ᓄᓇᕗᑦ ᐊᒻᒪᓗᓕᒫᓂᖅ ᑲᑎᒪᔨᖃᐅᔨᒪᔭᐅᓂᖅ ᐃᓕᓴᕐᓂᐊᕐᓂᖅ/NUNAVUT IMPACT REVIEW BOARD/NUNAVUTIMI KAMOGILIVALIANIKOT ELITTOHAIVEOPLOTIK HATIMAYIIT

February 5, 1999

To: Philippe di Pizzo
Executive Director
Nunavut Water Board
P.O. Box 199
Gjoa Haven, NT X0E 1J0

Re: Mineral Exploration at Meliadine Lake – WMC International Ltd.
NIRB:98EN124 NWB:NWB2MEL

Enclosed is the completed NIRB Screening Decision Report for the application for a water licence for mineral exploration at Meliadine Lake in the Kivalliq.

NIRB has screened this application for ecosystemic and socio-economic impacts of the proposal.

NIRB's indication to the Minister is:

12.4.4 (a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;

Please contact Joe Ahmad, Executive Director at (867) 983-2593 if you have any questions about the Screening Report.

Yours truly,

Larry Akeavigak, Chairperson
Nunavut Impact Review Board
P.O.Box 2379
Cambridge Bay, NT
X0E 0C0
Tel: (867) 983-2593 Fax: (867) 983-2574

ᓄᓇᕗᒥ ᐊᑦᑎᓕᕆᓂᕐᒧᑦ ᑲᑎᒪᔩᑦ/NUNAVUT IMPACT REVIEW BOARD/NUNAVUTMI KANOGILIVALIANIKOT ELITTOHAIYEOPLOTIK KATIMAYIIT

SCREENING DECISION

February 05,1999

Thomas Kudloo
Chairperson
Nunavut Water Board

Dear Mr. Kudloo:

RE: Screening Decision of the Nunavut Impact Review Board (NIRB) on Application:
NIRB 98EN124 NWB2MEL
WMC International – Mineral Exploration at Meliadine Lake

Authority:

Section 12.4.4 of the Nunavut Land Claim Agreement states:

Upon receipt of a project proposal, NIRB shall screen the proposal and indicate to the Minister in writing that:

a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;
b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;
c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or
d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

Primary Objectives:

The primary objectives of the Nunavut Land Claims Agreement are set out in section 12.2.5 of the Land Claims Agreement. This section reads:

In carrying out its functions, the primary objectives of NIRB shall be at all times to protect and promote the existing and future well-being of the residents and communities of the Nunavut Settlement Area, and to protect the ecosystemic integrity of the Nunavut Settlement Area. NIRB shall take into account the well-being of the residents of Canada outside the Nunavut Settlement Area.

The decision of the Board in this case is 12.4.4 (a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5.

ᐃᖃᓗᒃᑐᑦᑎᐊᕐᒥ, ᓄᓇᕗᒻᒥ/P.O. Box 2379 Cambridge Bay, NT/EKALUKTUTIAK, NUNATIAMI X0E 0C0 • ᐅᖄᓚᐅᑎᖓ/Phone/HIVAYAOTA: (867) 983-2593 • ᑎᑎᖅᑲᑦ ᐅᖄᓚᐅᑎᖓ/Fax/FAX-KOT: (867) 983-2594

Reasons for Decision:

NIRB's decision is based on specific considerations that reflect the primary objectives of the Land Claims Agreement. Our considerations in making this decision included:

- the impact of drilling activities on the ecosystem;
- disposal of drill cuttings and waste water;
- impact to water quality, aquatic habitat and wildlife and fish populations from chemicals, drill waste, drill fluids and potential fuel spills;
- storage and disposal of chemicals, fuel, garbage, sewage, and gray water, and impact of these on the ecosystem;
- the impact of noise from drilling activities and their disturbance to wildlife;
- the impact of campsite and equipment on terrain;
- the impact of exploration activities on archaeological sites or cultural landmarks in the area;
- clean up/restoration of the camp site and drilling locations upon abandonment; and

Terms and Conditions:

- That the terms and conditions attached to this screening report will apply.

Drill Sites

1. The Permittee shall not conduct any land based drilling within thirty (30) metres of the normal high water mark of a water body.
2. The Permittee shall conduct any the lake-based winter drilling, in accordance with *the Interim Guidelines for On-Ice drilling*.
3. The Permittee shall ensure that all drill cuttings are removed from ice surfaces.
4. The Permittee shall not use drilling muds or additives in connection with drill holes unless they are recirculated or contained such that they do not enter the water, or are certified to be non-toxic.
5. The Permittee shall ensure that the release of total suspended solids in the receiving environment shall be in compliance with *Guidelines for Total Suspended Solids* contained in the *Canadian Council of Ministers for the Environment's (CCME) Canadian Water Quality Guidelines, Chapter 3 - Freshwater Aquatic Life* (i.e. 10mg/L for lakes with background level under 100mg/L, or 10% for those above 100mg/L).
6. The Permittee shall ensure waste water that cannot be re-circulated be disposed of in a properly constructed sump or an appropriate natural depression that does not drain into a waterbody.
7. The Permittee shall collect drill cuttings and store them in barrels for removal to the Municipal Dump at Rankin Inlet.
8. The Permittee shall ensure that the sump/depression capacity is sufficient to accommodate the volume of waste water and any fines that are produced so that there will be no additional impacts.
9. The Permittee shall not locate any sump within thirty (30) metres of the normal high water mark of any water body.

10. The Permittee shall ensure that disturbance of vegetation from deposit of drill fluids/cuttings is restricted to the area of the sump and the ground prepared for revegetation upon abandonment.
11. The Permittee shall, where flowing water from bore holes is encountered, plug, the bore hole in such a manner as to permanently prevent any further outflow of water. If an artesian occurrence shall be reported to the Nunavut Water Board and Land Use Inspector within 48 hours.

Water

12. The Permittee shall ensure that all water intake hoses are equipped with a screen with an appropriate mesh size to ensure that there is no entrapment of fish.

Fuel and Chemical Storage

13. The Permittee shall ensure that fuel storage containers are not located within thirty-one (31) metres of the ordinary high water mark of any body of water.
14. The Permittee shall ensure that any chemicals, fuels or wastes associated with the project do not spread to the surrounding lands or enter into any water body.
15. The Permittee shall take all reasonable precautions to prevent the possibility of migration of spilled petroleum fuel or chemicals over the ground surface.
16. The Permittee shall have one extra fuel storage container on site equal to, or greater than, the size of the largest fuel container.
17. The Permittee shall examine all fuel and chemical storage containers daily for leaks. All leaks should be prepared immediately.
18. The Permittee shall have emergency response and spill contingency plans in place prior to the commencement of the operation.
19. The Permittee shall immediately report all spills of petroleum and hazardous chemicals in accordance the Government of the NWT Spill Report to the twenty four (24) hour spill report line at (867) 920-8130 to NWB and to the Land Use Inspector.

Waste Disposal

20. The Permittee shall not discharge or deposit any refuse substances or other waste materials in any body of water, or on the banks thereof, which will impair the quality of the waters of the natural environment.
21. Any sumps or areas designated for waste disposal shall not be located within thirty (30) metres of the ordinary high water mark of any body of water, unless otherwise authorized.
22. The Permittee shall construct a sump to contain all greywater discharged and shall ensure drainage is away from any waterbody.
23. The Permittee shall ensure all sumps should be filled and recontoured to match the natural environment upon abandonment.
24. The Permittee shall ensure that all sewage is collected and inclinerated.
25. The Permittee shall incinerate all combustible and food wastes to eliminate potential for wildlife problems created by the attraction of wildlife to garbage.

