

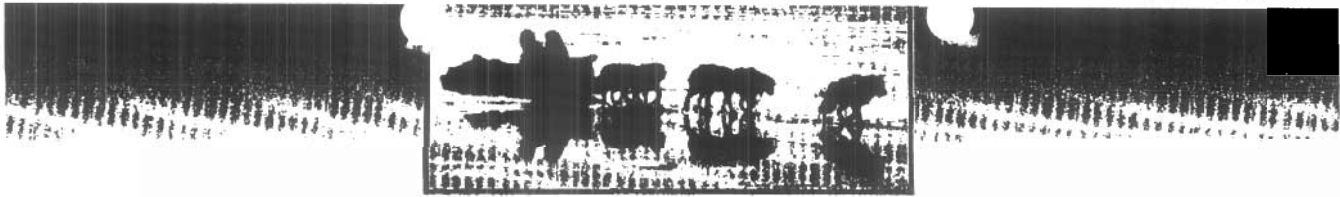


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SCREENING DECISION

Date: February 16, 2001

Mr. Thomas Kudloo
Chairperson, Nunavut Water Board
Gjoa Haven, NT

Dear Mr. Kudloo:

**RE: Screening Decision of the Nunavut Impact Review Board (NIRB) on Application:
NIRB 01WR005 NWB NWB2MEL01--
Renewal of Water Licence for Meliadine – WMC International Limited**

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;

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 and traditional users of area;
- the impact of campsite and equipment on terrain;
- the impact of exploration activities on archaeological sites or cultural landmarks in the area; and
- clean up/restoration of the camp site and drilling locations upon abandonment.

Terms and Conditions:

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

Drill Sites

1. The Licensee shall not conduct any land based drilling within thirty (30) metres of the normal high water mark of a water body.
2. The Licensee shall conduct any the lake-based winter drilling, in accordance with the Interim Guidelines for On-Ice drilling.
3. The Licensee shall ensure that all drill cuttings are removed from ice surfaces.
4. The Licensee 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 Licensee 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 Licensee shall ensure that any drill cuttings and 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 Licensee shall ensure that drilling wastes do not enter any water body. The use of biodegradable, salt free drill additives is encouraged over non-biodegradable types.
8. The Licensee 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 Licensee shall not locate any sump within thirty (30) metres of the normal high water mark of any water body.
10. The Licensee 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 Licensee shall not use mechanized clearing within 30 meters of the normal high water mark of a watercourse in order to maintain a vegetative mat for bank stabilization.
12. The Licensee 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. The occurrence shall be reported to the Nunavut Water Board and Land Use Inspector within 48 hours.

Water

13. The Licensee 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

14. The Licensee 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.
15. The Licensee 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.
16. The Licensee shall construct an impermeable dyke around each stationary fuel container or group of stationary fuel containers where one container has the capacity exceeding 4,000 litres.
17. The Licensee shall take all reasonable precautions to prevent the possibility of migration of spilled petroleum fuel or chemicals over the ground surface.
18. The Licensee shall have one extra fuel storage container on site equal to, or greater than, the size of the largest fuel container.
19. The Licensee shall examine all fuel and chemical storage containers daily for leaks. All leaks should be prepared immediately.
20. The Licensee shall seal all container outlets except the outlet currently in use.
21. The Licensee shall mark all fuel containers with the Licensee's name.
22. The Licensee shall have an approved emergency response and spill contingency plans in place prior to the commencement of the operation.
23. The Licensee shall immediately report all spills of petroleum and hazardous chemicals to the twenty four (24) hour spill report line at (867) 920-8130.

Waste Disposal

24. The Licensee 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.
25. The Licensee shall not locate any sumps or areas designated for waste disposal within thirty (30) metres of the ordinary high water mark of any body of water, and be sufficiently bermed or otherwise contained to ensure that these substances do not enter a waterway unless otherwise authorized.

26. The Licensee shall treat greywater and sewage according to the terms and conditions outlined in the NWB approval.
27. The Licensee shall backfill and recontour all sumps to match the natural environment prior to the expiry date of the license.
28. The Licensee shall incinerate all combustible and food wastes daily
29. The Licensee shall keep all garbage and debris in a covered metal container until disposed of.
30. The Licensee shall ensure that all wastes generated through the course of the operation are backhauled and disposed of in an approved dumpsite.
31. The Licensee shall deposit all scrap metal, discarded machinery and parts, barrels and kegs, at an approved disposal site.

