

## DISTRIBUTION

Gary Ash's research is titled "*Hope Bay Aquatic Investigations*" and is proposed to take place from May 15, 2001 to September 30, 2001.

Thank you for your continued assistance. Please contact our office if you have any questions or concerns regarding the above.

Mary Ellen Thomas  
Manager, Research Liaison

**Nunavut Water  
Board**  
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**Nunavut Research Institute**  
**Nunavummi Qaujisaqtulirijikkut**

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**SCIENTIFIC RESEARCH LICENCE APPLICATION**

**(Land, Freshwater & Marine Based Research)**

This application fulfills the requirements for NIRB environmental screening

**SECTION 1: APPLICANT INFORMATION**

**1. Applicant's full name and mailing address:**

Mr. Gary Ash  
R.L. & L. Environmental Services Ltd.  
17312 – 106 Avenue, Edmonton AB, T5S 1H9

**Fax:**

(780) 483 1574

**Phone:**

(780) 483 3499

**E-mail:** edmonton@rll.ca

**2. Field Supervisor (address, if different from above):**

Jack Patalas (address same as above)

**Phone (radio or otherwise):**

**3. Other Personnel list (name and position):**

Jim Campbell – fisheries biologist  
Rob Stack – fisheries technician  
Unspecified local assistants (Umingmaktok / Bathurst Inlet / Cambridge Bay residents)

**Total # of personnel: 4**

**Total # of person days: 100**

**SECTION 2: AUTHORIZATION NEEDED**

**4. List the organisations you will contact for necessary authorizations associated with the project. (See Appendix A & B):**

Department of Fisheries and Oceans, Iqaluit

**5. List the active permits, licences, or rights related to the project and their (expiry dates):**

Land Use Permits: KTL399C028 (31 Jan 2002); KTL399C029 (28 Feb 2002); KTL300F002 (30 Apr 2002); KTL100C002 (30 Apr 2002); and KTL100C023 (14 Jul 2001)

Nunavut Water Board Permits: NWB1BOS9801 (Jul 2001); NWB2HOP0002 (Mar 2002); and NWB4WEI9799 (Apr 2002).

### SECTION 3: PROJECT PROPOSAL DESCRIPTION

#### 6. Project duration:

Period of operation: 15 May 2001 to 30 September 2001

Proposed term of permit: 15 May 2001 to 30 September 2001

#### 7. Location(s) of data collection:

- Land Status Types: Crown, Commissioners', Inuit Owned Surface Lands, Inuit Owned Sub-Surface Lands, & Other
- Please ensure that maps of the project area are attached (1:50 000, 1:250 000)

Location Name	Region	Latitude (north)	Longitude (west)	NTS Map sheet #	Land Status
Little Roberts Lake	Kitikmeot	68°10'11"	106°34'27"	77 A/3	IOSL/IOSSL
Roberts Lake	Kitikmeot	68°09'59"	106°31'05"	77 A/3	IOSL/IOSSL
Roberts Bay	Kitikmeot	68°11'00"	106°36'39"	77 A/3	IOSL/IOSSL

For additional sites, attach a separate page

### NON-TECHNICAL PROJECT PROPOSAL SUMMARY

8. On a separate page, please include a non-technical description of the project proposal, no more than 300 words, in English & Inuktituk (Inuinaktun, if in the Kitikmeot). The project description should outline the project activities (research methods, camps, etc.) and their necessity, method of transportation, any structures that will be erected, expected duration of activity and alternatives considered. If the proposed activity fits into any long-term developments, please describe the projected outcome of the development for the area and its timeline.

### SECTION 4: MATERIAL USE

9. List equipment (including drills, pumps, aircrafts, etc.): not applicable

Equipment type and number	Size-dimensions	Proposed use

10. Detail fuel and hazardous materials use: not applicable

Fuels	Number of Containers	Capacity of Containers (gal & litres)
• Diesel		
• Gasoline		
• Aviation fuel		
• Propane		
• Other		
Hazardous Materials	Number of Containers/Concentration	Capacity of Containers (gal & litres)
•		
•		
•		

**10. Describe method of fuel transfer:**

Not applicable

**11. Describe any procedures and materials in place to handle accidental spills. Please attach the spill contingency plan and other appropriate information about the hazardous materials associated with the proposed project.**

