

CEAA SCREENING FORM - LEVEL I
Department of Indian Affairs and Northern Development

1. Public Registry Required Information

FEAF I.D. Reference
Number: _____

A number assigned by the Agency to be filled in on applications of PARTIAL from Agency

Subject Descriptors: inland waters

See Appendix A

Alias Project Title: Tuktoyaktuk municipal license renewal

PARTIAL project name

Lead RA and Screening
Division: Water Resources Div. DIAND

Division of DIAND or a Water Resources Unit (specify name and address)

Lead RA Contact:
DIAND: GREG COOK, Water Resources Div.
707-669-2656 FAX 669-2716

Name and telephone # of Regional manager of Division

Lead RA Trigger Type: LAW LIST

Is an agreement, funding, or other document, see 10.1 approved

Other RA Trigger
Type: Involunt Final Agreement - EA by
the Environmental Impact Screening

Is an agreement, funding, or other document, see 10.1 approved

EA Start Date: 19961205

Date application received and accepted (YYYYMMDD)

EA Type: Screening - level I

See Appendix A for categories of Environmental Activities

Physical Activity as identified from Inclusion List: water use

See Appendix B for Physical Activity Categories 10.1 of the Manual

Physical Work Being Assessed: municipal water & waste disposal

See Appendix B and C

Phase of Project / Primary Undertaking: operation & maintenance

See Appendix B for categories of Physical Activities, Appendix C for categories of Environmental Activities, and Appendix D for categories of Physical Activities

Multiple Activities: Yes No Indicate One: waste disposal

Project Category Code: Point Linear Area Other

Geographic Place Name: LAYOV Tuktoyaktuk

Is a, "NAME" listed entry of geographic feature, see Appendix B

EA Determination: 20-1-a

See Appendix B for categories 20.1 - see 11.1 of Screening Form and your project name

EA Determination Date: 19970228

Date of screening decision

Estimated Follow-up program termination date: _____

Date Follow-up program is not terminated

EA Terminated Yes

Specify reason for termination 10.1

2. General File Information

File Number: N7L3-0714

Type of Application: municipal water licence renewal

Present licence/perm/lease number: N7L3-0714

Proposed Date of Activity: 19970301

Other RA or Screening Divisions: (EISC under IFA)

Other RA Types of Approval: -

Project File Location: Water Resources Div. NW Water Bd.

District: INULVIK

3. Proponent

Proponent: In. Hamlet of Tuktoyaktuk
P.O. Box 120
TUKTOYAKTUK NT
XOE 1C0

Type of proponent: municipal government

4. Project Location

Topographic Map Sheet Number: 107 C

Latitude / Longitude: 69° 23' 55" N - 133° 02' 00" W

Watershed: Eskimo Lakes

Street Name: -

Surrounding Land Status: ILA & Commission

Special Designation: -

3. Project Description

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

- This is an existing hamlet along the Arctic coast, with limited water, source & waste disposal facilities
- Domestic water is obtained from Kudlak Lake, and piped via an above/below ground 7.5 km pipeline, to a reservoir. Water trucks deliver the water to residents.
- Chlorination & fluoridation occurs at site reservoir pump house.
- Sewage is collected by pump-out trucks from most buildings, & deposited at the lagoon 8 km SW of the hamlet, with some digested sewage deposited in a pit at the solid waste site. The solid waste site is approx. 4 km SW of hamlet, where it is segregated. The hamlet operates the facilities

What sources of information did you use?

- other government data
- historical maps
- scientific reports
- personal information
- CEAA public registry system
- census maps
- other, specify application files

Describe any accidents or malfunctions that may occur in connection with the project.

- risk of spills, release of sewage effluent, & contaminants from landfill areas.

4. Description of Environment (NWT Data Book)

- coastal location along Beaufort Sea, small
- on a spit, in Kugmuktuk Bay
- average annual precipitation: 7.2 cm rain, 65 cm snow, 13.8 mm. Total ppt. July mean high temp - 15.2°C, January mean high - 25°C
- bounded by many small lakes & swamps areas, on flat gravel covered, eroding coastal terrain. N. of tundra
- mammals incl. caribou, p. bear, G.S. grizzly & seals, beaver, wolf, fox, muskox, harems & whitefish + cisco

Description of socio-economic and cultural environment

- Inuit community (S. Port Drebant), traditional
 historical whaling centre, largely wage
 based now - Fisheries, Transportation, oil &
 gas exploration base, shopping,
 communications, government & IKA, tourism
 school, airport, health centre, RCMP

What sources of information did you use?

