



Nunavut Regional Office
P.O. Box 2200
Iqaluit, NU, X0A 0H0

August 20, 2001

Rita Becker
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0E 1J0

INTERNAL	
PC	J.P.
LA	Aug 21/01
OM	
TA	
BS	
ED	
CEO	
BRD	

NWB3KIM

Your file - Votre référence

Our file - Notre référence

2001

Dear Ms. Becker,

**Canadian Environmental Assessment Act (CEAA) Screening Report
on Kimmirut Water Licence Renewal**

I am pleased to inform you that pursuant to Section 5 of the *Canadian Environmental Assessment Act*, Indian and Northern Affairs Canada (INAC) has conducted an environmental assessment of the Hamlet of Kimmirut's water use and waste disposal facilities as described in the Water Licence renewal application submitted to the Nunavut Water Board (NWB) on May 17, 2001.

The project proposal was reviewed by INAC's Water Resources in collaboration with the Department of Fisheries and Oceans and Environment Canada. Based upon the results of this screening process, INAC has concluded that the project proposed in the application for a Water Licence for the Hamlet of Kimmirut is not likely to cause significant adverse environmental effects. In fact, the application of proper conditions within the Water Licence will likely diminish current environmental effects caused by Kimmirut's currently inadequate sewage treatment. One such Water Licence condition we recommend is a deadline to implement a new and adequate sewage treatment system. The fact that Community Government and Transportation (CG&T) provides the plans and funding for such projects should be taken into consideration when imposing the deadline to the community's Licence.

It is mentioned in the application that construction of a new sewage lagoon is already underway. Site visits by the Inspector have revealed that work on the sewage lagoon is very nearly completed. However, plans for the new sewage lagoon were not submitted to the NWB prior to construction, nor are they included in the licence application. Due to the lack of information regarding this new sewage lagoon, we cannot properly screen this proposed project. So as not to delay the licensing process, which we believe is beneficial for the community, we propose that the new sewage lagoon project be separated from the licence renewal process. Plans for the new proposed sewage treatment system, along with the

appropriate Operation and Maintenance Plans, should be submitted by the Hamlet of Kimmirut in an application to amend the licence to include this new facility before it is operational. When the application for an amendment is received, INAC will require a *CEAA* screening for the new sewage treatment system. A screening on the new proposed sewage lagoon will begin as soon as all the required information is received.

In summary, the Water Licence renewal for the Hamlet of Kimmirut may proceed, but a separate amendment application and *CEAA* screening must be performed to evaluate the proposed new sewage lagoon before it becomes operational.

If you should require further information, please do not hesitate to contact me at (867) 975-4555.

Sincerely,

Michael Roy
Baffin Regional Coordinator, Water Management
INAC - Nunavut Regional Office
P.O. Box 2200, Iqaluit, NU, X0A 0H0
(867) 975-4555
fax: (867) 975-4560
roymjp@inac.gc.ca

CEAA SCREENING FORM
Indian and Northern Affairs Canada
Nunavut Region

1. General File Information on Screening

File Number: NWB3KIM
Can be permit or licence number

*FEAI I.D. Reference Number: _____
A number assigned by the Agency; to be inserted here upon receipt of number from Agency

*Project Title: Kimmirut Water Licence Renewal
Title of project

*Alias Project Title: _____
Alternate project name (if any)

Proponent: Municipality of Kimmirut
Company/Applicant

Type of proponent: Municipal Government
(e.g., Industry, Government, Other private)

*Subject Descriptors: Inland Waters
See Appendix A

*EA Type: Screening
Screening, Class Screening or Comprehensive Study

*EA Start Date: May 17, 2001
Date application received

Proposed Date of Activity: OPEN: 2001

*EA Determination: 20 (1)(a) Water Licence Renewal may proceed (see attached letter for comments)
Final screening determination from subsection 20(1) and section 23 -- see # 13 of Screening Form and insert number here

Project Abandoned Yes NA
Explain reason for abandonment

*EA Determination Date: _____
Date of screening decision

Follow-up program required:
None beyond DIAND's normal Water Licence Inspections

Yes/No If Yes, by NAP or proponent (or both)

*Estimated Follow-up program termination date: NA

* Means this is a required field for a public registry

2. Responsible Authority (RA) Information

*Lead RA and Screening Division: INAC - Water Resources
(Division of DIAND (e.g. Water Resources, Land Administration, etc.))