Wildlife

32. The Licensee shall ensure that there is no damage to wildlife habitat in conducting this operation.
33. The Licensee shall not feed wildlife.
34. The Licensee use the latest bear detection and deterrent techniques to minimize man-bear interactions and shall report any Man-Bear Interactions to the nearest Renewable Resource Officer.
35. The Licensee shall not hunt or fish, unless the appropriate permits and licenses are acquired from a GN Renewable Resources Officer.
36. The Licensee shall ensure that the drill sites avoid known environmentally sensitive areas (denning, nesting etc.) by a minimum of 250 metres.
37. The Licensee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
38. The Licensee shall follow the Caribou protection measures attached.
39. The Licensee 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.
40. The Licensee shall ensure that aircraft pilots adhere to recommended flight altitudes of greater than 300 m above ground level as to not disturb wildlife. Raptor nesting sites and concentrations of nesting or molting waterfowl should be avoided by aircraft at all times.
41. The Licensee 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.
42. 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.

Environmental

43. The Licensee shall ensure that the land use area is kept clean and tidy at all times.
44. The Licensee 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.

45. The Licensee shall be required to undertake any corrective measures in the event of any damage to the land or water as a result of the Licensee's operation.
46. The Licensee shall not remove any material from below the ordinary high water mark of any waterbody.
47. The Licensee shall suspend overland travel of equipment or vehicles if rutting occurs.

Structure & Storage Facilities

48. The Licensee shall not erect structures or store material on the surface ice of lakes or streams.
49. The Licensee shall locate all structures and storage facilities on gravel, sand or other durable land.

Archaeological Sites

50. The Licensee shall follow all terms and conditions for the protection and restoration of archaeological resources as outlined by the Department of Culture, Language, Elders and Youths (CLEY) in attached letter.

Attachments

51. The Licensee shall follow the comments and recommendations provide by the Department of Sustainable Development and the letter addressed to the proponent from the Department of Fisheries and Oceans.

Reclamation

52. The Licensee shall remove all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material upon abandonment.
53. The Licensee shall complete all clean-up and restoration of the lands used prior to the expiry date of the permit.
54. The Licensee shall undertake ongoing restoration for any land or improvements which are no longer required for the Licensee's operation on the land.
55. The Licensee shall plug or cap all bore holes and cut off any drill casings that remain above ground to ground level upon abandonment of the operation.

Monitoring

56. The Licensee shall monitor the impacts to wildlife by maintaining a log of wildlife observed (species, number, date, time, location observed) and their behavior (i.e. avoidance, segregation, disturbance/stress, alteration of migration patterns or movements by wildlife).
57. The Licensee shall submit to the NWB and NIRB a summary report of activities undertaken and any abandonment and restoration of the site.

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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. 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 Chesierfield Inlet, Whale Cove and Rankin Inlet should be advised of any material changes to plans or operating conditions associated with the project.
4. Any amendment requests deemed by NIRB to be outside the original scope of the project will be considered a new 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 February 16/01 at Whale Cove, NU


Elizabeth Copland, A/Chairperson

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: Rita Becker
(office where project file is located, contact person, number)

Land Status: Inuit Owned ☒ Crown ☒ Commissioner's _____ Marine Areas _____

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

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

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

Present Authorizations (active): _____
(file number)

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

3. Project Location

Kivalliq ☒ Kitikmeot _____ Baffin _____

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

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

Local/Traditional Name: _____

National Topographic Sheet (NTS) Number: 55TJ, N, O Scale: 1:250,000

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

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

Nearest Settlement: Rankin Inlet

Adjacent Settlement/Out-post camps: _____

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

Does the project have Nunavut transboundary implications? Yes _____ No ☒

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 ✓ 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 Inuktitut)

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 No

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

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

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

Executive Summary

The main exploration activity during 2001-2002 on the Meliadine West Project gold exploration program will consist of a diamond drilling program of approximately 30,000 metres. The drilling is planned to commence in the April to early May period. In addition, four mineral claims will have boundary surveys completed which is required to bring these claims to mineral leases. This work will commence in the late May to early June period.