26. The Permittee shall ensure that all non-combustible wastes generated through the course of the operation are backhauled and disposed of in an approved dumpsite.
27. The Permittee shall deposit all scrap metal, discarded machinery and parts, barrels and kegs, at an approved disposal site.
28. The Permittee shall not bury any metal wastes.
29. The Permittee shall dispose of all toxic or persistent substance in a manner approved by the NWB and the land use inspector.

Wildlife

30. The Permittee shall ensure that there is no damage to wildlife habitat in conducting this operation.
31. The Permittee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
32. The Permittee shall cease activities that may interfere with migration or calving, such as airborne geophysics surveys or movement of equipment, drilling activities until the caribou and their calves have vacated the area.
33. The Permittee shall ensure that aircraft pilots adhere to recommended flight altitudes of greater than 300 m above ground level as to not disturb wildlife. In the event that caribou or muskox cows and calves are present all overflights by aircraft should be suspended. Raptor nesting sites and concentrations of nesting or molting waterfowl should be avoided by aircraft at all times.
34. The Permittee shall ensure compliance with Section 36 of the *Fisheries Act* which requires that no person shall deposit or permit the deposit of a deleterious substance on any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such a water body.
35. The harmful alteration, disruption or destruction of fish habitat is prohibited under Section 35 of the *Fisheries Act*. No construction or disturbance of any stream/lake bed or banks of any definable watercourse is permitted unless authorized by DFO.
36. The Permittee shall not obstruct the movement of fish while conducting the land use operation.
37. The Permittee shall ensure that the drill sites avoid known environmentally sensitive areas (denning, nesting etc.) by a minimum of 250 metres.

Environmental

38. The Permittee shall ensure that the land use area is kept clean and tidy at all times.
39. The Permittee shall prepare the site in such a manner as to prevent damage to the ground surface. Wooden walkways are to be used to minimize erosion between tents and the camp.
40. The Permittee shall be required to undertake any corrective measures in the event of any damage to the land or water as a result of the permittee's operation.
41. The Permittee shall not use any equipment except of the type, size and number that is listed in the accepted application.
42. The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging.

43. The Permittee shall suspend overland travel of equipment or vehicles if rutting occurs.

Camp

44. The Permittee shall not erect camps or store material on the surface ice of lakes or streams.
45. The Permittee shall locate all camps and storage facilities on gravel, sand or other durable land.
46. The Permittee shall follow the *Camp Sanitation Regulations* made under the authority of the Public Act of the Northwest Territories.

Archaeological Sites

47. The Permittee shall follow all terms and conditions for the protection and restoration of archaeological resources as outlined by the Prince of Wales Northern Heritage Centre (PWNHC) in attached letter.

Reclamation

48. The Permittee shall remove all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material upon abandonment.
49. The Permittee shall backfill and restore all sumps back to the natural surrounding contours of the land prior to the expiry date of this permit.
50. The Permittee shall undertake ongoing restoration for any land or improvements, which are no longer, required for the Permittee's operation on the land.
51. The Permittee shall cap all drill holes and cut off any drill casings that remain above ground to ground level upon abandonment of the operation.

Other Recommendations

1. NIRB would like to encourage the proponent to hire local people and services, to the extent possible.
2. NIRB advises proponents to consult with local residents regarding their activities in the region.
3. Any amendment requests deemed by NIRB to be outside the original scope of the project will be considered a new project.
4. The Environmental Protection Branch (DOE), Department of Fisheries and Oceans (DFO), Nunavut Impact Review Board (NIRB), and the Nunavut Water Board (NWB), and the communities of Chesterfield Inlet, Whale Cove and Rankin Inlet should be advised of any material changes to plans or operating conditions associated with the project.

Validity of Land Claims Agreement

Section 2.12.2
Where there is any inconsistency or conflict between any federal, territorial and local government laws, and the Agreement, the Agreement shall prevail to the extent of the inconsistency or conflict.

Dated FEB. 05/99 at Cambridge Bay, NT

Larry Pelnik Akeeagok, Chairperson

Attachment: NIRB Screening Form

[redacted]

ᓄᓇᕗᑦ ᐊᕐᓂᓕᓕᒫᓂᖅ ᑲᑎᒪᔨᖏᑦ/NUNAVUT IMPACT REVIEW BOARD/NUNAVUTMI KANOGILIVALIANIKOT ELITTOHAIYEOPLOTIK KATIMAYIIT

NUNAVUT IMPACT REVIEW BOARD
SCREENING FORM

1. General File Information on Screening

NIRB #: 98EN124 (yy-xxx) Authorizing Agency #(s): NWB2MEL (permit or licence #)

Project Title: Mineral Exploration / Diamond Drilling (Title of Project)

Proponent: WMC International Ltd. (Company/Applicant)

Proponent's Address: 22 Gurdwara Road
Nepean, ON.
K2E 8A2 (Full Address)

Contractor: (Company / persons doing the work if different from the proponent)

(address and contact numbers)

Proposed Starting Date of Activity: January 1999 (yyyy-mm-dd)

EA Starting Date: Dec. 23/98 (Date application accepted (yyyy-mm-dd))

Date Application Referred for Comments: Dec. 23/98 (yyyy-mm-dd)

Deadline for Comments: Jan. 26/99 (yyyy-mm-dd)

NIRB's EA Indication: 12.4.4 (a)

Date of Indication: February 05, 1999 (yyyy-mm-dd)

Project Cancelled: Yes, Give Reason

Comments:

ᐃᒡᓗᖕᒥ, ᓄᓇᕗᑦ/P.O. Box 2379 Cambridge Bay, NT /EKALUKTUTIAK, NUNATSIAQ XOE 0C0 • ᑕᑯᓐᓇᖅᑐᑦ/Phone/HIVAYAOTA: (867) 983-2593 • ᐅᓪᓗᒥ ᑕᑯᓐᓇᐅᔪᓐᓃᑦ/Fax/FAX-KOT: (867) 983-2594

2. Authorizing Agencies

Authorizing Agency(ies): Kivalliq I.A., Kitikmeot I.A., QIA, (NWB), NWMB, DIAND, DFO, DOE, NRI, RWED, Other: _____

Authorizing Agency Contact Person: _____
(office where project file is located, contact person, number)

Land Status: Inuit Owned ✓ Crown ____ Commissioner's____ Marine Areas____

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

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

Other required approvals, permits or licences: Land Use
(e.g. water licence, land use permit, quarry permit, lease, reserve)

Present Authorizations (active): NWB 0MEL
(file number)

Previous Authorizations (inactive/expired): _____
(file number)

3. Project Location

Kivalliq Y Kitikmeot____ Baffin ____

Land Use Planning Region: Kivalliq
(e.g. West Kitikmeot, North Baffin, South Baffin, Kivalliq)

Geographic Place Name: Heliadine Lake
(nearest place name or geographic feature)

Local/Traditional Name: _____

National Topographic Sheet (NTS) Number: 55 NI Scale: 1:50,000

Latitude/Longitude: 63°01'30", 92°10'20"
(degrees, minutes seconds)

Drainage Region and Watershed: Heliadine Lake
(nearest creek, river or lake system)

Nearest Settlement: Rankin Inlet.