Lead RA Contact: Michael Roy, Baffin Regional Coordinator, Water Management, (867) 975-4555
Name and telephone # of Regional Manager or Screener

NAP District: Nunavut

*Lead RA Trigger Types: Inclusion List (Part X, Item 69)
(e.g., proponent, funding, land disposition, law list approvals)

Type of Application: Water Licence
(e.g., water licence, land use permit, quarry permit, lease, reserve, OIC)

Type of Approval being sought: Renewal
(e.g., new, renewal, amendment, cancellation)

Present licence/permit/lease number: NWB3KIM

Other RAs or Screening Divisions: No
If yes, is there an Integrated Screening underway?

*Other RA Trigger Types: No

Other RA Types of Approval: No

Project File Location: _____
NAP office where project file is located

3. Project Location

*Region: Nunavut
Province/Territory

Topographic Map Sheet Number: 25 K 13
1:50,000 map sheet number

*Geographic Place Name: Municipality of Kimmirut
(e.g., nearest place name or geographic feature)

Latitude / Longitude: 62°51' N, 59°52' W
(e.g., degrees, minutes, seconds)

*Drainage Region: Peace Athabasca (Arctic Coast Islands) Lower Mackenzie Keewatin circle one

Watershed: Lake Fundo (water supply lake)
(nearest creek, river or lake system)

Street Name: NA
(complete address of project if it occurs in a municipality)

*Nearest Community: Kimmirut (formerly Lake Harbour)

Surrounding Land Status: Crown Land
(e.g., private, Commissioner's, crown land, settlement land)

Special Designation: No, but located at the south end of Katannilik Territorial Park
(Yes / No - e.g. heritage river system)

4. Project Description

*Physical Work Being Assessed: Municipal Infrastructure: Water use and waste disposal
(e.g. road, bridges, etc.)

*Multiple Activities?: ☒ Yes ☐ No

*Physical Activity as identified from Inclusion List: Water Use
(e.g., water use, etc.)

*Project Category Code: **(Point)** Linear Areal circle one

*Phase of Project / Primary Undertaking: Operation and maintenance of waste disposal facilities
(e.g., construction, modification, operation, abandonment, decommissioning, repair, maintenance, installation, or expansion)

Project Description: Describe thoroughly (e.g. duration of project, size of project, related physical activities, machinery used, fuels and chemical use and storage, etc.)

WATER SUPPLY: - Potable water is trucked to residents from Lake Fundo

SEWAGE: - Buildings are fitted with pump out sewage facilities; trucks collect sewage and dispose of it in the sewage lagoon.

- The current sewage lagoon is inadequately small and does not provide adequate treatment of sewage. The lagoon is also very close to town and could possibly pose a health risk. A new lagoon is in the works (and remains to be screened).

SOLID WASTE: - Collected by truck and brought to dump. Combustible waste is burned, compacted and covered. Hazardous material is segregated, but not contained properly.

PROPOSED: - The Hamlet/Community Government and Transportation plans on building a new sewage lagoon and dump. These new facilities will be evaluated under a separate screening process.

What sources of information did you use?

☒ other government data

☐ historical maps

☐ scientific reports

☐ personal information

☐ CEAA public registry system

☐ contour maps

☒ other, specify **Application**

5. Description of Environment

*Ecozone: # 14 Northern Arctic

See Appendix B for zone names

Description of Biophysical Environment:

- Located on South end of Baffin Island, approximately 125 km south-east of Iqaluit.
- Located in permafrost zone, with only a shallow active layer. The winters are long and cold, and the summers short and cool
- Local wildlife includes: whales, seals, arctic chars, arctic foxes, wolves, polar bears and caribou

Description of socio-economic and cultural environment:

- Almost all Inuit with a small non-native population.
- Kimmirut has hamlet level of government, with airport, RCMP, community health center and school.
- Major activities include marine mammal harvesting, hunting, fishing, trapping and carving.