DATA Book

- Historical Maps (original copies and photocopies)
- Planning Maps (current sources and historical)
- Interference Maps (air and electromagnetic)
- Public Register System
- GIS
- Index Land Registry
- Land Transition Management Study

7. Consultation on Project

Federal Government	Contact Person	Date Comments received
DIAND	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water	<input checked="" type="checkbox"/> B. Collins, F. Jackson	<input checked="" type="checkbox"/> JAN 10/97
Geology	<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 checked="" type="checkbox"/> B. KUEYK	<input type="checkbox"/>
ISE	<input type="checkbox"/>	<input type="checkbox"/>
O.M.	<input checked="" type="checkbox"/> R. Cockney	<input checked="" type="checkbox"/> JAN 08/97
R.M.O.	<input type="checkbox"/>	<input type="checkbox"/>
DFO	<input checked="" type="checkbox"/> J. Dahl	<input checked="" type="checkbox"/> JAN 12/97
OCIE	<input checked="" type="checkbox"/> S. HARBING	<input checked="" type="checkbox"/> JAN 10/97
Health Canada	<input type="checkbox"/>	<input type="checkbox"/>
DOT	<input type="checkbox"/>	<input type="checkbox"/>
Coast Guard	<input type="checkbox"/>	<input type="checkbox"/>
N.W.T. Government		
Env. Res.	<input type="checkbox"/>	<input type="checkbox"/>
Health	<input type="checkbox"/>	<input type="checkbox"/>
Transport	<input type="checkbox"/>	<input type="checkbox"/>
Tourism	<input type="checkbox"/>	<input type="checkbox"/>
MACA	<input type="checkbox"/>	<input type="checkbox"/>
EMSPR	<input type="checkbox"/>	<input type="checkbox"/>
PNWGC	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>
Aboriginal Group		
	<input checked="" type="checkbox"/> L. Graf, EISC	<input checked="" type="checkbox"/> DEC. 11/96
	<input checked="" type="checkbox"/> P. Vandusen, IKA	<input checked="" type="checkbox"/> Feb 19/1997
	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>
Public/Interested Parties/Other		
<input type="checkbox"/>		<input type="checkbox"/>

8. Detailed description of environmental and cumulative effects identified in Boxes A and B. Tables

Environmental or cumulative environmental effect	Description
<p>- contamination of water bodies, potential adverse impacts on fish etc + runoff from sewage & solid waste, unknown wastes in dump sites.</p>	<p>- continued seepage from both sewage & solid waste sites leaves fish, water quality, in general vulnerable to contamination from increased levels of various waste parameters, BOD, metals etc.</p> <p>- lack of fish screen on water intakes can entrain fish.</p> <p>- contaminants etc will also impact on benthos + sediments.</p>
<p>impact to local community, trad'l use, aesthetics, air quality, etc</p>	<p>- overall concerns with poor waste facilities & mgmt thereof, & potential impact on local use, harvesting of resources</p> <p>- burning of garbage, smell.</p> <p>- potential presence of PCB's & hazardous wastes in the dump (military, oil industry)</p>

9. Summary of mitigation measures

- * Consider/Implement as appropriate, any measures recommended by the Luviakit EISC
- complete & assess Royal Roads study, & implement appropriate recommendations.
- improve water sampling program - expand SNP network, post signs as required.
- cover freshwater intake with appropriate fish screen, reduce burning of waste.
- further assess impacts of sewage/solid waste seepage on fish & fish habitat in bay (Kugmallit)
- require/Implement a more acceptable O&M plan for the waste facilities operation. (sewage & solid waste); develop A&R plan for any sites to be closed.
- appropriate licence conditions to ensure proper reporting, sample analysis & monitoring of all pipes & pumps sewage to approved waste facilities; limits on discharge parameters; min. frequency & inspections, sewage study/assessment on Kugmallit Bay, with analysis of fish/benthos

10. 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 #11; if no, proceed to #12

(pending release of Royal Roads
waste study/assessment could reveal
unknown significant impacts, but not
likely to be that cannot be mitigated)

11. Likelihood of Occurrence

Of the identified adverse significant environmental effects in #10 are any likely to occur?

Yes No If yes, which one(s)?

12. CEEA Determination Recommendation

- Section 20 (1)(a) - Project may proceed as it is not likely to cause significant adverse environmental effects. - subject to consideration of EISC review/position.
- 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.