Adjacent Settlement/Out-post camps: _____

Special Designation: _____
(Yes/No -e.g. Heritage River, Wildlife Reserve, Park)

Does the project have Nunavut transboundary implications? Yes ____ No Y

If yes, what additional procedures/contacts are needed? _____

4. Project Description and Assessment

Physical Work, Activity(ies): Drilling, camp
(drilling, construction, camp, research, water works, installation, modification, maintenance)

Multiple Activities: Yes X No

Project Category Code: Point Multiple Points Linear (Area)

Phase of Project: Exploration
(exploration, bulk sampling, development, operations, decommissioning, abandonment/restoration)

Project Description Summary (non-technical):

(duration of project, size of project, number of personnel on site, related physical activities, machinery used, fuels and chemical use and storage, associated infrastructure, methods of transportation, amount and source of resources needed eg. Gravel)

Attach Project Overview (English and Inukitut)

Alternatives Considered:
(list all alternatives to the project and/or components of the project to avoid unnecessary amendments, (e.g. alternatives to location of ice road or camp logistics)

5. The Proponent's Public Consultation Process

Description of Proponent's Public Consultation Process

Did proponent make use of traditional knowledge? Yes X No

Was information available in the community's preferred language? Yes X No

In NIRB's opinion, was the proponent's public consultation adequate? Yes X No

If no, explain why the proponent's consultation program was found deficient.

December 23, 1998

To: Distribution List via fax.

Re: NIRB: 98EN124 (New File) 98E07N110 (Old File)
Project: Mineral Exploration - Meliadine Lake
Proponent: WMC International Limited
Region: Kivalliq (63° 01' 30" N, 92° 10' 20" W)

Project Overview:

WMC International has applied for a renewal to their water licence from the Nunavut Water Board for the purpose of conducting mineral exploration and diamond drilling on Inuit Owned Lands in the Meliadine Lake Area near Rankin Inlet.

All components of the exploration and diamond drilling are unchanged except for an increase in camp population to a fifty person camp. The camp is located on an esker on the south shore of Meliadine Lake . The site is selected based on topology and proximity to exploration area in consultation with Kivaliq Inuit Association.

They will be taking water from Meliadine Lake and small ponds for land based drilling. The consumption for the camp will be 5000 litres per day and for the exploration and diamond drilling will be 75,000 litres per day. The water intake for the camp will be done by submersible pump with a filtered intake.

Drill cuttings will be collected in a centrifuge and removed, stored in barrells for removal to Municipal Dump at Ranking Inlet. Winter drilling fluids will be pumped to sumps on shore. All land based drilling fluids will be treated in sumps to collect cuttings, allowing the water to drain in to the surrounding landscape. Spill kits will be located at each fuel tank location: camp; diesel fuel, jet fuel tanks, drill diesel tanks.

Waste Treatment & Disposal

Camp sewage and solid waste will be incinerated (Westlund, 120 lbs/hour), scrap metal, waste oil/hazardous waste and non-combustible waste will be taken to Rankin Inlet municipal dump.

ᑎᓯᒻᒥᕆ 23, 1998

ᐅᑯᓇᖓ: ᑐᓂᐅᖅᑕᐅᔪᓐᓇᐊᖅᑐᑦ ᓱᖁᑦᑐᒃᑯᑦ ᑐᓂᐅᖅᑕᐅᓚᖓᔪᑦ

ᐱᔾᔪᑎᖓ: NIRB: 98EN124 (ᓄᑖᖅ) NIRB: 98E07N110 (ᐱᑐᖃᖅ)
ᐱᓕᕆᐊᕆᐊᒪᒃᓴᖅ: ᓴᕕᕿᔭᒃᓴᖅᓯᐅᕈᒪᓂᕐᒧᑦ - Meliadine Lake
ᐱᓕᕆᐊᖃᕈᒪᔪᖅ: WMC International Limited
ᓄᓇᖓᑦ ᐊᕕᒃᑐᖅᓯᒪᓂᐊᓂ: ᑭᕙᓪᓕᕐᒥ (63° 01' 30"N, 92° 10' 20"W)

ᑕᑯᓪᓗᒍ ᑕᒫᑦ ᐱᓕᕆᐊᕆᔭᐅᕙᒪᕙᖅ :

WMC International - ᑯᑦ ᓄᑖᒥᒃ ᓚᐃᓴᑖᕈᒪᕙᑦ ᓚᐃᓴᓇᕙᔭᖓᑦ ᑭᓪᓕᓕᓯᒪᓕᕐᒪᑦ ᑐᒃᓯᖅᑐᒃᑲᓂᕈᒪᕙᑦ ᓄᓇᕗᒥ ᐃᒪᓕᓇᐹᒃᑯᓐᓂᒃ ᓴᕕᕿᔭᒃᓴᖅᓯᐅᕈᑎᒥᒃ ᓗᓂᔅᕙᒃ ᐊᑐᕈᒪᔭᖓᑦ ᐃᒪᖅ ᐅᔭᖅᓂᓪᓗ ᓯᑎᓂᖅᐹᓂᒃ ᐃᑰᑕᕈᒪᓪᓗᑎᒃ ᐃᓄᐃᑦ ᓄᓇᖁᑎᖏᓐᓂ Meliadine Lake - ᓴᓂᐊᓂ ᖃᖏᖅᓕᓂᐅᑉ ᖃᓂᒋᔭᓂ.

ᓴᕕᕿᔭᒃᓴᖅᓯᐅᕐᓂᕐᒧᑦ ᐊᒻᒪᓗ ᐅᔭᖅᓂᓪᓗ ᓯᑎᓂᖅᐹᖅᓯᐅᕐᓂᕐᓗ ᐊᓯᔾᔨᖅᑎᑦᑐᑦ ᑭᓯᐊᓂ ᓴᓇᔾᔨᖏᑦ ᐊᒥᓲᓂᖅᓴᐅᓂᐊᖅᑐᑦ ᐊᕙᑏᒃ ᒪᕐᕉᒃ ᖁᓕᓪᓗᓚᓕᖅᑐᑦ. (ᐱᕝᕕᖓᑦ ᑐᐊᕙᑕᓕᕐᒦᑦᑐᖅ Meliadine Lake - ᓂᒋᐊᓂ. ᓇᕕᕿᔭᒃᓴᖅᓯᐅᕝᕕᐅᓂᐊᖅᑐᖅ ᐃᑰᑦᕕᐅᓂᐊᖅᑐᓗ ᓂᕆᐊᖅᑕᐅᓯᒪᔪᖅ ᓄᓇᖑᐊᖅᑎᑐᑦ ᓄᓇ ᕿᒥᕐᕈᔭᐅᓂᑯᓗᓂ ᓱᑯᑦᓯᕐᓂᖓᓄᓪᓗ ᓴᕕᕿᔭᒃᓴᖅᓯᐅᕝᕕᐅᓂᐊᖅᑐᑦ ᖃᓂᒋᔭᖃᕐᓂᖓᓄᓪᓗ ᑭᕙᓪᓕᖅ ᐃᓄᐃᑦ ᑲᑐᔾᔨᖃᑎᒌᖏᑦ ᐅᖃᖃᑎᒋᕙᐅᖄᓯᑎᒃ ᓂᕆᐊᖅᑕᐅᕙᕙᖅ ᓴᕕᕿᔭᒃᓴᖅᓯᐅᕝᕕᐅᓛᖅᑐᖅ ᐊᒻᒪᓗ ᐃᑰᑦᕕᐅᓛᖅᑐᓗ.