Past and Current Land Use Activities in the Area

- ☒ Historical Maps (expired permits and licences)
- ☒ Running Maps (current permits and licences)
- ☐ Interference Maps (other land dispositions)
- ☐ Public Registry System
- ☐ GIS
- ☐ Indian Land Registry
- ☐ Land Transition Management Style

6. Consultation/Referral of Application

Was public consultation deemed appropriate? ☐ Yes ☒ No

Date application referred to government departments: July 10, 2001

Date application referred to public: NA

Deadline date for public comments: NA

Referral sent to:

Date comments received:

Federal Government

Contact Person

DIAND	Water	<input type="checkbox"/>	<input type="checkbox"/>
	Lands	<input type="checkbox"/>	<input type="checkbox"/>
	Minerals	<input type="checkbox"/>	<input type="checkbox"/>
	Ec. Dev.	<input type="checkbox"/>	<input type="checkbox"/>
	Env't	<input type="checkbox"/>	<input type="checkbox"/>
	I&I	<input type="checkbox"/>	<input type="checkbox"/>
	D.M.	<input type="checkbox"/>	<input type="checkbox"/>
	R.M.O.	<input type="checkbox"/>	<input type="checkbox"/>
DFO		<input checked="" type="checkbox"/> Jordan deGroot	<input type="checkbox"/>
DOE		<input checked="" type="checkbox"/> Lawrence Ignace	<input type="checkbox"/>
Health Canada		<input type="checkbox"/>	<input type="checkbox"/>
DOT		<input type="checkbox"/>	<input type="checkbox"/>
Coast Guard		<input type="checkbox"/>	<input type="checkbox"/>

Nunavut Government

CG&T	<input type="checkbox"/>	<input type="checkbox"/>
Health	<input type="checkbox"/>	<input type="checkbox"/>
DSD	<input type="checkbox"/>	<input type="checkbox"/>
Tourism	<input type="checkbox"/>	<input type="checkbox"/>
CLEY	<input type="checkbox"/>	<input type="checkbox"/>
Other:	<input type="checkbox"/>	<input type="checkbox"/>

Institutions of Public Government

NIRB	<input type="checkbox"/>	<input type="checkbox"/>
NWB	<input type="checkbox"/>	<input type="checkbox"/>
NWMB	<input type="checkbox"/>	<input type="checkbox"/>
NPC	<input type="checkbox"/>	<input type="checkbox"/>
NSRT	<input type="checkbox"/>	<input type="checkbox"/>

Inuit Organizations

NTI	<input type="checkbox"/>	<input type="checkbox"/>
QIA/KIA/KIA	<input type="checkbox"/>	<input type="checkbox"/>
QWB	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

Public/Interested Parties

HTO	<input type="checkbox"/>	<input type="checkbox"/>
Hamlet	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

record of comments attached to screening form

7. Identification of Project Components and Environmental Effects

Identify all components of the project under screening and their potential adverse environmental effects

Project Components

(✓ check all the items appropriate to this project)

- ___ access road
- ___ construction
- ___ abandonment/removal
- ___ modification e.g., widening, straightening
- ___ automobile, aircraft or vessel movement
- ___ blasting
- ___ building
- ✓ burning
- ✓ burying
- ___ channelling
- ___ cut and fill
- ___ cutting of trees or removal of vegetation
- ___ dams and impoundments
- ___ construction
- ___ abandonment/removal
- ___ modification
- ___ ditch construction
- ___ drainage alteration
- ___ drilling other than geoscientific
- ___ ecological surveys
- ___ excavation
- ___ explosive storage
- ___ fuel storage
- ✓ garbage
- ✓ disposal of hazardous waste
- ✓ disposal of sewage
- ✓ waste generation
- ___ geoscientific sampling
- ___ trenching
- ___ diamond drill
- ___ borehole core sampling
- ___ bulk soil sampling
- ___ gravel
- ___ hydrological testing
- ___ site restoration
- ___ fertilization
- ___ grubbing
- ___ planting/seeding
- ___ reforestation
- ___ scarify
- ___ spraying
- ___ recontouring
- ___ slash and burn
- ___ soil testing
- ___ topsoil, overburden or soil
- ___ fill
- ___ disposal
- ___ removal
- ___ storage
- ___ stream crossing/bridging
- ___ tunnelling/underground
- ___ other, explain: _____

___ accidents or malfunctions (Check if there is a possibility for malfunctions and accidents with this project. Describe:

✓ effects of environment on project (e.g. beaver dams).