Environmental baseline studies will continue with focus on water, fish and wildlife studies. This work will commence in mid-May.

Continued monitoring and documentation of the rehabilitation of all diamond drilling sites completed by WMC during 1995-2000. This work will commence in mid-June.

A total of up to 55 people will be completing this work program out of the Meliadine Lake camp during the early April to late October period.

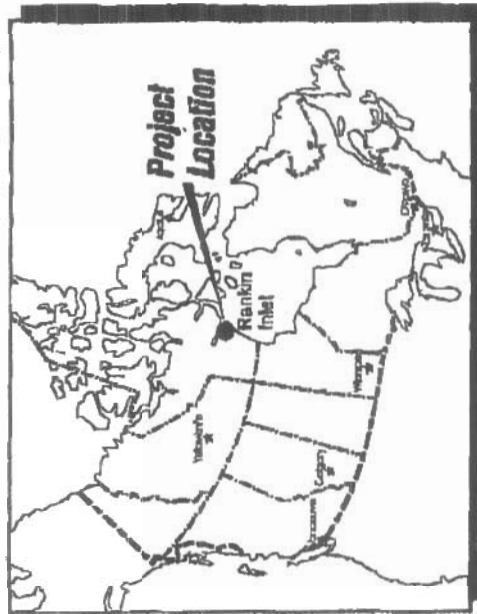
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Location Map, 1998, Status Report