ᐃᒥᖅᑕᖅᑕᓛᖅᑐᑦ Meliadine Lake - ᒥᑦ ᐊᒻᒪᓗ ᑕᓯᐅᔭᕈᓗᖅᑕᓪᓗ ᓄᓇᐃᓐᓇᖏ ᐃᑰᑕᓕᕈᑎᒃ. ᑐᐱᖅᐸᒃᕕᖓᓐᓇ 5000 ᓕᑖᓂᒃ ᐅᓗᖅ ᑕᒫᑦ ᐃᒥᖅᑕᖅᑕᐅᖃᑦᑕᓛᖅᑐᑦ ᐊᒻᒪᓗ 75,000 ᓕᑖᓂᒃ ᓕᑖᓂᒃ ᐃᒥᖅᑕᖃᑦᑕᓛᖅᑐᑦ ᐅᓪᓗ ᑕᒫᑦ ᓴᕕᕿᔭᒃᓴᖅᓯᐅᓕᕈᑎᒃ ᐊᒻᒪᓗ ᐃᑰᑕᓕᕈᑎᓪᓗ ᐊᑐᖅᑕᓗᒃᓴᐅᕙᓂᒃ. ᑐᐱᖅᐸᒃᕕᖓᓄᑦ ᐃᒥᖅᑕᐅᑕᐅᓕᖅᑯᒥᒃ ᒥᓪᓗᐊᕈᑎᒃᑯᑦ ᐳᑐᓛᓕᖅᒧᑦ ᐃᒥᖅᑕᖅᑕᐅᖃᑦᑕᓛᖅᑐᑦ.

ᐃᑯᑕᓚᕕᓃᑦ ᑲᑎᑕᐅᖃᑦᑕᓛᖅᑐᑦ ᑲᐃᕙᑦᑐᓗᐊᖅᑲᖅᑕᐅᖃᑦᑕᑦᑐᑎᒃ ᓴᕕᕿᔭᒃᓴᐃᑦ ᐊᒻᒪᓗ ᐃᒪᖅ ᐊᑐᖅᑕᕕᓂᖅ ᐹᔭᖅᑕᐅᕙᓪᓕᐊᖃᑦᑕᓛᕐᒪᑕ ᑕᓪᕙᖓᑦ ᑲᐃᕙᑦᑐᒥᑦ ᐊᒻᒪᓗ ᖃᑕᐅᔭᓄᐊᖅᑲᖅᑕᐅᖃᑦᑕᓛᖅᑐᑦ ᐊᑐᖅᑕᐅᕙᓇᐃᓕᕙᑦ ᖃᖏᖅᓕᓂᐅᑉ ᐊᒃᑕᖕᕕᐊᓄᐊᖅᑲᖅᑕᐅᖃᑦᑕᕐᓛᖅᑐᑦ. ᐳᑭᐅᒃᑯᑦ ᐃᑰᑕᕈᑎᓄᑦ ᐃᓕᓯᐅᔾᔭᕕᓃᑦ ᒥᓪᓗᐊᕈᒧᑦ ᐃᑎᖅᓴᓗᐊᖅᑲᖅᑕᐅᖃᑦᑕᓛᖅᑐᑦ ᓯᓪᔭᒥ. ᓄᓇᒥ ᐃᑰᑕᕈᑎᓄᑦ ᐃᓚᔭᐅᕙᕕᓃᑦ ᓴᓗᒻᒪᖅᓴᕈᑎᓄᑦ ᓴᓗᒻᒪᖅᓴᖅᑕᐅᖃᑦᑕᓛᖅᑐᑦ ᐃᑯᑕᓚᕕᓃᓪᓗ ᑲᑎᑕᐅᖃᑦᑕᓚᓇᓪᓗᑎᒃ ᐃᒪᕐᓗ ᓴᓗᒪᐃᑦᑐᐃᔭᖅᑕᐅᔪᓐᓇᕐᖁᑎᒃ ᐅᐊᓴᕈᑎᕕᓂᔭᖅᑕᐅᔪᓐᓇᕈᑎᒃ ᒪᓂᕐᒧᑦ ᑯᕕᔭᐅᖃᑦᑕᓛᖅᑐᑦ. ᐳᖅᓯᐊᓗᖅᒥᑦ ᑯᕕᕙᖅᑕᕐᓂᖅᐸᑦ ᒪᓴᒃᑎᕈᑎᓂᒃ ᐊᑐᐃᓇᐅᑎᕐᓯᓛᖅᑐᑦ ᐅᖅᓯᐊᓗᒃᑲᐅᑎᒃᕖᑦ ᓴᓂᕐᓯᐊᖏᓐᓂ: ᑐᐱᖅᐸᓄᑦ ᐊᑐᖅᑕᐅᖃᑦᑕᓛᖅᑐᓄᑦ ᐅᖅᓯᒃᑲᐅᑎᒋᑦᑕᓗ ᒪᓴᒃᑎᕈᑎᑕᑲᑲᑦᑕᓇᓪᓗᓂ; ᒪᓂᖕᓴᐃᑎᓄᓪᓗ, ᑎᕐᒥᔮᓄᓪᓗ ᐅᖅᓯᐊᓗᒃᑲᐅᑎᒃᕕᖓᓐᓇ, ᐃᑰᑕᕈᑎᓄᓪᓗ ᐊᐅᓚᐅᑎᓄᑦ ᐅᖅᓯᐊᓗᒃᑲᐅᑎᒃᕕᒋᓐᓄᑦ ᒪᓴᒃᑎᕈᑎᑲᑲᑦᑕᓇᓪᓗᑎᒃ.

ᐊᑐᖅᑕᐅᔫᒍᓐᓃᖅᑐᑦ ᓴᓗᒻᒪᖅᓴᖅᑕᐅᓂᖏᓐᓄᑦ ᐊᒻᒪᓗ ᐃᒋᐅᖃᖅᑕᐅᓂᓇᓛᖅᑕᖏᓐᓄᓪᓗ

ᑐᐱᖅᐸᒃᕕᖏᓐᓂ ᖁᖅᑕᐃᑦ ᐃᑯᐊᓚᑕᐅᖃᑦᑕᓛᖅᑐᑦ (Westlund, 120 lbs/ᐃᑲᕐᕋᑕᒫᑦ). ᓴᕕᕿᔭᕕᓃᑦ, ᐅᖅᓯᐊᓗᕕᓃᑦ/ᐊᑦᑕᓇᖅᑐᖅᑕᓖᓪᓗ ᐊᒻᒪᓗ ᖃᓘᖁᓇᖏᑦᑐᓪᓗ ᑲᖏᖅᓕᓂᐅᑉ ᐊᒃᑕᖕᕕᐊᓄᐊᖅᑲᖅᑕᐅᖃᑦᑕᓛᖅᑐᑦ.

6. Description of the Environment

Description of Biophysical Environment

Wolves and foxes den along eskers in area
Caribou are occasionally seen throughout area

Baseline study work is being conducted by proponent

Description of Socio-Economic and Cultural Environment

This area contains several base camps from which winter caribou hunts are organized. Some trapping is also done in this area and wolves are hunted as encountered. Many lakes are fished in spring and fall

7. NIRB's Consultation Process

Date application referred for comments: December 23, 1998 (yyyy-mm-dd)

Deadline for comments: January 26, 1999 (yyyy-mm-dd)

Distribution List:	Contact Person:	Date comments received:
NUNAVUT:		
✓ NTI		
QIA		
✓ Kivalliq I.A.		
Kitikmeot I.A.		
✓ NPC		
✓ NWB		
✓ NWMB	Rebecca Mike	Jan 14, 1999
RWO		
Inuit Heritage Trust		
✓ Community(s) Rankin / Chesterfield / Whalecove		
✓ Hamlet		
✓ HTO	Ch Inlet - MaryAnn Issaluk	Jan 26/99
Other?		
FEDERAL:		
✓ DIAND	Paul Smith	Jan 12/99.
✓ DFO	Margaret Keat	Jan 21/99
✓ DOE	Carey Ogilvie / Anne Wilson	Jan. 23/99 / Jan 27/99
Heritage Can.		
Natural Resources		
Other? (eg. Health DOT, DND)		
GNWT:		
✓ DRWED		
✓ Transport		
✓ MACA		
✓ PWNHC	Charles Arnold	Jan 18, 1999.
Other? (eg. Health, Soc.Serv., ECE)		
TRANSBOUNDARY PARTIES		
BQCMB		
OTHER PARTIES		

