



February 6, 2020

Bijaya Adhikari
Science and Regulatory Coordinator
Inuvialuit Water Board
P.O. Box 2531
125 Mackenzie Road
Suite 302, Professional Building
Inuvik, NT X0E 0T0

Dear Mr. Adhikari,

**Re: Northwestel Inc. (NWTel)
Water Licence Application – N3L8-1844
Asset Removal at the Taglu Microwave Tower Site
Request for Review and Comments**

The Department of Environment and Natural Resources (ENR), Government of the Northwest Territories has reviewed the application at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act* and provides the following comments and recommendations for the consideration of the EISC.

Topic 1: Water Use

Comment(s):

According to the Water Licence Application, NWTel is seeking “no more than 100m³ of water per day” for usage for ice road construction from Inuvik to the project site. ENR does note that should the applicant use less than 100 m³ of water per day a water licence may not be required.

ENR notes that Section 2.2.1 states that any water required will be from the Mackenzie River. Given the large quantity of water in the Mackenzie River, ENR supports its use as a water source as opposed to smaller isolated water bodies which may be at higher risk from water withdrawal. If other sources are proposed for water withdrawal, they should be identified to allow assessment during the licensing process.

Recommendation(s):

- 1) ENR requests that NW Tel confirm the amount of water required for the project. If the project requires less than 100 m³/day of water, a Water Licence may not be required.

Topic 2: Sediment and Erosion Control

Comment(s):

Section 13.0 concludes that based on the application of the mitigation measures in Table 8-1 there will be no significant negative environmental effects from the project on aquatic resources. ENR notes that there is limited information for mitigation to potential ground disturbance and erosion issues related to works near river banks (e.g. ramp construction).

Section 7.5 on Hydrology and 7.6 on Water Quality gives general information on sediment, levels of turbidity and TDS concentrations and conductivity, but provides limited information on sediment and erosion control during the project period.

Recommendation(s):

- 1) ENR recommends that NWTel provide additional information on proposed mitigation measures related to sediment and erosion control during the project.

Topic 3: Industrial and Solid, Liquid or Sewage Waste Disposal

Comment(s):

If the Proponents Waste Management Plan or methods of waste disposal indicate that project waste, or industrial waste, will be transported to community infrastructure for disposal, the Proponent should not assume they may deposit industrial wastes, generated outside of community boundaries, in Northwest Territories community Solid and Liquid Waste Disposal Facilities.

Recommendation(s):

- 1) Should the Proponent intend to deposit waste in an NWT community Solid and Liquid Waste Disposal Facility, ENR requests that the Proponent demonstrate in the Waste Management Plan, and to the Board, that the receiving communities' Solid and Liquid Waste Disposal Facility holds a Water Licence that authorizes the disposal of any industrial waste streams originating from outside municipal boundaries. The Proponent should also demonstrate to the Board that the community has been consulted, and has consented in writing, regarding the use of its infrastructure for disposal of the waste streams and quantities in question,

and the disposal of such wastes will not contravene the Waters Act or the *Environmental Protection Act* and related Regulations and Guidelines.

Topic 4: Hazardous Waste Management

Comment(s):

All Proponents that generate hazardous wastes must be registered as a generator of hazardous waste in the NWT.

The Guideline for the General Management of Hazardous Waste in the NWT defines hazardous waste and outlines the roles and responsibilities of generators, carriers, and receivers of hazardous waste in the NWT. The ENR, Environment Division (ED) registers generators, carriers, receivers, and tracks the disposal of hazardous waste generated in the NWT to registered receiving facilities on hazardous waste movement documents (manifest). The definition of hazardous waste includes all waste materials that are 'dangerous goods' according to the Transportation of Dangerous Goods Regulations, and any additional waste of special concern that the ED has determined hazardous until proven otherwise, including but not limited to:

- a) incinerator waste and/or residuals (including bottom ash and fly ash);
- b) any liquid or solid wastes contaminated with refined petroleum products;
- c) bilge wastes;
- d) vehicle or vessel servicing wastes
- e) drilling wastes;
- f) produced fluids (Glycol / Hydrocarbon / Inorganic Mixtures);
- g) tailings; and
- h) any hydrocarbon, lead, mercury or other forms of contaminated soils.