13. Consultation on Screening Report

Public consultation on screening report deemed necessary Yes No

Deadline for comments on screening report _____

Public Comments Received on Screening Report Yes No

(Please refer to screening report)

Table A. 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	Project Effects ✓ check all the items appropriate to this project
<input checked="" type="checkbox"/> access road <input type="checkbox"/> construction <input type="checkbox"/> abandonment/removal <input type="checkbox"/> modification e.g., widening, straightening <input type="checkbox"/> automobile access or vehicle movements <input type="checkbox"/> blasting <input type="checkbox"/> building <input type="checkbox"/> burning <input type="checkbox"/> burying <input type="checkbox"/> channelling <input type="checkbox"/> cut and fill <input type="checkbox"/> cutting of trees or removal of vegetation <input type="checkbox"/> dams and encroachments <input type="checkbox"/> construction <input type="checkbox"/> abandonment/removal <input type="checkbox"/> modification <input type="checkbox"/> fill construction <input checked="" type="checkbox"/> drainage alteration <input type="checkbox"/> drilling other than geoscientific <input type="checkbox"/> ecological surveys <input type="checkbox"/> excavation <input type="checkbox"/> explosive storage <input checked="" type="checkbox"/> fuel storage <input checked="" type="checkbox"/> garbage <input checked="" type="checkbox"/> disposal of hazardous waste <input checked="" type="checkbox"/> disposal of sewage <input checked="" type="checkbox"/> waste generation <input type="checkbox"/> geoscientific sampling <input type="checkbox"/> trenching <input type="checkbox"/> dam and <input type="checkbox"/> geotechnical core sampling <input type="checkbox"/> bulk soil sampling <input type="checkbox"/> gravel <input type="checkbox"/> hydrological testing <input checked="" type="checkbox"/> site restoration <input type="checkbox"/> fertilization <input type="checkbox"/> grubbing <input type="checkbox"/> planting/seeding <input type="checkbox"/> revegetation <input type="checkbox"/> scoping <input type="checkbox"/> spraying <input type="checkbox"/> repaving <input type="checkbox"/> stock and bush <input type="checkbox"/> soil testing <input type="checkbox"/> topsoil, overburden or soil <input type="checkbox"/> fill <input type="checkbox"/> disposal <input type="checkbox"/> removal <input type="checkbox"/> storage <input type="checkbox"/> stream crossing/bridging <input type="checkbox"/> tunnelling/underground <input type="checkbox"/> other, explain _____	Biophysical Environment <input type="checkbox"/> 1. deposit into surface water <input type="checkbox"/> 2. deposit into ground water <input type="checkbox"/> 3. change in surface water flow <input type="checkbox"/> 4. change in ground water flow <input type="checkbox"/> 5. change in water temperature <input type="checkbox"/> 6. change in drainage pattern <input checked="" type="checkbox"/> 7. change in air quality <input type="checkbox"/> 8. change in air flow <input type="checkbox"/> 9. micro-climate change <input type="checkbox"/> 10. ice log <input type="checkbox"/> 11. change in ambient noise levels <input type="checkbox"/> 12. change in slope stability <input type="checkbox"/> 13. change in soil structure <input type="checkbox"/> 14. alteration of permafrost regime <input type="checkbox"/> 15. destabilization/erosion <input checked="" type="checkbox"/> 16. soil compaction <input type="checkbox"/> 17. loss of access to non-renewable resource <input type="checkbox"/> 18. depletion of non-renewable resource <input type="checkbox"/> 19. removal of rare/endangered plant species <input type="checkbox"/> 20. introduction of species <input checked="" type="checkbox"/> 21. invasive weed accumulation <input type="checkbox"/> 22. removal of threatened/wildlife species <input type="checkbox"/> 23. change in wildlife regime <input type="checkbox"/> 24. impact on large mammals <input type="checkbox"/> 25. impact on small mammals <input checked="" type="checkbox"/> 26. impact on fish <input type="checkbox"/> 27. impact on birds <input type="checkbox"/> 28. impact on other wildlife <input type="checkbox"/> 29. impact on a colony, nesting or spawning area <input type="checkbox"/> 30. removal of wildlife buffer zone <input type="checkbox"/> 31. change in wildlife habitat/ecosystem <input type="checkbox"/> 32. other, explain <u>impact to water quality</u> Directly-related Socio-economic and Cultural Environment <input type="checkbox"/> 33. impact to trappers <input type="checkbox"/> 34. impact to hunting <input type="checkbox"/> 35. impact to outfitters <input type="checkbox"/> 36. recreational or back country use <input checked="" type="checkbox"/> 37. impact to fishing <input type="checkbox"/> 38. impact to First Nation traditional use <input checked="" type="checkbox"/> 39. impact to community <input type="checkbox"/> 40. impact to industry <input type="checkbox"/> 41. impact to community health <input type="checkbox"/> 42. change in local land use/economy <input type="checkbox"/> 43. change in housing or infrastructure <input type="checkbox"/> 44. change in regional transportation <input type="checkbox"/> 45. other, explain _____ <input checked="" type="checkbox"/> 46. impact to traditional use area <input type="checkbox"/> 47. impact to historical site or cultural landmark <input checked="" type="checkbox"/> 48. impact to local aesthetics <input type="checkbox"/> 49. impact to archaeological or historical site <input type="checkbox"/> 50. view <input type="checkbox"/> water _____
<input checked="" type="checkbox"/> accidents or malfunctions (Check if there is a possibility for malfunctions and accidents with the project. Describe: <u>risk of spills with 9 soil contamination from waste sites</u>) <input type="checkbox"/> effects of environment on project (e.g., below dated. Describe: <u>could weather back 9 soil</u>)	