Identification of Project Activities and Environmental Effects

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

Project Activities

(√ check all the items appropriate to this project)

- ✓ access road
  - ✓ winter
  - __ construction
  - __ abandonment/removal
  - __ modification e.g., widening
- ✓ automobile, aircraft or vessel movement
- __ blasting
- ✓ burning
- ✓ burying
- __ channelling
- __ construction
  - __ building
  - __ shed/warehouse
  - __ landing strip
- __ cut and fill
- __ removal of vegetation
- ✓ dams and impoundments sumps
  - ✓ 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 or grey water
  - ✓ disposal of solid waste
- ✓ geoscientific sampling
  - __ trenching
  - ✓ diamond drill
  - __ borehole core sampling
  - __ bulk soil sampling
- __ quarry
- __ hydrological testing
- __ river/stream/lake crossing/bridging
- __ site restoration
  - __ fertilization
  - __ grubbing
  - __ planting/seeding
  - __ scarification
  - __ spraying
  - __ recontouring
- __ soil testing
- __ topsoil, overburden or soil
  - __ fill
  - __ disposal
  - __ removal
  - __ storage
- __ tunnelling/underground
- ✓ other, explain camp

✓ possibility for accidents or malfunctions. Describe.
possible fuelspills.

✓ effects of environment on project (e.g., flooding).
Describe. winds.

Project Effects

(√ check all the items appropriate to this project)

Directly-related Socio-Economic & Cultural Effects:

1. ✓ impact to hunting / trapping / fishing
2. __ impact on: __ women
   __ men
   __ children
   __ elders
3. ✓ impact to traditional use or traditional use area
4. __ impact to outfitters
5. __ impact on recreational use
6. __ impact on family structure
7. __ impact to community health
8. __ change in community economics
9. __ change in community housing or infrastructure
10. __ impact to industry
11. __ change in regional transportation
12. ✓ impact to archaeological or cultural landmarks
13. ✓ impact on beauty of the landscape
14. __ other, explain_____

Biophysical Environment Effects

15. __ deposit into surface or ground water
16. __ deposit to marine environment
17. __ change in surface or ground water flow
18. __ change in water temperature
19. __ change in drainage pattern
20. __ change in air quality
21. __ change in air flow
22. __ micro-climate change
23. __ ice fog
24. ✓ change in ambient noise level
25. ✓ deposit onto ground surface
26. __ change in slope stability
27. __ change in soil structure
28. __ alteration of permafrost regime
29. ✓ destabilization/erosion
30. ✓ soil compaction
31. __ change in access to renewable resources
32. __ depletion of non-renewable resource
33. __ removal of rare/endangered plant species
34. __ introduction of species
35. __ toxin/heavy metal accumulation
36. __ removal of rare/endangered wildlife species
37. __ change in wildlife health
38. ✓ impact to large mammals
39. __ impact to small mammals
40. ✓ impact to fish
41. ✓ impact to birds
42. __ impact to other wildlife
43. __ impact in a calving, nesting, staging or spawning area
44. __ removal of wildlife buffer zone
45. __ change in wildlife habitat/ecosystem
46. __ other, explain _____

Describe biophysical and socio-economic and cultural effects identified from check-list.

Environmental Effect	Describe
#1, #3	Exploration site is close to the community of Rankin Inlet near camps and local fishing, trapping + hunting areas
#12	See PWNHC comments.
#13	camp and drilling activities temporary visual disturbance.
#24.	Noise from helicopters and drilling activities may cause temporary disturbance to wildlife and humans using the area proponent tries to avoid direct overflights over camps.
#25	grey water is being discharged onto the ground surface.
#29, #30	wooden walkways need to be placed prior to spring thaw to avoid erosion of ground between buildings at camp.
#38, #40, #41	Wildlife may avoid area due to noise of activity occurring drill cuttings and waste water if accidently deposited into water may be harmful to fish.

9. Cumulative Effects: Identification of Other Resources Used in the Area. Identify past, current and future (pending applications) physical works and activities in the area (for the proponent, other proponents and nearby communities) and their potential adverse environmental effects.

Other Resource Uses
(√ check all the items appropriate to this project)

- ✓ harvesting
  - marine mammals
  - ✓ land mammals
  - ✓ fur bearers
  - birds
  - shellfish
  - plants
  - berries
  - ✓ fish
- ✓ mining
  - ✓ exploration
  - open pits
  - underground
  - off-shore
- mineral processing
- industry _____ (type)
- ✓ quarries
  - carving stone
  - aggregate
- transportation/communications
  - airport / landing strip
  - ✓ roads/access routes winter
  - shipping
  - channels/canal
  - telephone lines, satellite dishes, cables
  - beacons
- waste disposal (solid, liquid or gas?)
- energy project
  - hydro
  - pipeline
  - transmission line
- other water licenses, permits, leases
- ✓ lands
  - ✓ Inuit owned
    - -surface rights
    - -sub-surface rights
  - ✓ Crown
  - ✓ Commissioner's
  - Marine Areas
- other private lands held under tenure
- ✓ heritage sites or archaeological sites
- ✓ recreation (eg. cabins, tent frames)
- ✓ tourism
- municipal (construction)
  - commercial
  - built structures
  - infrastructure
- agriculture
- forestry
- other, explain _____

Effects from Other Resource Uses
(√ check all the items appropriate to the scope of this project)

Directly-related Socio-Economic & Cultural Effects:

1. __ impact to hunting / trapping / fishing
2. __ impact on: __ women
   __ men
   __ children
   __ elders
3. __ impact to traditional use or traditional use area
4. __ impact to outfitters
5. __ impact on recreational use
6. __ impact on family structure
7. __ impact to community health
8. __ change in community economics
9. __ change in community housing or infrastructure
10. __ impact to industry
11. __ change in regional transportation
12. __ impact to archaeological or cultural landmarks
13. __ impact on beauty of the landscape
14. __ other, explain _____

Biophysical Environment Effects

15. __ deposit into surface or ground water
16. __ deposit to marine environment
17. __ change in surface or ground water flow
18. __ change in water temperature
19. __ change in drainage pattern
20. __ change in air quality
21. __ change in air flow
22. __ micro-climate change
23. __ ice fog
24. __ change in ambient noise level
25. __ deposit onto ground surface
26. __ change in slope stability
27. __ change in soil structure
28. __ alteration of permafrost regime
29. __ destabilization/erosion
30. __ soil compaction
31. __ change in access to renewable resources
32. __ depletion of non-renewable resource
33. __ removal of rare/endangered plant species
34. __ introduction of species
35. __ toxin/heavy metal accumulation
36. __ removal of rare/endangered wildlife species
37. __ change in wildlife health
38. __ impact to large mammals
39. __ impact to small mammals
40. __ impact to fish
41. __ impact to birds
42. __ impact to other wildlife
43. __ impact in a calving, nesting, staging or spawning area
44. __ removal of wildlife buffer zone
45. __ change in wildlife habitat/ecosystem
46. __ other _____

10. Cumulative Environmental Effects

Based on a comparison of effects identified in #8 and #9.

Matching Number(s)	Description of Cumulative Environmental Effects

NO Will the project make large demands on non-renewable energy sources?

___ Will the project encourage further developments within the current project or other developments (other similar projects, energy development, generation, petroleum development and extraction, the building of additional roads)? possibly

NO Will the project encourage a "boom-bust" economy over an economy of permanence?

NO Will the project encourage more wildlife harvesting on account of better access for hunters and fishers?

___ Will the project have an effect on the water quality of the watershed? possibly

NO Will the project have a significant effect on existing land uses?