The Guideline for the General Management of Hazardous Waste in the NWT and the Transportation of Dangerous Good Regulations may be found at the following sites:

http://www.enr.gov.nt.ca/sites/enr/files/guidelines/general_management.pdf

<http://www.tc.gc.ca/eng/tdg/clear-menu-497.htm>

Recommendation(s):

- 1) If the Proponent is using or generating hazardous waste, they must register as a generator of hazardous waste in the NWT and track the disposal of hazardous waste from the site activities to registered receivers on hazardous waste movement documents provided by ENR. Please contact the Environmental Protection and Waste Management Division, ENR to register or for more information contact Mr. Lee Ross, Hazardous Waste Management Specialist,

Environmental Protection and Waste Management Division by email ([Lee Ross@gov.nt.ca](mailto:Lee.Ross@gov.nt.ca)) or by phone (867) 767-9236 extension 53187.

Topic 5: Fuel Storage and Spill Contingency Planning and Reporting

Comment(s):

ENR acknowledges the proponent's Spill Contingency Plan.

In addition, the Proponent should also follow best practices for fuel storage and spill containment during project activities which may include the following recommendations.

Recommendation(s):

- 1) To assist in spill contingency planning, information is provided in EPA *Spill Contingency Planning and Reporting Regulations* found here:

<https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r2.pdf>

If clarification or further information is needed please contact the Environment Division, ENR directly to aid in the development of the Plan

- 2) In accordance with the *Spill Contingency Planning and Reporting Regulations Section 10*, all spills in accordance with Schedule B must be reported immediately to the 24-hour Spill Report Line (867) 920-8130.
- 3) With respect to the *Environmental Protection Act Section 5 (1b)* all spills, regardless of amount, must be cleaned up, and contaminated materials disposed of at an approved facility, or in an approved manner. Additionally, as indicated in *Section 5(1c)* all reasonable efforts must be made to notify any parties affected or potentially affected by the spill.
- 4) Fuel storage areas should be greater than 100m distance from the ordinary high water mark of a water body and not located in a drainage channel.
- 5) All fuel or storage vessels containing hazardous substances left for extended periods of time (including overnight in vehicles), should be stationed in an area that contains sufficient secondary containment (i.e. Drip pans, lined bermed areas, double walled enviro-tanks etc.).
- 6) It is recommended spill kits be provided. Personnel should be trained to ensure that in the event of a spill it is contained and remediated appropriately to

industry-accepted best practices and regulatory approval. In case refuelling takes place near water, in water spill planning should be considered to prevent inadvertent releases.

- 7) ENR recommends, for the operator's convenience and increased environmental protection, that all heavy equipment and refuelling vehicles carry portable spill kits that include items such as absorbent pads, containment booms, and spill pool catchment receptacles. Readily available and fully stocked spill kits can effectively mitigate potential spills.
- 8) ENR recommends that the proponent include the ENR, GNWT, Inuvik Regional Office phone number, in the Spill Response Plan. The phone number is 867-678-6696.
- 9) In the event of a spill the Inuvik Region Environmental Assessment Coordinator, Alicia McRae should also be contacted at (867) 678-6653.

Topic 6: Wildlife: NWT Listed and Pre-listed Species at Risk

Comment(s):

Sections 76 and 77 of the Species at Risk (NWT) Act require the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a Land Use Permit or Water Licence application, respecting the potential impacts of the proposed development, Permit or Licence application on a NWT-listed or pre-listed species or its habitat. NWT-listed species are those that are on the NWT List of Species at Risk. Pre-listed species are those that have been assessed by the NWT Species at Risk Committee (SARC) but have not yet been added to the NWT List of Species at Risk.

The Proponent should be aware that NWT-listed or pre-listed species at risk and their habitat may also be subject to protection under existing sections of the NWT *Wildlife Act*.

As a best practice, ENR encourages the Proponent to consider potential impacts, mitigation measures and monitoring requirements for species at risk listed under the federal *Species at Risk Act*, as well as those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that may occur in the project area, and the prohibitions that may apply to these species under federal legislation.