Not applicable

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**SECTION 5: WASTE DISPOSAL AND TREATMENT FACILITIES**

**12. Describe amount and methods of disposal:** not applicable

Type of Waste	Projected Amount Generated	Method of Disposal	Additional Treatment Procedures
Sewage			
Grey water			
Garbage			
Overburden (organic soil, waste material,tailings )			
Hazardous waste:			
Other:			

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**SECTION 6: RESTORATION AND ABANDONMENT PLANS**

**13. Describe or attach the proposed procedure for site restoration upon abandonment of any area associated with the project:**

Not applicable

## SECTION 7: ENVIRONMENTAL IMPACT

**14. Indicate and describe the components of the environment that are near the project area, as applicable. Attach any relevant maps or information:**

Type of species (common name, associated herd, etc.)	Important Habitat Area (calving, staging, denning, migratory pathways, spawning, nesting, etc.)	Critical time periods (calving, post-calving, spawning, nesting, breeding, etc.)
Example:		
Fish: Arctic char	Roberts Lake	Sep-Oct; spawning / overwintering migrations
Caribou:		
Muskox:		
Raptor:		
Migratory Birds:		
Waterfowl:		
Seals:		
Whales:		
Narwhals:		
Canid family (wolves, wolverines, foxes, etc.)		
Bears (grizzly, polar, black):		
Other:		
Eskers:		
Communities:		
Historical/Archaeological sites:		

**15. Indicate and describe other known uses of the area such as local development, traditional use (hunting/fishing/spiritual), outfitting, tourism, mineral development, research, etc.:**

The study area is presently being explored by Hope Bay Joint Venture to evaluate the potential for developing a gold mine. The area may also be used occasionally for hunting and fishing by residents of Umingmaktok, Bathurst Inlet, and Cambridge Bay.

**16. Describe the impacts of the proposed project activity on the environmental components and uses, in the area listed above:**

Because of the proposed use of non-lethal fish sampling techniques, fish mortalities will be minimal. Small numbers of Arctic charr and lake trout (approximately 30 of each species) will be sacrificed to collect tissues for contaminant analyses. The impacts of the proposed study on the aquatic habitat are expected to be negligible or non-existent.

**17. What are some suggested mitigation measures for these impacts?**

Not applicable

## SECTION 8: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

### 18. List the community representatives that you have contacted about this proposed project:

Community	Name	Organisation	Date Contacted	Means	Telephone #	Fax #
Bathurst Inlet		Burnside HTO	August 2000	meeting		
Umingmaktok		Umingmaktok HTO	August 2000	meeting		
Taloyoak		KIA	May 2000	meeting		

### 19. Describe the level of involvement that the residents of Nunavut have had with respect to the proposed project. Elaborate on local employment opportunity, training programs, contracts, Inuit Impact Benefit Agreements (if applicable):

During 2000, the Hope Bay project has hired 38 local residents from Bathurst Inlet, Umingmaktok, Cambridge Bay, Taloyoak, and Gjoa Haven (mostly as labourers, camp support, etc.). It is our intention to hire assistants from these communities to help with the 2001 environmental program.

### 20. Describe and attach documentation regarding community concerns or support for the proposed project:

During the community visits held in Bathurst Inlet, Umingmaktok, and Taloyoak in May and August 2000, all representatives voiced support of the project. The ongoing environmental investigations planned for 2001 will increase the data base so that the project can move forward to a feasibility study.

### 21. Is there a Traditional Knowledge (TK) component to this research project? If yes, see Appendix C.

The TK component of the study was completed during previous investigations, and will not form part of the current application.

Applicant:



Senior Fisheries Biologist & Principal,

14 Feb 2001

Signature

Title

Date

## Section 3

### 8. Non-Technical Project Proposal Summary

The Hope Bay Joint Venture (comprised of Miramar Hope Bay Ltd. and Hope Bay Gold Corporation Inc.), plan to carry out additional baseline aquatic investigations during the 2001 field program. The program for 2001 is considered an extension of the work done in 2000 and the data information collected is required to fill in some information gaps as we continue our advanced exploration activities in the Hope Bay Belt. A considerable amount of aquatic surveys have been completed on the belt since 1992 under a previous owner. The program in 2001 will focus on the Roberts Bay, Little Roberts Lake and Roberts Lake area, located in the northern portion of the Hope Bay Belt with the closest community being Umingmaktok. Community visits to Bathurst Inlet and Umingmaktok during the summer of 2000 summarized the program anticipated in 2000 and what we might expect to do in 2001.