WMC International Limited

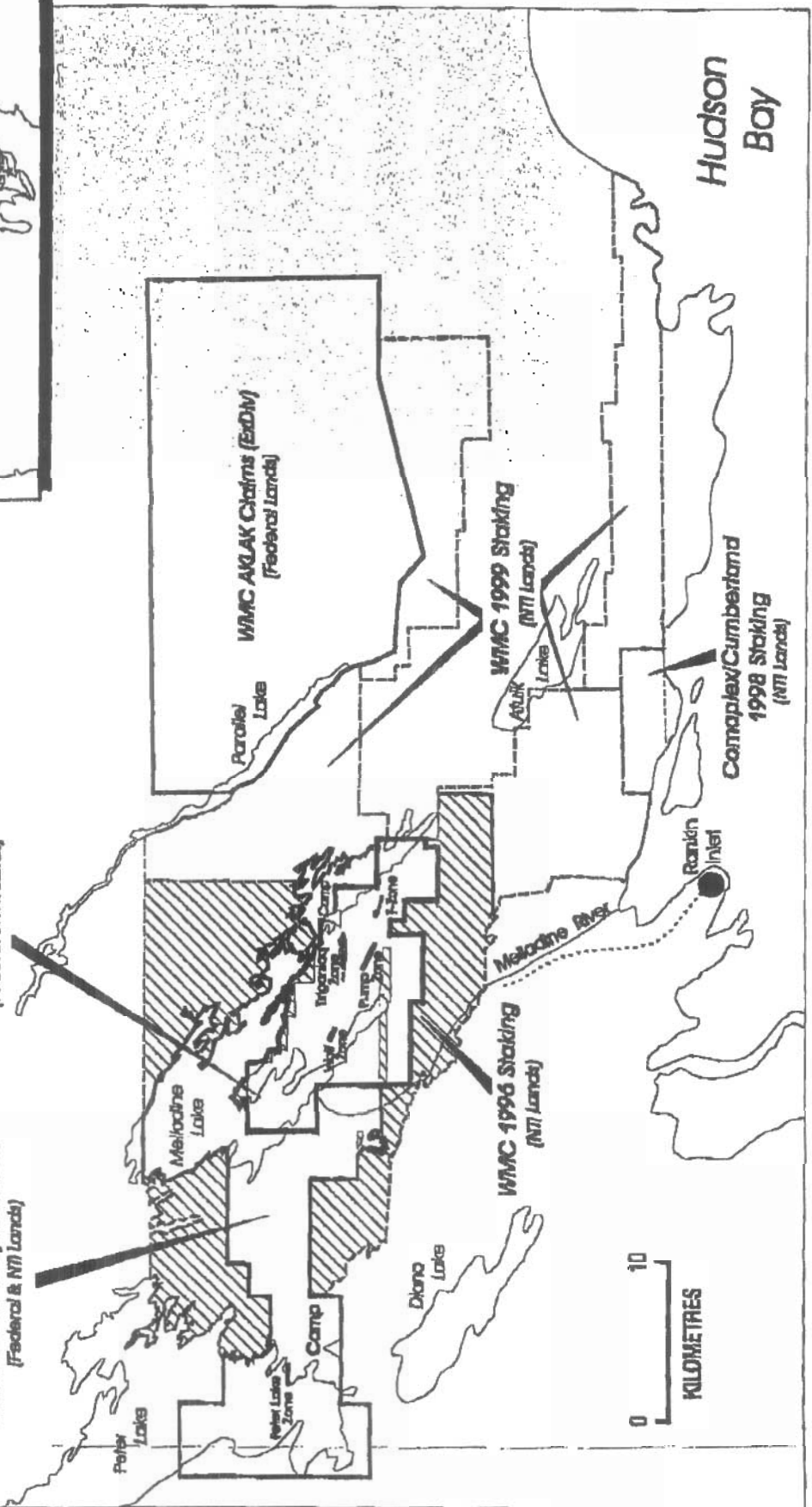
MELIADINE WEST GOLD PROJECT

WMC Claim Groups & Mineralized Zones

Rankin Inlet, Nunavut

Meliadine West Project Area
(Federal & NIT Lands)

WMC ExDiv Project Area
(Federal & NIT Lands)



6. Description of the Environment

Description of Biophysical Environment

Wolves and foxes den along rivers in area. Caribou are occasionally seen throughout the area.

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:

February 1, 2001
(yyy-mm-dd)

Deadline for comments:

February 9, 2001
(yyy-mm-dd)

Distribution List:

Contact Person:

Date comments received

NUNAVUT:

☐ NTI
☐ QIA
☐ Kivalliq I.A.
☐ Kitikmeot I.A.
☒ NPC
☐ NWB
☐ NWMB
☐ RWO
☐ Inuit Heritage Trust
☐ Community(s)
☐ Hamlet
☐ HTO
☐ Other?

Brian AglukarkFeb 6/01**FEDERAL:**

☐ DIAND
☐ DFO
☒ DOE
☐ Heritage Can.
☐ Natural Resources
☐ Other? (eg. Health
 DOT, DND)

Anne WilsonFeb 12/01**GOVERNMENT OF NUNAVUT:**

☐ Sustainable Dev.
☐ CGHT
☐ HSS
☒ CLEY
☐ Other?

Doug StantonFeb 6/01**TRANSBOUNDARY
PARTIES****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

[X] 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
- ☒ burning
- ☐ channelling
- ☐ construction
 - ☐ budding
 - ☐ 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
- ☐ over 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.

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

Project Effects

[X] check all the items appropriate to this project)

Directly-related Socio-Economic & Cultural Effects:

1. ☒ impact on 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 culving, nesting, staging or spawning area
44. ☐ removal of wildlife buffer zone
45. ☐ change in wildlife habitat/ecosystem
46. ☐ other, explain

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(October 1998 version) Nunavut Impact Review Board Screening Form

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
 - ☐ shell fish
 - ☐ 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
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- 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?~~NO~~ Will the project have an effect on the water quality of the watershed?~~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

	<i>See Screening Decision Report.</i>

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 (APG) NRB
- ☒ previous similar projects
- ☐ service organizations
- ☐ media monitoring
- ☐ experts
- ☐ other _____

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

15. Staff Recommendations

Staff Recommendations: (include rationale):

Environmental effects should be mitigated with known technology and best practice techniques and the terms and conditions contained in the screening decision report.

Prepared By: Wadey Joudrey Date: February 12, 2001
Screening yyyyy-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.

Feb-16-01 09:32A

2001-Feb-16 09:16am From-NUNAVUTIMPACT REVIEW BOARD

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1-142 P 004/004 t-3b5

P-01

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 include:

19. Authorization

Approved By: *Elizabeth Inland* Date: *Feb-16/01*
(NIRB Decision Maker) (777 000-00)

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?