The project area overlaps with the ranges of the following NWT-listed and/or pre-listed species:

- [Grizzly Bear](#) – Listed as Threatened
- [Barren-ground Caribou](#) – Listed as Threatened
- [Polar Bear](#) – Listed as Special Concern

Recommendation(s):

- 1) Although the project overlaps with the range(s) of the species listed above, ENR is of the opinion that the nature, areal extent, scale and/or timing of the proposed project are such that the likelihood of potential impacts to NWT-listed or the pre-listed species at risk listed above can be avoided or minimized if ENR's wildlife recommendations in this letter are implemented as necessary, including the application of any wildlife mitigation and monitoring measures imposed by the IWB, or as outlined in the Proponent's Land Use Permit application and supporting documents.

Topic 7: Cumulative Effects Tracking

Comment(s):

Keeping track of the disturbance footprint of development activities is an important component of tracking and informing the management of cumulative effects on wildlife and wildlife habitat.

Recommendation(s):

- 1) The Proponent should submit the bounding coordinates or geospatial data for the proposed project footprint and for the completed project footprint to the Land and Water Board for placement on the public registry. The Mackenzie Valley Land and Water Board's "*Standards for Geographic Information Systems (GIS) Submissions*" should be followed when submitting spatial data.

Topic 8: Wildlife Abodes

Comment(s):

Subject to sub-section 51(2) of the *Wildlife Act*, it is illegal to break into, destroy, or damage a den, beaver dam or lodge, muskrat push-up or hibernaculum unless you have an Aboriginal or treaty right or a Permit to do so.

Protection of dens, beaver lodges, muskrat push-ups, and hibernacula is essential to ensuring reproductive success and survival of both adults and young.

Recommendation(s):

- 1) The Proponent should conduct pre-activity surveys within 800m of the project footprint to identify active bear dens if project activities will occur between September 30 and March 30. Surveys should be conducted in the fall to detect freshly dug dens.
- 2) If an active bear den is detected, or suspected, the Proponent should implement and maintain an 800 m exclusion zone until the bear emerges in spring.
- 3) If a bear den and exclusion zone would result in the halt of part or the entire program, the Proponent should contact ENR to discuss alternative mitigation options. The location of active bear dens should be kept confidential between the developer and ENR until after emergence in the spring.
- 4) It is recommended that, if encountered, beaver lodges, muskrat push-ups, and hibernacula are not disturbed or damaged.

Topic 9: Wildlife Attractants and Waste Management

Comment(s):

Subject to sub-section 66(1) of the *Wildlife Act* no person shall store food, waste, or other substances in a manner that may attract big game or other prescribed wildlife and put people, domestic animals, or wildlife in danger.

Subject to sub-section 65(1) of the *Wildlife Act*, it is illegal to intentionally feed big game, furbearers or other prescribed wildlife. Schedule A – Part 2 of the *Wildlife General Regulations* sets out the species prescribed as fur-bearers.

Recommendation(s):

- 1) The Proponent should utilize food and garbage handling and storage procedures that will minimize the attraction of wildlife.
- 2) The Proponent should store all food, waste, washed recyclables and debris that may attract wildlife within sealed animal proof containers until final disposal.
- 3) The Proponent should ensure that sealed animal proof containers are cleaned once emptied to minimize the attraction of wildlife.
- 4) The Proponent should ensure that all grey water (dishwater, showers, laundry, etc.) and black water (sewage) are treated and disposed of in a manner that will minimize the attraction of wildlife.

- 5) The Proponent should remove all contaminated waste, waste petroleum products including used oil filters, rags, scrap metal, discarded machinery, parts, drums, barrels, or plastics to an approved waste disposal facility.

Topic 10: Wildlife Disturbance and Harassment

Comment(s):

Unless authorized by a Licence or Permit, paragraphs 52(a) and (b) of the *Wildlife Act* prohibit engaging in an activity that is likely to result in significant disturbance to big game or other prescribed wildlife, or to unnecessarily chase, fatigue, disturb, torment or otherwise harass game or other prescribed wildlife.