As mentioned, the study program for 2001 is designed to compliment existing information and fill in data gaps on aquatic habitat and fish populations in the study area. The work will include both spring and fall field surveys, focusing on Arctic grayling spawning locations and Arctic Charr migration patterns in and out of Roberts Lake. Tissue samples will be collected from approximately 60 fish (30 Arctic charr and 30 lake trout) and analyzed for metal concentrations. Where possible, fish tagging will be undertaken to enable longer term monitoring. In addition, sediment samples will be collected in Roberts Bay and Roberts Lake to determine the present concentrations of metals and organic contaminants. The collected data in 2001 will be incorporated into our project description as part of the environmental impact assessment and permitting process.

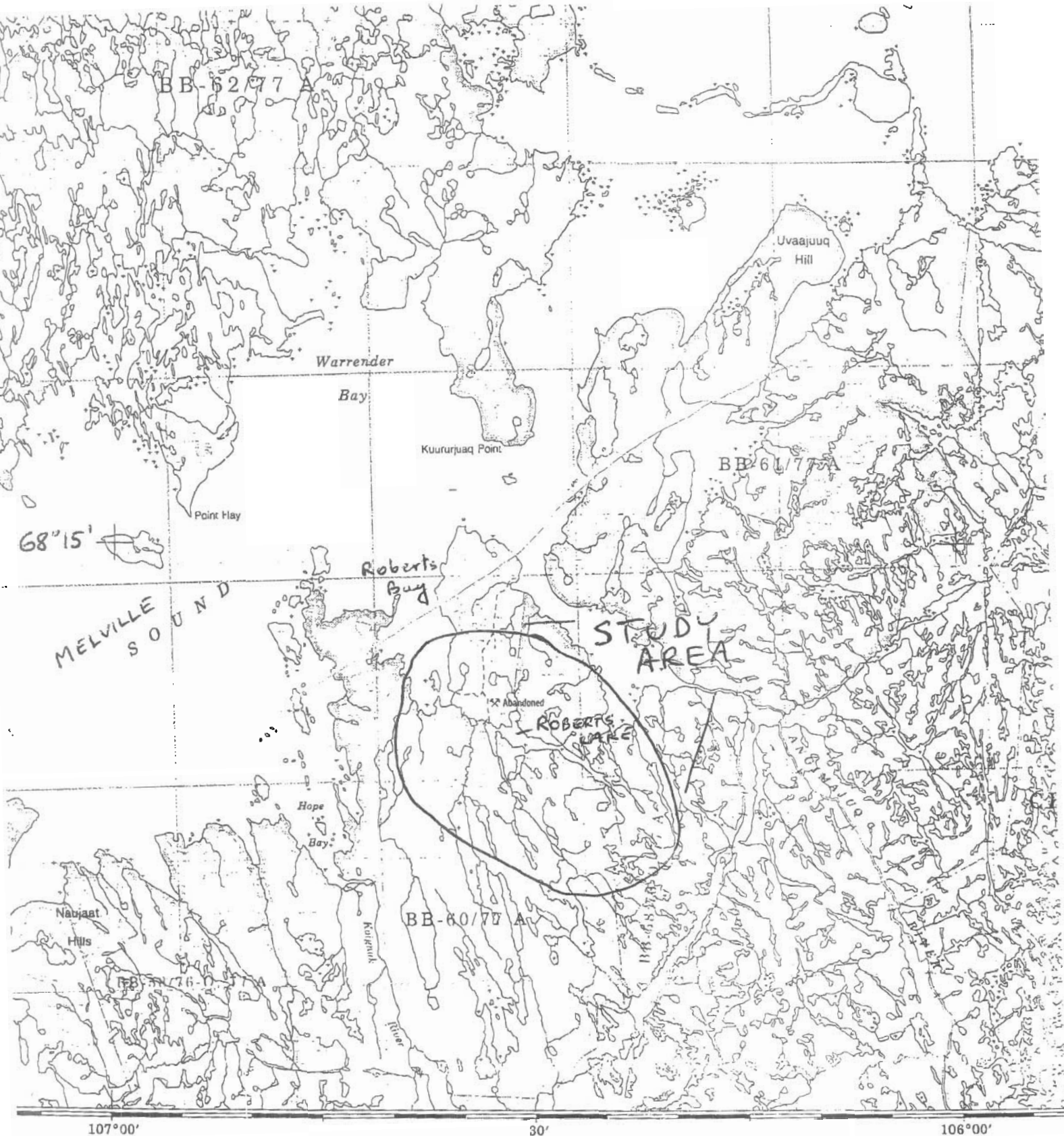


## 8. Ayoknaitok-Ehivgioknik Oyagakhiokvikmi Naitok Ehivgiokvikhak

Okoa Kapihiliktokmi Pikatigiit Oyagakhioktit (eligiit The Hope Bay Joint Venture Miramar Hope Bay Ltd. okoalo Hope Bay Gold Corporation Inc.), oktogahoaliktot kenikhialotik emakmi manikaktonik oyaganik ovani 2001-mi oyagakhiokhimaklotik. Okoa oyagakhiokhimaklotik ovani 2001 nalvaakhiokhimakniaktot manikakninik ovani 2000-mi ovalo manikagiakhaita nalvakhiozniagait kanogittakhaita manikaknyummikagonakhiot nalvaakvitik ovani Kapihiliktokmi Agingakmiilo. Hamna emap ataani manikaknigiagahogiyat talvani 1992-mi kanga piotikaktoni aipananikmot. Ona nalvakhiokvikhak 2001-mi kenikhiahimakniaktot Ogholiotilikmi, Tahikmi ovani Agingamilo tahamani Agingap Kangiani Kukap ona kanittok inukaknimi Umingmaktok. Tahamonga polaktakniaktot Kengaokmot ovongalo Umingmaktomot aoyakat 2000 okaotigiaktoklogo oyagakhiogotikhaktik ovani 2000-mi ovalo kanogiliokniaktogut ovani 2001-mi.