11. Mitigation Measures

For each environmental effect identified in #8, #9 and #10, describe the required mitigation measures.

Number(s) (as identified in #8, #9 & #10)	Description of Mitigation Measures
	See Screening Decision Report

12. Significance

After taking into account the mitigation measures identified in #11, are any of the residual, adverse environmental effects significant?

___ Yes ✓ No

If yes, identify which one(s) and proceed to #13; if no proceed to # 14.

Number(s) ____ ____

____ ____

____ ____

____ ____

13. Likelihood of Occurrence

Of the significant, residual, adverse environmental effects identified in #12, are any likely to occur?

___ Yes ✓ No

Number(s) ____ ____

____ ____

14. Information Sources

What sources of information were used in the screening process?

- ✓ local knowledge
- ___ traditional ecological knowledge
- ✓ land use plans (and draft land use plans)
- ✓ authorizing agencies' data
- ✓ departmental or agency opinions
- ✓ maps
- ___ photos
- ✓ reports (scientific, economic, social, or anthropological, archival or historical information)
- ___ Nunavut Environmental Database (NED)
- ✓ personal communications
- ___ Project Registry (NPC)
- ✓ previous similar projects
- ___ service organizations
- ___ media monitoring
- ___ experts
- ✓ other field site visit

For information sources identified above, provide contact person and/or information location (for future follow-up): _____

15. Staff Recommendations

Staff Recommendations: (include rationale)

Any significant environmental effects caused by the project proposal should be mitigable with known technology best practice techniques. and the terms and conditions contained in the screening decision report

Prepared By: JAIDA EDWARDS (Screener) Date: Feb 01/99 (yyyy-mm-dd)

16. NIRB'S Principles

___ The project has significant adverse effects on the ecosystem, wildlife habitat or Inuit harvesting activities.

___ The project may have significant adverse socio-economic effects on northerners.

___ The project will cause significant public concern.

___ The project involves technological innovations for which the effects are unknown.

_✓_ The project-**does not** have significant effects or concerns.

17. Indication to the Minister (12.4.4)

N.B. Transfer this information to Box 1: "EA Indication" and "Date of Indication".

_✓_ a) the proposal may be processed without a review under Part 5 or 6; NIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in Section 12.2.5;

___ b) the proposal requires review under Part 5 or 6; NIRB shall identify particular issues or concerns which should be considered in such a review;

___ c) the proposal is insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or

___ d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

18. Terms and Conditions

If the determination is 12.4.4 a), NIRB's terms and conditions include those listed in the Screening Decision Report.

Specific Terms and Conditions to note include:

19. **Authorization**

Approved By: _____ Date: 99-02-05
(NIRB Designated Manager) (yy/mm/dd)

20. **Follow-up / Monitoring**

Minister's Determination

___ Minister agreed with NIRB's indication.
Action? _____

___ Minister varied NIRB's indication.
Action? _____

___ Minister rejected NIRB's indication
Action? _____

If applicable,

___ Is a follow-up/monitoring program required? If yes, give details.

___ Has screening report information been added to NIRB's GIS/Calyx system?

Northwest Territories Education, Culture and Employment

201 23

January 8, 1999

Jaida Edwards
Environmental Assessment Screener
Nunavut Impact Review Board
Box 2379
Cambridge Bay NT X0E 0C0

Fax: 867-983-2594
Due date: January 26, 1999

Re: NIRB 98EN124 (new file) 98E07N110 (old file); Mineral exploration and diamond drilling at Meliadine Lake (WMC International Limited)

Dear Ms. Edwards:

Pursuant to A.s. 33.5.12 of the Nunavut Land Claim Agreement, the Prince of Wales Northern Heritage Centre gives consent for approval of the above-cited land use application.

An archaeological impact assessment and mitigation has been carried out by Elisa Hart as documented in "Report of the Meliadine West Gold Project Archaeological Survey and Assessment."

Under A.s. 33.5.13, the attached conditions specify plans and methods of site protection and restoration to be followed by the permittee if an archaeological site is encountered or disturbed in the course of the land use activity.

Regards,

Charles D. Arnold, Director
Culture and Heritage Division

Prince of Wales Northern Heritage Centre

ARCHAEOLOGICAL RESOURCES: TERMS AND CONDITIONS
BACKGROUND

I. The archaeological record of the Inuit of the Nunavut Settlement Area is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical, and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence which shall be expressed in terms of special rights and responsibilities.

The archaeological record of the Nunavut Settlement Area is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary.

In recognition of the cultural, spiritual and religious importance of certain areas in the Nunavut Settlement Area to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claim Agreement.

II. "Archaeological site" means a site or work within the Nunavut Settlement Area of archaeological, ethnographical or historical importance, interest or significance or a place where an archaeological specimen is found, and includes explorers' cairns. "Archaeological specimen" means an object or specimen found in an archaeological site of archaeological, ethnological or historical importance, interest or significance and includes explorers' documents.

III. Any new Terms and Conditions raising issues found in ss. 10 and 16 of the Territorial Land Use Regulations should duplicate statutory sections, or be stricter, but not more lenient in terms of protection of archaeological resources.

IV.
1. The permittee shall not operate any vehicle over a known or suspected archaeological site.
2. The permittee shall not remove, disturb or displace any archaeological specimen or site.
3. The permittee shall contact the Arctic Archaeologist at the Prince of Wales Northern Heritage Centre (867-873-7551) and DIAND official should an archaeological site or specimen be encountered or disturbed by any land use activity.
4. The permittee shall immediately cease any activity which disturbs an archaeological or historical site, encountered during the course of a land use operation, until permitted to proceed with the authorization of the Prince of Wales Northern Heritage Centre (PWNHC).
5. The permittee shall follow the direction of the Prince of Wales Northern Heritage Centre and DIAND in restoring disturbed archaeological sites to an acceptable condition, and according to the respective jurisdictions and authorities of the PWNHC (Article 33, Nunavut Land Claim Agreement) and DIAND Land Administration Division (Territorial Land Use Regulations).
6. The permittee shall provide information to the Prince of Wales Northern Heritage Centre about each archaeological site or specimen encountered by any land use activity, by completing the attached form.
7. The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and specimens.

ARCHAEOLOGICAL SITE RECORD

FIELD NUMBER:

SITE NAME:

PROJECT:

DESCRIBE LOCATION OF SITE:

TERRITORY: Northwest Territories
DISTRICT:
MAP REFERENCE:
JURISDICTION:
UTM:
LATITUDE:
LONGITUDE
ELEVATION: SIZE:

CONDITION:

SITE TYPE CLASS:

- ❑ Prehistoric
- ❑ Indigenous historic
- ❑ Historic
- ❑ Natural
- ❑ Undetermined

SITE FEATURES:

CULTURE:

REPORTER'S NAME AND ADDRESS:

YEAR OBSERVED:

REMARKS/SKETCH/PHOTOGRAPHS:

[Please attach a copy of the NTS map (1:250,000) with the site location clearly marked.]

Return to: Prince of Wales Northern Heritage Centre, Yellowknife, Northwest Territories X1A 2L9
Telephone: 867-873-7551; Fax: 867-873-0205

Fisheries and Oceans Canada / Pêches et Océans Canada

Box 358
Iqaluit, NT.
X0A 0H0
Ph: (819) 979-6274
Fax: (819) 979-4539

January 21, 1999

Jaida Edwards
Nunavut Impact Review Board
P.O. Box 2379
Cambridge Bay, NT
X0E 0C0

Re: Mineral Exploration/Diamond Drilling – Meliadine Lake
NIRB: 98EN124

The Department of Fisheries and Oceans, Habitat Management (DFO-HM) has reviewed the information submitted with the above application. DFO's assessment takes into consideration impacts on fish and fish habitat only.