14. Follow-up Program

Describe any follow-up program that may have been put in place for the project and who is responsible.

- under DIAND screening, followup inspections, analysis of SIP data, submission of required license plans & reports it shall suffice to monitor success or problems encountered with mitigation measures imposed as license terms & conditions

(Lauridit EISC may want to conduct a different review, followup, & outcome of study may reveal a need to deal with PCB's).

15. Authorization

Krey Cook
Prepared By:

Feb 27/97
Date

Dainmilt
Approved By:

March 5/97
Date

16. Water Board Authorization

Prepared By:

Date

[Signature]
Approved By:

March 11, 1997
Date

Table B. Identification of Other Resources Uses And Their Environmental Effects
 Identify relevant past, current and future (pending applications) physical works and activities and their potential adverse environmental effects.

Other Resources Uses <input checked="" type="checkbox"/> check all the items appropriate to this project	Effects from other Resource Uses <input checked="" type="checkbox"/> check all the items appropriate to the scope of this project
___ agriculture	Biophysical Environment
___ forestry ___ commercial ___ domestic	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
<input checked="" type="checkbox"/> fishing	7. ___ change in air quality 8. ___ change in air flow 9. ___ micro-climate change 10. ___ ice log
<input checked="" type="checkbox"/> hunting/trustlands	11. ___ change in ambient noise levels 12. ___ change in slope stability 13. ___ change in soil structure 14. ___ alteration of permafrost regime 15. ___ detrital accumulation 16. ___ soil compaction
___ urbanization ___ commercial / residential ___ built structures ___ infrastructure	17. ___ loss of access to non-renewable resources 18. ___ depletion of non-renewable resources
___ mining ___ exploration ___ open pits ___ underground	19. ___ removal of or endangered plant species 20. ___ introduction of species 21. ___ man-made material accumulation (PCB's)
___ quarries	22. ___ removal of or 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 to a colony, nesting or spawning area 30. ___ removal of wildlife buffer zone 31. ___ change in wildlife habitat/ecosystems 32. ___ other, explain _____
<input checked="" type="checkbox"/> transportation/communications ___ roads / trails ___ channels / canals ___ telephone lines, satellite dishes, cables (P.E.W. LINE) ___ beacons	Directly-related Socio-economic and Cultural Environment 33. ___ impact to trapping 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 work force or community economics 43. ___ change in housing or infrastructure 44. ___ change in regional transportation 45. ___ other, explain _____
<input checked="" type="checkbox"/> solid waste disposal	46. ___ impact to traditional use area 47. ___ impact to historical site or cultural landmark 48. ___ impact to local residents 49. ___ impact to archeological or historical site 50. ___ other, explain _____
___ energy project ___ hydro ___ propane ___ transmission line	
___ other water licenses, permits, leases	
<input checked="" type="checkbox"/> land claims ___ selected ___ withdrawn ___ special management ___ heritage sites ___ cultural sites	
___ other private lands held under tenure	
___ recreational	
<input checked="" type="checkbox"/> trapping	
___ timber processing	
<input checked="" type="checkbox"/> transport	
___ recreation	
___ other heritage sites	
<input checked="" type="checkbox"/> other, explain _____	

Cumulative Environmental Effects

Based on a comparison of effects identified in Box A and Box B

Matching
Numbers:

Description of cumulative environmental effects

None were identified per
se. There may be a
need to deal with problems
if any are identified,
pending completion of the
waste study.

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 8: Geographic Place Name