Describe:

cold weather: causes sewage lagoon to freeze

Project Effects

(✓ check all the items appropriate to this project)

Biophysical Environment

1. ✓ deposit into surface water
2. ___ deposit into ground water
3. ___ change in surface water flow
4. ___ change in ground water flow
5. ___ change in water temperature
6. ___ change in drainage pattern
7. ___ change in air quality
8. ___ change in air flow
9. ___ micro-climate change
10. ___ ice fog
11. ___ change in ambient noise level
12. ___ change in slope stability
13. ___ change in soil structure
14. ___ alteration of permafrost regime
15. ___ destabilization/erosion
16. ___ soil compaction
17. ___ loss of access to non-renewable resource
18. ___ depletion of non-renewable resource
19. ___ removal of rare/endangered plant species
20. ___ introduction of species
21. ___ toxin/heavy metal accumulation
22. ___ removal of rare/endangered wildlife species
23. ___ change in wildlife health
24. ___ impact to large mammals
25. ___ impact to small mammals
26. ___ impact to fish
27. ___ impact to birds
28. ___ impact to other wildlife
29. ___ impact in a calving, nesting or spawning area
30. ___ removal of wildlife buffer zone
31. ___ change in wildlife habitat/ecosystem
32. ✓ other, explain: impact on marine water quality

Directly-related Socio-economic and Cultural Environment

33. ___ impact to trappers
34. ___ impact to hunting
35. ___ impact to outfitters
36. ___ recreational or back country use
37. ___ impact to fishing
38. ___ impact to First Nation traditional use
39. ___ impact to community
40. ___ impact to industry
41. ✓ impact to community health
42. ___ change in manpower or community economics
43. ___ change in housing or infrastructure
44. ___ change in regional transportation
45. ___ other, explain: _____
46. ___ impact to traditional use area
47. ___ impact to historical site or cultural landmark
48. ✓ impact to local aesthetics
49. ___ impact to archaeological or historical site
50. ___ other, explain: _____

7. Identification of Project Components and Environmental Effects (Cont.)

Describe biophysical and socio-economic and cultural environmental effects identified from checklist.

[illegible]

8. Identification of Other Resource Uses and Their Environmental Effects

Identify relevant past, current and future (pending applications) physical works and activities and their potential adverse environmental effects.

Other Resource Uses

(✓ check all the items appropriate to this project)

- ☐ agriculture
- ☐ forestry
 - ☐ commercial
 - ☐ domestic
- ☒ fishing
- ☒ hunting/subsistence
- ☒ urbanization
 - ☒ commercial / residential
 - ☒ Built structures
 - ☒ Infrastructure
- ☐ mining
 - ☐ exploration
 - ☐ open pits
 - ☐ underground
- ☐ quarries
- ☒ transportation/communications
 - ☒ roads/trails
 - ☐ channels/canal
 - ☐ telephone lines, satellite dishes, cables
 - ☐ beacons
- ☐ solid waste disposal
- ☐ energy project
 - ☐ hydro
 - ☐ pipeline
 - ☐ transmission line
- ☐ other water licences, permits, leases
- ☒ land claims
 - ☐ selected
 - ☐ withdrawn
 - ☐ special management
 - ☐ heritage sites
 - ☐ cultural sites
- ☐ other private lands held under tenure
- ☐ recreational
- ☒ trapping
- ☐ mineral processing
- ☐ airport
- ☐ recreation
- ☐ other heritage site
- ☐ other, explain: _____

Effects from other Resource Uses

(✓ check all the items appropriate to the scope of this project)