On the basis of the information provided, DFO has determined that the above project has the potential to affect fish or fish habitat pursuant to the Fisheries Act. Under Section 12(3) of the Canadian Environmental Assessment Act, DFO as a federal authority is required to provide specialist information or knowledge to the responsible authority.

DFO has concluded that the potentially adverse environmental effects that may be caused by the proposal are mitigable with known technology, in which case the proposal may proceed with the following conditions:

1. The deposition of deleterious substances into water bodies frequented by fish is prohibited under Section 36 of the Fisheries Act. The proponent shall ensure that any chemicals, fuel or wastes associated with the proposed project do not enter any such waters. DFO recommends that all sumps, wastes and fuel caches be located a minimum of thirty (30) metres from the normal high water mark of any such water body.

2. The harmful alteration, disruption or destruction of fish habitat is prohibited under the Fisheries Act. No construction or disturbance of any stream/lake bed or banks of any definable watercourse is permitted unless authorized by DFO.

3. No drilling is to be done within thirty (30) metres of the high water mark of any water body or watercourse.

4. If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.

5. Drilling wastes shall not be allowed to enter any water body.

6. Disposal of chemical additives or drilling muds shall be in a sump such that they do not enter any water body.

7. DFO recommends that mechanized clearing not be permitted within thirty (30) metres of the normal high water mark of any stream or lake.

8. The deposition of slash, debris or sediment into any water body is prohibited. These materials shall be disposed of above the high water mark in such a fashion that they do not enter the water.

9. Winter lake/stream crossings shall be located to minimize approach grades. Cuttings or filling of crossing approaches shall not be permitted unless approved by DFO.

10. Winter lake/stream crossings shall be constructed entirely of ice and snow materials or as authorized by DFO. All winter crossings shall be removed prior to spring breakup.

11. The permittee shall not erect camps or store material on the surface ice of streams or lakes.

12. Fuel and lubricants shall be kept in a sump located a minimum of thirty (30) metres from the normal high water mark and such that they do not enter any water body.

13. All spills of oil, fuel, or other deleterious materials shall be reported immediately to the 24-Hour Spill Line at (867) 920-8130.

14. DFO shall be notified of any changes in plans or operation conditions associated with this land use activity which may adversely affect fish or fish habitat.

15. The proponent shall follow the Interim Guidelines for On-Ice Drilling in the NWT for all On-Ice Drill Operations. They are as follows:

Interim Guidelines for On-Ice Drilling in the NWT

1. All drill cuttings shall be removed from the ice surface.

2. The release of total suspended solids tot he receiving environment should be in compliance with the Guidelines for Total Suspended Solids

contained in the Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines Chapter 3 - Freshwater Aquatic Life.

3. In addition, for drilling in kimberlite deposits, toxicity testing will be done on the effluent from the drilling operation.

Please note that none of the foregoing should be taken as authorization of the undertaking in accordance with the Fisheries Act or any other applicable legislation.

Failure to comply with any of the above conditions may result in the harmful alteration, disruption, or destruction of fish habitat, and/or the deposit of deleterious substances into fish bearing waters in contravention of the Fisheries Act.

If you have any questions, concerns or comments with respect to the above, please contact me at (867) 979-8007.

Regards,

M. Keast

Margaret Keast
Area Habitat Management Biologist
Nunavut Area

cc. Area Manager, G. Weber
cc. Chief Conservation & Protection Officer, W. Fillatre

Environnement Canada Environment Canada
ENVIRONMENTAL PROTECTION BRANCH
5204-50th AVENUE, SUITE 301
YELLOWKNIFE, NT. X1A 1E2
(867) 669-4737 (Telephone)
(867) 873-8185 (Fax)

Post-it® Fax Note 7671	Date	# of pages ▶ 3
To JAIDA EDWARDS	From CAREY OGILVIE	
Co./Dept. NIRB	Co. ENVIRONMENT CANADA	
Phone #	Phone # (867) 669-4737	
Fax # (867) 983-2574	Fax #	

January 23, 1999

Ms. Jaida Edwards
Environmental Assessment Screener
Nunavut Impact Review Board
P.O. Box 2379
Cambridge Bay, NT. X0E 0C0

Meliadine Lake Area, WMC International Ltd - NIRB 98EN124

I am responding to your letter, dated 23 December 1998, requesting comments on the application by WMC International Limited to renew their water licence for their mineral exploration activities in the Meliadine Lake area. From the project overview, I understand that the exploration and diamond drilling activities will remain unchanged but the camp population will increase to fifty people. Therefore, comments and recommendations in my letter of July 22nd 1998 (attached) would still apply to this project. In addition, given the increase in camp size, the operator should, if they have not already done so, utilize sewage treatment technology for human waste (e.g. biotoilets) and grey water (e.g. engineered sumps) generated at the site.

Please advise the NWT Environmental Protection Branch of Environment Canada of any substantive changes to the proposed project.

Should you have questions, please call me at (867) 669-4737.

Carey Ogilvie
Northern EA Coordinator
Environmental Protection Branch

Environment Canada Environnement Canada

ENVIRONMENTAL PROTECTION BRANCH
5204-50th AVENUE, SUITE 301
YELLOWKNIFE, NT. X1A 1E2
(867) 669-4737 (Telephone)
(867) 873-8185 (Fax)

July 22, 1998

FAXED July 22/98

Ms. Jaida Edwards
Environmental Assessment Screener
Nunavut Impact Review Board
P.O. Box 2379
Cambridge Bay, NT. X0E 0C0

Screening: Meliadine Lake Area, WMC International Ltd - NIRB #98AE01N102

I am responding to your letter, dated 8 July 1998, requesting comments on the applications for a DIAND Land Use Permit, KIA Land Use Permit and Nunavut Water Licence to support an underground mineral exploration program in the Meliadine Lake Area.

The project has the potential to affect water quality and fish. To help ensure compliance with Subsection 36(3) of the *Fisheries Act* (which prohibits the deposit of a deleterious substance of any type in water frequented by fish) and to help minimize impacts to the general water quality of nearby water bodies, the applicant should:

- Locate all sumps and spill basins as well as the camp (no maps were included in the screening package) a minimum of 30 metres from the normal high water mark of any water body or obvious drainage system.
- Locate fuel caches a minimum of 30 metres from the normal high water mark of any water body or drainage system. In addition, fuel caches should ideally be stored in portable, self-contained fuel berms for added protection against soil contamination.
- Ensure the esker island quarry site is stabilized before spring thaw as well as upon final abandonment to ensure there is no sedimentation reaching the Meliadine Lake.
- Ensure there is adequate snow cover before transporting materials and equipment over land to the proposed project site.
- Control and monitor (sample for water quality parameters) drainage from the overburden, waste rock and ore storage pads.

Information in the application (Points 24 and 81) implies that some rock types, including extracted ore, may be of concern in regard to potential acid rock generation - test results from acid base accounting work were not included in the screening package but apparently are available. In addition to the applicant's intent to store these rock types separately, they should be located in a location or on a substrate that facilitates the management of drainage and collection of water samples.

Although the deposit appears promising, the applicant should develop a conceptual abandonment and restoration plan in case the development is delayed or abandoned after the bulk sampling is completed. From a more positive perspective, the applicant should be encouraged to initiate comprehensive baseline studies on water quality and quantity, wildlife and bird habitat, kinetic acid rock drainage potential, local terrain and vegetation, etc. in support of a possible future full-scale mining proposal.