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Department of
Culture, Language, Elders & Youth

Pithohilikioni

Ministère du gouvernement
Culture Langues, Aînés et Jeunesse

February 6, 2001

Gladys Joudrey
Environmental Assessment Screener
Nunavut Impact Review Board
Box 2379
Cambridge Bay, NU X0E 0C0

Re: Land Use Application NIRB 01WR005; Renewal of Water Licence: Meliadine Lake(WMC International)

Due Date: February 9, 2001

Dear Ms. Joudrey:

At your request, the Department of Culture and Heritage, Government of Nunavut, has reviewed the above-noted application. Our recommendations follow.

In view of the fact that this is a request for a renewal of the license, and that no changes have been made to the original application (NIRB 00EA034), we recommend approval of the above-cited application, as the proposed activities do not constitute a threat to known archaeological resources.

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.

Sincerely,


Leah Otak, Director
Culture and Heritage
Department of Culture, Language, Elders and Youth

Encl.



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Department of
Culture, Language, Elders & Youth

Pithohilikioni

Ministère du gouvernement
Culture Langues, Aînés et Jeunesse

ARCHAEOLOGICAL RESOURCES: TERMS AND CONDITIONS

BACKGROUND

- I. The archaeological record of the Inuit of Nunavut 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 Nunavut 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 Nunavut 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 Nunavut of archaeological ethnographical or historical importance, interest or significance, or a place where an archaeological specimen is found, and includes explorer's cairns.

"Archaeological specimen" means an object or specimen found in an archaeological site of archaeological ethnographical or historical importance, interest or significance, or a place where an archaeological specimen is found, and includes explorer's 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 Department of Culture, Language, Elders and Youth (867-975-5500) and DIAND officials 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 Department of Culture, Language, Elders and Youth, Government of Nunavut, Iqaluit.
 5. The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological sites to an acceptable condition.
 6. The permittee shall provide information to the Department of Culture, Language, Elders and Youth 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.
8. The permittee shall avoid the known archaeological sites as listed in Attachment #1
9. The permittee shall have an archaeologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth: survey, inventory and documentation of the archaeological and historical resources of the land use area; assessment of potential for damage to archaeological sites; mitigation; marking boundaries of archaeological sites for avoidance; restoration. The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit all procedures subsumed under the above operations.

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:	Renewal of Water Licence for Melladine
Proponent:	WMC International
Location:	Melladine Lake, Kivalliq, NIRB# 01WR005
Comments Due By:	Friday February 9, 2001

Indicate your concerns about the project proposal below:

- | | |
|--|---|
| <input type="checkbox"/> no concerns | <input type="checkbox"/> traditional uses of land |
| <input checked="" type="checkbox"/> water quality | <input type="checkbox"/> Inuit harvesting activities |
| <input type="checkbox"/> terrain | <input type="checkbox"/> community involvement and consultation |
| <input type="checkbox"/> air quality | <input type="checkbox"/> local development in the area |
| <input type="checkbox"/> wildlife and their habitat | <input type="checkbox"/> tourism in the area |
| <input type="checkbox"/> marine mammals and their habitat | <input type="checkbox"/> human health issues |
| <input type="checkbox"/> birds and their habitat | <input type="checkbox"/> Other: _____ |
| <input checked="" type="checkbox"/> fish and their habitat | |
| <input type="checkbox"/> heritage resources in area | |

Please describe the concerns indicated above:

See attached letter of advice

Do you have any suggestions or recommendations for this application?

Do you support the project proposal? YES ☐ NO ☐
Any additional comments?

Name of person commenting: *Jordan Debrout* of
Position: *Biologist* Organisation: *DFO*
Signature: *J. Debrout* Date: *Feb 12, 2001*

Fisheries
and OceansPêches
et OcéansFish Habitat Management
P.O. Box 368
Iqaluit, Nunavut
X0A 0H0

Your file Votre référence

00WR005

Our file Notre référence

February 12th, 2001

Alan Sexton
WMC International Inc.
22 Gurdwara Road
Napcan, Ontario
K2E 8A2**RE: NIRB File # 00WR005, Water Licence Renewal Application, Mineral Exploration,
WMC International, Meliadine Lake Area.**

Dear Mr. Sexton:

This letter is to advise that The Department of Fisheries and Oceans, Fish Habitat Management (DFO-FHM) received your Water Licence Renewal Application for mineral exploration, in the Meliadine Lake area, submitted on your behalf by the Nunavut Impact Review Board. I have reviewed the plans for the proposed work.

