strong smell and empty containers located nearby. Note: during the 2008 inspection an open bucket containing waste oil was left in this area. Refer to Photographs 11-13.
- This area is identified on Crown Lands, outside the boundaries indicated by the KIA and Crown lease parcels held by the Lodge.

Airstrip:

- Wastes, machinery, old equipment, batteries, etc have accumulated along the airstrip and in the near area. One older drum was found leaking among some other debris.
- Debris at the runway includes wastes from mineral exploration activities: Northrock Resources Inc. (also associated with Rockgate Capital Corp.) has been basing their activities from the Lodge for the last several seasons. Refer to Photographs 14-16.

Fuel Storage

There are concerns with fuel storage practices at the site: Fuel is cached at various sites around the Lodge, including the airstrip, float plane dock area and near the main fuel storage tanks. Refer to Photograph 17. A reclamation plan is required to address fuel-contaminated substrate.

- Fuel is to be stored within appropriate spill, or secondary, containment structures and must not be located within 30 metres of the high water mark.
- All refuelling activities are to be conducted in bermed containment areas to prevent spills.



- Note that any water or snow melt captured inside containment/berm structure must undergo appropriate treatment and testing before it can be discharged. It is recommended that spill containment structures be covered in order to prevent this.
- Contaminated absorbent materials and substrate are to be stored appropriately and either treated or disposed of at an approved facility.
- The proponent should be aware that a Spill Contingency and Prevention Plan is also required and must be prepared, as per the *Spill Contingency Planning and Reporting Regulations* under the Government of Nunavut's *Environmental Protection Act*.

Fuel Tank Area:

There are concerns that the with the fuel storage tank(s) in use do not meet current petroleum product storage tank standards (refer to Environmental Canada on *Petroleum and Allied Petroleum Products Storage Tank Regulations*). It is acknowledged that there is some discussion as to whether the tanks are on Inuit Owned Land and their ownership, though it appears the Lodge is the primary user and operator of these tanks.

- Empty drums recovered or reused from various sources are stacked along one fuel tank for eventual re-filling; some materials from Northrock are stored here as well. Nearby, Northrock has a small fuel cache used to refuel helicopters –no secondary containment is used here either. Refer to Photographs 18-21.
- The area between the fuel storage tanks and generator shack is used to reuse and re-fill fuel drums for use around the site and for the generator: no secondary containment is used during this activity and the soil in this area is well stained with hydrocarbons. No cleanup of contaminated substrate has occurred to date. Refer to Photograph 22.

Float Plane Dock Area:

Fuel storage near the float plane dock has the potential to contaminate surface water; refuelling activities have the potential to contaminate surface water.

- Several hundred fuel drums were observed within the 30 meter high water mark. This remains an outstanding action item from the 2008 inspection.
- Refuelling activities occur either on or near the dock and jerry cans and barrels of fuel are left near shore without secondary containment.
- A fuel drum from a cache beside the water marked “ATL” for Air Tindi was found leaking: Air Tindi pilots on site refuelling at the time (contracted by Rockgate/Northrock, who bases their operations out of the Lodge) positioned the barrel upright when this was identified by the Inspector. Refer to Photographs 23-26.
- In addition, no spill response was observed in the vicinity of the float plane dock.

Other:

Heating fuel drums and conveyance lines for cabins/building are a concern.

- Attention is needed to replace worn out hoses and seals, as well as monitoring the fuel conveyance lines to prevent spills.
- Maintenance and monitoring activities information remains outstanding from the 2008 inspection.



Legislation Information

The Nunavut Waters and Nunavut Surface Rights Tribunal Act (NWNSRTA) prohibits the use of waters and deposit of waste in Nunavut except in accordance with the conditions of a licence (sections 11 and 12 of the Act).

Continued operation in violation of the Act will result in enforcement action. Failure to comply constitutes an offence under section 90 of the Act and entails, upon summary conviction, a fine of \$100,000 or to imprisonment for a term of one year, or both.