Biophysical Environment

1. ☐ deposit into surface water
2. ☐ deposit into ground water
3. ☐ change in surface water flow
4. ☐ change in ground water flow
5. ☐ change in water temperature
6. ☐ change in drainage pattern
7. ☒ change in air quality
8. ☐ change in air flow
9. ☐ micro-climate change
10. ☐ ice fog
11. ☐ change in ambient noise level
12. ☐ change in slope stability
13. ☒ change in soil structure
14. ☒ alteration of permafrost regime
15. ☐ destabilization/erosion
16. ☒ soil compaction
17. ☐ loss of access to non-renewable resource
18. ☐ depletion of non-renewable resource
19. ☐ removal of rare/endangered plant species
20. ☐ introduction of species
21. ☐ toxin/heavy metal accumulation
22. ☐ removal of rare/endangered wildlife species
23. ☐ change in wildlife health
24. ☒ impact to large mammals
25. ☒ impact to small mammals
26. ☒ impact to fish
27. ☐ impact to birds
28. ☐ impact to other wildlife
29. ☐ impact in a calving, nesting or spawning area
30. ☐ removal of wildlife buffer zone
31. ☐ change in wildlife habitat/ecosystem
32. ☐ other, explain: _____

Directly-related Socio-economic and Cultural Environment

33. ☐ impact to trappers
34. ☐ impact to hunting
35. ☐ impact to outfitters
36. ☐ recreational or back country use
37. ☐ impact to fishing
38. ☐ impact to First Nation traditional use
39. ☐ impact to community
40. ☐ impact to industry
41. ☐ impact to community health
42. ☐ change in manpower or community economics
43. ☐ change in housing or infrastructure
44. ☐ change in regional transportation
45. ☐ other, explain: _____
46. ☐ impact to traditional use area
47. ☐ impact to historical site or cultural landmark
48. ☐ impact to local aesthetics
49. ☐ impact to archaeological or historical site
50. ☐ other, explain: _____

9. Cumulative Environmental Effects

Based on a comparison of effects identified in #7 and #8.

Matching Number(s)	Description of cumulative environmental effects
_____	<u>No cumulative environmental effects noted</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

10. Mitigation Measures

For each environmental effect identified in #7 and #8, describe the required mitigation measure(s)

Number(s)	Description of Mitigation Measure(s)
<u>41 & 48</u>	<u>A new sewage treatment system is the town's best method of dealing with this problem. However, said new sewage treatment system will have to undergo an environmental screening to evaluate possible impacts.</u>
<u>1 & 32</u>	<u>The problem of inadequate sewage treatment can also be resolved with a new, properly built sewage treatment system, combined with following an approved Operations and Maintenance Plan.</u>
_____	_____
_____	<u>Therefore, in conclusion, most current problems faced by the hamlet can be resolved with the proper construction of a new sewage treatment system. This new system should be screened and evaluated by the proper experts and authorities before it is built or used to make sure it is indeed an adequate replacement for the old lagoon.</u>
_____	_____
_____	_____

11. Significance

After taking into account the above mitigation measures, are any of the adverse environmental effects significant?

☐ Yes ☒ No

If yes, identify which one(s) and proceed to #12; if no, proceed to #13.

Number(s) _____

12. Likelihood of Occurrence

Of the identified adverse significant environmental effects in #11 which are likely to occur?

☐ Yes ☐ No

Number(s) _____

13. CEAA Determination Recommendation

- ☒ Section 20 (1)(a) - Project may proceed as it is not likely to cause significant adverse environmental effects. **But see comments on cover letter**
- ☐ Section 20 (1)(b) - Project may not proceed as it is likely to cause significant adverse environmental effects that cannot be justified.
- ☐ Section 20 (1)(c)(i) - Project must be referred to the Minister of Environment as it is uncertain whether the project is likely to cause significant adverse environmental effects
- ☐ Section 20 (1)(c)(ii) - Project must be referred to the Minister of Environment as it is likely to cause significant adverse environmental effects.
- ☐ Section 20 (1)(c)(iii) - Project must be referred to the Minister of Environment as public concerns warrant the reference.