Schedule A – Part 1 of the *Wildlife General Regulations*, sets out the species prescribed as big game, and Schedule B sets out prescribed wildlife for the purpose of paragraphs 52(a) and (b) of the *Wildlife Act*.

Disturbance to wildlife from sources such as noise, light, vibrations, and human presence can result in energetic stress, avoidance of key habitat, loss of reproductive fitness, injury or mortality of wildlife. Activities that may cause sensory disturbance to wildlife include vehicle traffic, stationary machinery, noise from blasting, excavation, crushing, seismic testing, vegetation clearing, and lighting or flaring.

Recommendation(s):

- 1) The Proponent should be aware that no wildlife should be disturbed, chased, or harassed by human beings on foot, in a motorized vehicle, or by aircraft. Unless authorized by a Licence or Permit, paragraphs 52(a) and (b) of the *Wildlife Act* prohibit engaging in an activity that is likely to result in significant disturbance to big game or other prescribed wildlife, or to unnecessarily chase, fatigue, disturb, torment or otherwise harass game or other prescribed wildlife. However, subject to section 55 of the *Wildlife Act* a person may chase wildlife away from a camp or work site if doing so is necessary to prevent injury or death to a person or damage to property.
- 2) Consult the setback distances, flight altitude guidelines and timing windows for wildlife provided in Tables 6 and 7 of the Northern Land Use Guidelines: Northwest Territories Seismic Operations Vol.9 (a) as they are applicable to variety of land use activities:

http://www.lands.gov.nt.ca/sites/lands/files/resources/nlug_seismic_2015_english_-_16_sept_2015.pdf

- 3) Consult the approved Land Use Plan, if applicable, that applies to the project area for further guidance on setback distances and timing windows to minimize disturbance to wildlife.
- 4) Wildlife shall be given the right of way at all times.
- 5) Suspend activities temporarily if one or more individuals of a big game species are spotted within five hundred (500) metres of the work site.

Topic 11: Reporting Wildlife Defense/Property Kills and Wildlife Incidents

Comment(s):

Subject to paragraph 57(a) of the *Wildlife Act*, any big game or other prescribed wildlife that is killed to prevent injury or death to a person or damage to property must be reported to ENR as soon as is practicable. Section 7 of the *Wildlife General Regulations* describes what information must be included in the report.

Subject to section 58 of the *Wildlife Act* and sub-section 8(1) of the *Wildlife General Regulations*, any person who accidentally kills or seriously wounds big game or other prescribed wildlife with a motorized vehicle on a highway must report the event to an officer within 24 hours after the incident.

Recommendation(s):

- 1) Report all sightings of bears in and around the project location to your local ENR office. Any defence of life and property kills must be reported to the appropriate ENR office immediately. Please contact the following Regional Office as required:
 - Inuvik Region Wildlife Emergency Line at (867) 678-0289
- 2) Ensure all field personnel have completed a bear safety training course to decrease the risk of attracting bears to work sites and threats to human safety, learn how to respond to bear encounters, and decrease the risk of wildlife mortality resulting from kills in defence of life and property.
- 3) Consult the “Safety in Grizzly Bear and Black Bear Country” brochure, available at:

http://www.enr.gov.nt.ca/sites/enr/files/resources/safety_in_grizzly_and_black_bear_country_english.pdf
- 4) Report to an ENR officer as soon as is practicable any wildlife that is killed to prevent injury or death to a person or damage to property.

- 5) Report to an ENR officer any big game or other prescribed wildlife that is killed or seriously wounded by a motorized vehicle on a highway within 24 hours after the incident.
- 6) Reports must include at minimum the name of the person who killed or injured the wildlife, an explanation of the incident, the time, date and location of the incident, the species or quantity involved, and any other information requested by the wildlife officer.
- 7) Contact the regional ENR office to obtain blank wildlife incident forms.

Topic 12: Reuse of Assets and Structures or as Waste Deposit

Comment(s):

ENR is concerned that the tower may be contaminated with lead as this was built in 1973.