I noted the applicant intends to design (at a higher initial cost) the portal, decline and ventilation and escape raise to support without modification a possible full-scale mining operation at the site. This is a positive action. Similar pre-design features should be included in other components of the bulk sampling project including the fuel cache(s), camp facilities, any road infrastructure and storage pads for the overburden, waste rock and ore.

Please advise the NWT Environmental Protection Branch of Environment Canada of any substantive changes to the proposed project.

Should you have questions, please call me at (867) 669-4737.

Cheers,

Carey Ogilvie
Environmental Assessment Coordinator
Environmental Protection Branch

c. Mr. Stephen Harbicht
Mr. Ed Collins
Ms. Laura Johnston

COMMENT FORM FOR NIRB SCREENINGS

The Nunavut Impact Review Board has a mandate to protect the integrity of the ecosystem for the existing and future residents of Nunavut. In order to assess the environmental and socio-economic impacts of project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Project Title: Mineral Exploration Meliadine Lake
Proponent: WMC International
Location: Meliadine Lake, Kivalliq NIRB#: 98EN124
Comments Due By: January 26, 1999

Indicate your concerns about the project proposal below:

- ☐ no concerns
- ☑ water quality
- ☐ terrain
- ☑ air quality
- ☑ wildlife and their habitat
- ☑ marine mammals and their habitat
- ☑ birds and their habitat
- ☑ fish and their habitat
- ☑ heritage resources in area
- ☐ traditional uses of land
- ☐ Inuit harvesting activities
- ☑ community involvement and consultation
- ☑ local development in the area
- ☐ tourism in the area
- ☑ human health issues
- ☐ Other: ______

Please describe the concerns indicated above:

Please keep us up-to-dates with your progress. and all correspondences be translated to Inuktitut

Do you have any suggestions or recommendations for this application?

Any [illegible] be posted in public areas.

Do you support the project proposal? YES ☑ NO ☐

Any additional comments?

Name of person commenting: Members of [illegible] of [illegible] HTO
Position: [illegible]
Signature: [illegible] Date: [illegible]

FAX

Date 01/26/99

Number of pages including cover sheet

TO: Jaida Edwards
Enviromental Assesment Screener
NIRB
Cambridge Bay, NT

Phone (867)983-2593
Fax Phone (867)983-2574

FROM: MaryAnn Sylvia Issaluk
Aqigiq HTO
Box 94
Chesterfield Inlet, NT
XOC OBO

Phone (867)898-9063
Fax Phone (876)898-9079

CC:

REMARKS: ☐ Urgent ☒ For your review ☐ Reply ASAP ☐ Please Comment

I'm sorry I made a mess on the comment form.
Name of commenting are the director's of Aqigiq HTO /Hamlet representative/KIA representative.
They are in full support of this, but would like to be kept up-to-date with any new information.

tiama,

Environment Canada / Environnement Canada

NWT DIVISION
ENVIRONMENTAL PROTECTION BRANCH
PRAIRIE AND NORTHERN REGION
#301 - 5204 - 50TH AVE
YELLOWKNIFE, NT X1A 1E2
PH, (403) 669-4700

January 26, 1999 1165 036 L005

Jaida Edwards
Nunavut Impact Review Board
Box 2379
Cambridge Bay, NT X0E 0C0

BY FACSIMILE (403) 983-2594

Dear Ms Edwards;

Re: Land Use Application 98EN124 - WMC International Ltd. - Mineral Exploration - Melladine Lake

On behalf of the Environmental Protection Branch (EPB), Environment Canada, I have reviewed the information submitted with the above application.

EPB's contribution to your request for specialist advice is based primarily on the mandated responsibilities for the enforcement of Section 36 of the *Fisheries Act* and the *Canadian Environmental Protection Act* (CEPA). On the basis of the information provided, EPB believes that the above noted project has the potential to affect fish pursuant to the *Fisheries Act*.

Areas of concern with respect to camp waste management are addressed in the application with the use of incineration of camp sewage and solid waste, and removal of other wastes and hazardous materials to the Rankin Inlet municipal dump. The following points pertain mainly to the drilling operations:

1. The applicant shall ensure that any drill cuttings, chemicals, fuel or wastes associated with the proposed project do not enter waters frequented by fish. All sumps, spill basins and fuel caches should be located a minimum of thirty (30) metres from the normal high water mark of any such waterbody.

2. For on-ice drilling, any return water released to the lake must be non-toxic, and not result in an increase in total suspended solids in the immediate receiving waters of the lake above Canadian Council of Ministers for the Environment Guidelines for the Protection of Freshwater Aquatic Life (ie. 10mg/L for lakes with background levels under 100 mg/L, or 10% for those above 100 mg/L).

3. Drilling additives or muds shall not be used in connection with holes drilled through the lake ice unless they are recirculated or contained such that they do not enter the water, or demonstrated to be non-toxic.

4. If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.

5. Drilling wastes from land-based activity shall be disposed of in a sump such that they do not enter any water body.

6. The permittee shall not erect camps or store material on the surface ice of streams or lakes.

Please advise the NWT Environmental Protection Branch of Environment Canada of any substantive changes to the proposed project. I can be reached at (867)669-4735 or by email at anne.wilson@ec.gc.ca with any questions or comments regarding the foregoing.

Yours truly,

A. Wilson

Anne Wilson
Water Pollution Specialist

cc: Steve Harbicht (Head, Assessment & Monitoring, EPB)
Neil Scott (Inspector, EPB)

COMMENT FORM FOR NIRB SCREENINGS

The Nunavut Impact Review Board has a mandate to protect the integrity of the ecosystem for the existing and future residents of Nunavut. In order to assess the environmental and socio-economic impacts of project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Indicate your concerns about the project proposal below:

- ☐ no concerns
- ☑ water quality
- ☐ terrain
- ☐ air quality
- ☐ wildlife and their habitat
- ☐ marine mammals and their habitat
- ☐ birds and their habitat
- ☐ fish and their habitat
- ☐ heritage resources in area
- ☐ traditional uses of land
- ☐ Inuit harvesting activities
- ☐ community involvement and consultation
- ☐ local development in the area
- ☐ tourism in the area
- ☐ human health issues
- ☐ Other: _____

Please describe the concerns indicated above:

Sump for Grey water. Referenced map was not attached. When last on site (June '98), the sump was not visible nor was it being used (it was still buried under snow). Grey water was being discharged along sides of tents - which made the ground around the tents very sloppy (and mucky).

Terrain. Wooden walkways are used to minimize erosion between tents within the camp. However, there was still a substantial amount of snow in and around the camp and as such, no boards had been placed. As a result, there was quite a bit of muck around the camp where the snow held melted and there was traffic within the camp.

Do you support the project proposal? YES ☑ NO ☐

Any additional comments?

Grey water trap/filter as discussed within the Remote Site Protocol should be suggested to the applicant. It may be the case that a number of units would be required as there is no central plumbing system.

COMMENT FORM FOR NIRB SCREENINGS

The Nunavut Impact Review Board has a mandate to protect the integrity of the ecosystem for the existing and future residents of Nunavut. In order to assess the environmental and socio-economic impacts of project proposals, NIRB would like to hear your concerns, comments and suggestions about the following project application:

Indicate your concerns about the project proposal below:

- ☐ no concerns
- ☐ water quality
- ☐ terrain
- ☐ air quality
- ☐ wildlife and their habitat
- ☐ marine mammals and their habitat
- ☐ birds and their habitat
- ☐ fish and their habitat
- ☐ heritage resources in area
- ☐ traditional uses of land
- ☐ Inuit harvesting activities
- ☐ community involvement and consultation
- ☐ local development in the area
- ☐ tourism in the area
- ☐ human health issues
- ☐ Other: _____

Please describe the concerns indicated above:

Do you support the project proposal? YES ☑ NO ☐

Any additional comments?