Ovani okaotigiaptingni, ona ehivgiokhinik oyakkanik ovani 2001-mi naonaiyaotiginiaktakot nalvaanik ovalo kanogitot emap ataanitot nalvaat ehivgiokniaktavut naonaikhajlota emakmiotaniik ikalukniklo kaffioyakhaita talvaniitot. Ona havaknik atokniaktakot opingamit okiakhamot ehivgiokhilota, elihaklogit Holokpaogait evvatokliit okoalo ikalukpiit hitoakatakniit kugaitni ovani Ogholiotilikmi. Nikkainik ehivgiokhiniaktogut ikaluit 60 ikaluit (30 ikalukpiit okoalo 30 ehokit) ovalo ehivgiokniaktavut havilgakagiakhaita nikkait. Hamani nammakpat, ikaluit nappaliktoktaoniaktot ema kakogogaalokmot taotogiami kinat ikaluit. Hamalo, tattip natka maklok ehivgiokpakniaktakot Ogholiotiliop tahiitlo hanianiitot kanok havivalokagiakhata maklok ovalo halumainialo taotoklogo. Okoa katitiktavut ovani 2001-mi elaoniaktot ehivgioktabtingnot nuna emaklo ehivgiokhimakniagaptigo ovalo laisiniktitaovagiaptingnik halumagaikpata havakvivut.





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ED F 1:50 000 MAPS. INFORMATION CURRENT AS  
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BY HER MAJESTY THE QUEEN IN RIGHT OF CANADA,  
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1 CORRECTIONS 1993.

Routes:

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SEE REVERSE SIDE POUR UNE LISTE COMPLÈTE DES SIGNES, VOIR AU VERSO

Information concerning bench marks and horizontal survey  
monuments can be obtained from Geodetic Survey, Canada  
Centre for Surveying, Ottawa.

Offshore islands lie within the District of Franklin N.W.T.

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# Nunavummi Qaujisaqtulirijikkut /Nunavut Research Institute

Box 1720, Iqaluit, NT XOA OH0 phone: (819) 979-4108 fax: (819) 979-4681 email: slcnri@nunanet.com

## Reviewer Recommendation Form: Land &/or Water based Research

<b>Applicant Name:</b>	Gary Ash
<b>Project Name:</b>	Hope Bay Aquatic Investigations
<b>Review Panel Name:</b>	Executive Director, NWB
<b>Region:</b>	Kitikmeot

**Research Discipline:** Aquatic Studies

**Panel Comments:**

**Requested Terms or Conditions:**

Approved ☐  
Rejected ☐

Annual ☐ or  
Multi-year ☐

Signature

Title:

Date