ENR does allow 600ppm Total Lead to be used as a screening method. Samples under 600ppm Total Lead would not need to have the leachate extraction procedure and could be deposited to an approved landfill for that waste stream. Samples over 600ppm Total Lead may still be able to go to a landfill but would need to meet the 5.0 mg/l lead when subjected to the leachate extraction procedure. Anything over 5.0 mg/l lead when subjected to the leachate extraction procedure cannot be deposited a community landfill and would have to be deposited at an approved facility capable of accepting toxic wastes.

Lead is toxic to living micro-organisms in the water column, sediment and soil. In addition to lead, industrial or steel coatings such as paint and paint primer, may contain other contaminants to be aware of such as arsenic, polychlorinated biphenyls (PCBs), cadmium, chromium, copper, magnesium and mercury. These are toxic substances if inhaled or ingested.

Recommendation(s):

- 1) It is possible that the tower, and assets, should be sampled for lead contaminants before dismantling begins, or before depositing as a waste at a community landfill, or before depositing at an approved facility capable of receiving toxic waste that cannot be accepted in community landfills.
- 2) For further information on possible hazardous or toxic wastes that may be a concern in this project, **and prior to the onset of project activities**, please contact Mr. Lee Ross, Hazardous Materials Management Specialist, Environmental Protection and Waste Management and Monitoring Division by email (Lee.Ross@gov.nt.ca) or by phone (867) 767-9236 extension 53187.

Topic 13: Water Withdrawal Protocols

Comment(s):

The proponent will be withdrawing water for this project.

Recommendation(s):

- 1) ENR recommends that the proponent utilize a 2.54 mm mesh screen at end of water withdrawal apparatus to prevent the entrainment of fish during withdrawals if water is withdrawn for fish bearing water sources.
- 2) The proponent should consult with DFO regarding water withdrawal protocols in the Inuvik region prior to the onset of project activities.

Comments and recommendations were provided by ENR technical experts in the Environmental Protection and Waste Management Division, the Water Management and Monitoring Division, the Wildlife Management Division and the Inuvik Region and were coordinated and collated by the Environmental Assessment and Monitoring Section (EAM), Environmental Stewardship and Climate Change Division.

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email patrick.clancy@gov.nt.ca.

Sincerely,



Patrick Clancy
Environmental Regulatory Analyst
Environmental Assessment and Monitoring Section
Environmental Stewardship and Climate Change Division
Department of Environment and Natural Resources
Government of the Northwest Territories

Att: General Bear Encounter Guidelines



Bear Encounter Response Guidelines

I. PRINCIPLES:

1. Protection of Life and Property
2. Conservation

II. OPERATIONAL GUIDELINES:

- A. Deterrence
- B. Re-locate, if feasible
- C. Destroy

III. OPERATIONAL PROCEDURES:

Contacts:

Initial contact during regular hours:

Environment and Natural Resources Inuvik office at (867) 678-6650

Initial contact after regular hours and weekends:

Renewable Resource Officer on call

Cell: (867) 678-0289

Fax: (867) 678 -6659

Response Personnel:

The following personnel can be available for responding to problem bear situations:

Doug Villeneuve	Inuvik	(867) 678-6680
Tobias Halle	Inuvik	(867) 678-6681
Lila Voudrach	Inuvik	(867) 678-6652
Kevin Allen	Inuvik	(867) 678-6682
Ian McLeod	Aklavik	(867) 978-2248
	Tuktoyaktuk	(867) 977-2350
Glen Alexie	Ft McPherson	(867) 952-2200

Initial Contact:

1. The complainant should complete the attached checklist prior to calling Department of Environment and Natural Resources. It is critical that as much information as possible be provided at this point in order to determine the appropriate response.

IV. RESPONSE

Wildlife Monitors will be the initial responders to problem bears. It is imperative that they have a sufficient supply of approved deterrents at their disposal. All bear sightings and encounters shall be reported to the ENR office closest to the area of operation.