Field operations in or near water may result in the harmful alteration, disruption or destruction of fish habitat, which is prohibited under Section 35 of the *Fisheries Act*. In addition to the measures set out in the project proposal, the following mitigation measures, if incorporated into the project, are intended to prevent any potentially harmful impacts to fish and fish habitat:

- ✓ All disturbed areas should be stabilized and re-vegetated as required, upon completion of work, and restored to a pre-disturbed state.
- ✓ If artesian flow is encountered, drill holes should be plugged and permanently sealed upon completion of the project.
- If the drilling requires water in sufficient volume that the source waterbody may be drawn down please submit details (volume required, size of waterbody, etc.) to DFO-FHM for review. DFO-FHM does not recommend the use of streams as a water source.
- ✓ All water intakes should be properly screened to prevent the entrainment of fish. Refer to the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO 1995), available on request.
- Winter lake/stream crossings should be located to minimize approach grades. Cutting or filling of crossing approaches below the normal high water mark will require prior review and approval by DFO-FHM.

Canada

- The use of material other than ice or snow to construct a temporary crossing over any ice-covered watercourse is prohibited by regulations under *Fisheries Act* unless authorized by a Fishery Officer.
- All winter crossings should be removed prior to spring breakup.
- ✓ No material should be left on the ice when there is the potential for that material to enter the water (i.e. spring break-up).

Depositing deleterious substances into fish bearing waters is prohibited as stated under Subsection 36(3) of the *Fisheries Act*. The following are additional measures to mitigate habitat disturbance or loss as well as the deposition of deleterious substances.

- ✓ Sediment and erosion control measures should be implemented prior to, and maintained during the work to prevent entry of sand or sediment into the water.
- All activities, including maintenance procedures and vehicular refuelling, should be controlled to prevent the entry of petroleum products, debris, slash, rubble, or other deleterious substances into the water.
- All wastes, drill cuttings, sewage containments and fuel caches should be located a minimum of thirty (30) metres from the normal high water mark of any water body, and be sufficiently bermed or otherwise contained to ensure that these substances do not enter any water body.
- ✓ Drill cuttings should be disposed of in a sump such that they do not enter any water body. The use of biodegradable, salt free drill additives is encouraged over non-biodegradable types.
- ✓ All spills of oil, fuel, or other deleterious material should be reported immediately to the 24-Hour Spill Line at (867) 920-8130.

If the proposed work is carried out as described in the plans provided to DFO-FIIM and if the additional mitigation measures specified above are implemented, the proposed work will not be considered as contravening Subsection 35(1) of the *Fisheries Act* which reads:

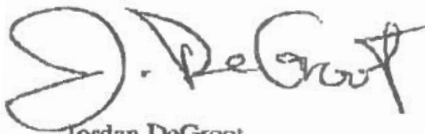
"No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat."

Therefore, an authorization under Subsection 35(2) of the *Fisheries Act* will not be necessary. If a harmful alteration, disruption or destruction of fish habitat and/or the deposition of deleterious substances into fish bearing waters occurs as a result of a change in the plans for the proposed works or failure to implement the additional mitigation measures specified above, prosecution under Subsection 35(1) and/or Subsection 36(3) of the *Fisheries Act* may be initiated.

Please note that this letter of advice does not release the proponent of the responsibility for obtaining any other permits that may be required and will apply for the proposed activities for the period of the Water Licence.

Canada

If you have any questions concerning the mitigation measures or should there be any changes to the proposed work, please contact me at (867) 979-8007 or by fax at (867) 979-8039.