Required Action Items

Several violations of the NWNSRTA have been noted repeatedly at this site. As several of these issues have serious implications for human health and environmental impacts the following actions must be taken by the owner/operation of the Lodge. Before November 1, 2010, you are required to submit to the undersigned, a plan with specific timelines for implementation, which will address (but is not limited to):

- Confirmation that standard operating procedures, protocols and on-going training are in place to ensure that a potable water supply is consistently provided to guests and employees of the lodge. Confirmation includes:
 - disinfection procedures and protocols
 - water distribution and maintenance procedures
 - protocols for testing and records keeping
 - training logs for employees on procedures and protocols
 - procedure for notification of adverse water quality events, corrective actions to be taken for adverse water quality events, and posting of water quality results
- Waste disposal practices, fuel storage and fuel handling practices
- Plan for removal of existing waste stockpiles (i.e.: old drums, waste liquids)
- Plan for remediation or removal of contaminated soils and debris
- Reclamation of historical waste disposal sites used by the Lodge
- Land use activities (i.e.: water usage and waste disposal) occur

You are to retain the services of a competent and qualified professional consultant(s) in the areas of environmental management and public health to complete the items noted above.

Failure to respond to these issues in a manner satisfactory to the Inspector will result in enforcement action. Your response regarding the issues identified, complete with the timelines to address them, is required by November 1, 2010.

Should you require clarification regarding this Letter of Inspection please feel free to contact me at (867) 975-4548 or Melissa.Joy@inac.gc.ca to discuss further.

Sincerely,

//Original signed by//

Melissa Joy
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Cc: Peter Kusugak – Manager of Field Operations, Indian & Northern Affairs Canada
Lou-Ann Cornacchio – Manager of Water Resources, Indian & Northern Affairs Canada
Jeff Mercer – A/Manager of Land Administration, Indian & Northern Affairs Canada
Phyllis Beaulieu – Manager Licensing, Nunavut Water Board
Geoff Clark, Stanley Anablak – Kitikmeot Inuit Association
Peter Workman, Wilfred Ntimoah – GN Health and Social Services
Rob Eno, Ian Rumbolt – GN Department of Environment
Todd McKay, Bram Sikma, Zeb Alamgir – GN Petroleum Products Division (Community and Government Services)

(1) Attachment (CIDM 425905): List of Photographic References (July 22/09 unless otherwise indicated)

Photograph 1: Aerial view of Bathurst Inlet and sites
Photograph 2: Aerial view of water intake pump
Photograph 3: Water intake pump (Aug 5/10)
Photograph 4: View of water intake shed and storage tanks
Photograph 5: View of third water storage tank
Photograph 6a, 6b: Views inside the water intake shed
Photograph 7: Glass jar used to measure bleach for water treatment (Aug 1/08)
Photograph 8: Grey water discharge area behind shower/laundry hut
Photograph 9: Honey bag pit on Garbage Island
Photograph 10: Honey bag exposed along shore of Garbage Island
Photograph 11: Open burn pit and scattered burned debris on Garbage Island
Photograph 12: Aerial view of bulky debris and wastes on Garbage Island
Photograph 13: View of partially buried fuel drum on Garbage Island
Photograph 14: Equipment and debris at the Bathurst Inlet airstrip
Photograph 15: Batteries and other debris at the Bathurst Inlet airstrip
Photograph 16: Fuel drums (Rockgate) and debris at the Bathurst Inlet airstrip
Photograph 17: Aerial view of fuel storage areas at Bathurst Inlet
Photograph 18: Fuel storage tanks at Bathurst Inlet, looking toward Burnside Bay
Photograph 19: Fuel storage at Bathurst Inlet (opposite view)
Photograph 20: Empty drums stacked behind fuel storage tank for eventual re-filling
Photograph 21: Northrock helicopter refuelling area near fuel storage tank
Photograph 22: Fuel drum re-filling area (between fuel storage tank and generator shack area)
Photograph 23: Refuelling area near float plane dock
Photograph 24: Jerry cans left beside shore at float plane dock
Photograph 25: Fuels drums stored with 30 metres of water, near float plane dock
Photograph 26: Air Tindi pilots refuelling at float plane dock

(2) Attachment (CIDM 424406): Water Use Inspection Report 2009