The potential responses will be considered in the following order:

a) Camps

1. Wildlife Monitors will employ conventional means of deterring problem bears that threaten public safety or property. This may involve chasing a bear out of the camp with a vehicle or snowmobile, or using noise makers and rubber bullets. If these methods prove ineffective, and where a helicopter is available or can be obtained in the area, the bear may be chased from camp. Pilots must be careful not to over stress the bear during this flight and must back off when the bear is a sufficient distance from the camp and keeps running in the desired location. If circumstances allow, a Renewable Resource Officer (RRO) should be contacted prior to using aircraft to deter bears. Undue harassment is illegal and must be avoided. **All incidents involving any means of deterrence should be reported to a Renewable Resource Officer as soon as possible.**
2. Should for some reason, the Wildlife Monitor be unable to deter a bear, and where the bear does not pose an immediate threat to public safety or property, the Department of Environment and Natural Resources (DENR) may send a deterrent or capture team to the site.

b) Denning bears

If a bear is located in, at or near a den site, work in the area must halt. All employees should safely retreat from the area and report the occurrence to the Site Supervisor, Wildlife Monitor, and the Renewable Resource Officer in your area as soon as possible. Staff from DENR will be required to assess the site and may implement measures to ensure bears are not unduly disturbed. This may include the establishment of an exclusion zone of 300 meters around the den in which no work will be permitted. Work inside the exclusion zone will remain stalled until after den emergence.

c) Free ranging bears

Prior to active deterrence of free ranging bears, and where public safety or property is not in immediate danger, the Wildlife monitor will assess the situation. The monitor should determine if the bear has been disturbed from a den or if it is denning in close proximity. Bears in the vicinity of a den should not be deterred and work should cease until DENR has assessed the site. If the Wildlife Monitor has determined that the bear is in fact free ranging, and not lingering around a den site, then active deterrence may commence.

d) Destruction of the bear

Instructions to destroy the bear will be given when deterrent actions have failed, when additional deterrent actions are not possible, and when it is determined that capture and relocation cannot be conducted or is unlikely to be successful.

The bear can be destroyed if human life or property is in immanent danger.

If a bear is killed, you will be required to:

- 1) Report the kill to Department of Environment and Natural Resources, as soon as possible.
- 2) Skin the bear, leaving the claws and penis (if applicable) attached, and preserve the hide by freezing or salting it and storing it in a cool place. Be generous with the salt.
- 3) Turn in the hide, the skull, and any other biological samples requested to a Department of Environment and Natural Resources Renewable Resource Officer.

As per the NWT Wildlife Act, no person may retain any part of a bear killed in defence of life or property.

V. FOLLOW-UP

After response measures are completed, the situation will be reviewed with the camp operator and corrective actions identified. These may include a wide array of actions aimed at avoiding future bear problems and ensuring that the operator is made aware of legal obligations. The need for conservation and the vulnerability of bear populations to over harvest is to be stressed.



Bear Complaint Checklist

1. Complainant Details:

Date/Time of Report: _____
Complainants Name: _____
Affiliation/Location of Complainant: _____
Contact Number for Complainant: _____
Other on Site Contacts: _____
Wildlife Monitors Name: _____

2. Camp Details:

Location of Complaint: _____
Latitude/Longitude: _____
Type of Camp- Permanent/ Mobile: _____
Number of People in Camp: _____
How Long has Camp Been Here (if Mobile): _____
Are there any Aircraft on site? If yes, Type: _____

3. History of the Problem:

Date/Time Bear First Sighted: _____
Type of Bear: Grizzly _____ Polar _____ Black _____
Sex of Bear: Male _____ Female _____ Unknown _____
Age of Bear: Cub _____ Juvenile _____ Adult _____
Has Bear Been Observed Before: _____

Den site found (description)?

What was the Bear Attracted To: _____
Did the Bear Obtain Food: _____
Behaviour of Bear: Fearful _____ Not Fearful _____ Aggressive _____
Damage By Bear: _____

4. Deterrent Action:

Was the Bear Deterred? Yes _____ No _____
If Yes, Type of Deterrent Used: _____
Present Status of Bear: _____

5. Other Information:

Reporters Name/Title: _____
Weather on Site at Time of Report: _____
Checklist Forwarded to: _____