14. Screening Report and/or Decision Report

Public Notice of availability of Screening Report	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Public Notice of availability of Decision Report	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	<input type="checkbox"/> No Decision Report	
Decision Report sent out	<input type="checkbox"/> Yes <input type="checkbox"/> No	To whom (attach list)
Public Comments Received on Screening Report	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Public Comments Received on Decision Report	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Record of Comments attached to screening form	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

15. Authorization

Prepared By: _____	Date: _____
<small>Screener</small>	
Approved By: _____	Date: _____
<small>Decision Maker (e.g , Regional Manager, engineer, etc.)</small>	

Appendix A: Subject Descriptors

Choose from this list and insert as a “Subject Descriptor”

- agriculture
- buildings
- communications
- defence
- energy
- forestry
- industry
- inland waters
- mining
- oceans
- oil and gas
- parks
- transportation

Appendix B: Ecozone

Choose from this list and insert as “Ecozone” (Note that this list only includes Ecozone found within Nunavut).

08	Taiga Shield	South-eastern mainland near the Hamlet of Arviat, as well the Belcher Islands and Sanikiluaq.
10	Hudson Plains	The islands within James Bay, such as Bear Island.
13	Southern Arctic	Nunavut mainland, including Rankin Inlet, Baker Lake, Kugluktuk and the Jericho/Lupin Mines area. Also includes Southampton Island and the community of Coral Harbour. Does not include the Melville Peninsula area.
14	Northern Arctic	The Melville Peninsula (Igloolik and Hall Beach) as well as all of the arctic islands, including Baffin, Ellesmere and Victoria (with the exception of Southampton Island). Note that it does not include the Cordillera regions on the eastern coasts of Baffin and Ellesmere Islands.
15	Arctic Cordillera	The area within the mountainous Cordillera, which include the east coasts of Baffin Island, Devon Island and Ellesmere Island.

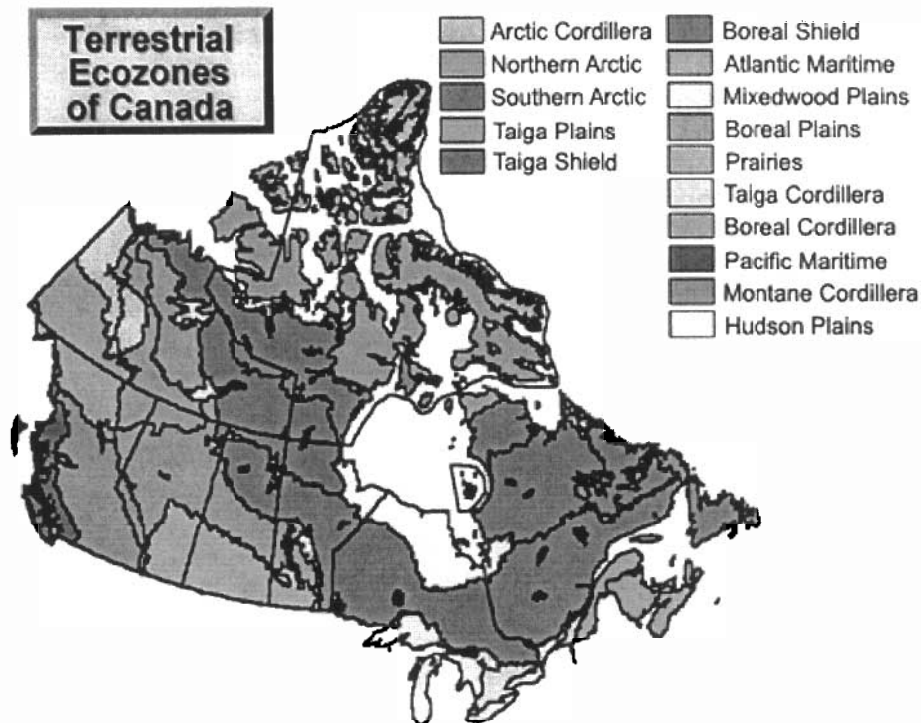


Image taken from Environment Canada at: <http://www2.ec.gc.ca/soer-ree/English/vignettes/Terrestrial/terr.cfm>