Jordan DeGroot
Area Habitat Biologist
Fish Habitat Management
Department of Fisheries and Oceans- Eastern Arctic Area

c.c. Gladys Joudrey, Nunavut Impact Review Board
Winston Fillard - A/C&P Supervisor/Fishery Officer

Canada

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: <u>Renewal of Water license for Meladine</u>	
Proponent: <u>WMC International.</u>	
Location: <u>Meliadine Lake Kivalliq</u> , NIRB#: <u>01WR005</u>	
Comments Due By: <u>February 9, 2000</u>	
Indicate your concerns about the project proposal below:	
<input type="checkbox"/> no concerns <input type="checkbox"/> water quality ✓ <input type="checkbox"/> terrain <input type="checkbox"/> air quality <input type="checkbox"/> wildlife and their habitat <input type="checkbox"/> marine mammals and their habitat <input type="checkbox"/> birds and their habitat <input type="checkbox"/> fish and their habitat <input type="checkbox"/> heritage resources in area	<input type="checkbox"/> traditional uses of land <input type="checkbox"/> Inuit harvesting activities <input type="checkbox"/> community involvement <input type="checkbox"/> local development in the area <input type="checkbox"/> tourism in the area <input type="checkbox"/> human health issues <input type="checkbox"/>
Other: <u>and consultation</u> ✓	
Please describe the concerns indicated above:	
DSD has reviewed the permit application from WMC Inc. and offers the following comments for your consideration:	
<ul style="list-style-type: none"> Copies of all environmental reports should be sent to the Regional Wildlife Biologist in Arviat and DSD headquarters in Iqaluit. The proponent has indicated that drilling water will be discharged into natural depressions. These depressions should not drain in any active aquatic system. This project is adjacent to a Territorial Park and (although the mapping does not allow identification of the sites in relation to the park) no drill sites, sumps, water access, water disbursement etc. should include lands or water within the park. 	
Do you have any suggestions or recommendations for this application?	
Do you support the project proposal? YES <input type="checkbox"/> NO <input type="checkbox"/>	
Any additional comments?	
Name of person commenting: <u>Dept. of Sustainable Development</u>	
Position: _____ Organisation: _____	
Signature: <u>Chris Nichols</u> Date: <u>March 20, 2000</u>	

DEPARTMENT OF SUSTAINABLE DEVELOPMENT
ENVIRONMENTAL PROTECTION SERVICE
STANDARD RECOMMENDATIONS FOR LAND USE
APPLICATIONS
(AS APPLICABLE)

Spill Contingency Plan

The applicant should have a contingency plan for responding to chemical and petroleum spills which might occur during the proposed activity. The plan should include a list of available spill response equipment and the names of trained personnel who will be on-site and available in the case of a spill.

The proponent is referred to DSD's *Spill Contingency Planning and Reporting Regulations* and *A Guide to the Spill Contingency Planning and Reporting Regulations*.

Fuel Storage

To prevent spreading in the event of a spill, fuel stored in drums should be located, whenever practical, in a natural depression a minimum distance of 90 feet from all streams, preferably in an area of low permeability. All fuel storage containers should be situated in a manner that allows easy access and removal of containers in the event of leaks or spills. Large fuel caches in excess of 20 drums, should be inspected daily.

Chemical Storage

All chemicals should be stored in a safe and chemically-compatible manner a minimum of 90 feet from all bodies of water. The applicant should be required to remove unused chemicals for reuse or disposal to an approved site using methods approved by the Land Use Inspector. Material safety data sheets (MSDS) should be provided for each chemical and be posted in a central location; accessible by all camp personnel. Camp personnel should be conversant in the handling of these chemicals as well as able to deal with any accidents or spills.

Location of Hazardous Materials

Hazardous materials stored on-site should be marked so they will be visible under all conditions, in all seasons. This recommendation is intended to help prevent possible injuries to camp personnel and/or damage to the containers. Unless otherwise specified by the land use inspector or licence-issuing agency,

all hazardous materials should be removed from the site upon completion of the activity. The proponent is referred to DSD's *Environmental Guideline for the General Management of Hazardous Waste*.

Waste Oil/Waste Fuel Disposal

Waste oil and waste fuel should be removed and returned for recycling when the land use activity is completed. Alternative methods of disposal that provide and equivalent level of environmental protection will be considered on a case by case basis.

Used Drums

Used fuel and oil drums should be removed from the site, returned for deposit, or reused.

Contaminated Soils

Soil contaminated by fuel (e.g., soils under an old storage tank) should be treated on site or removed to an approved disposal site and replaced with new soil. The proponent is referred to DSD's *Environmental Guideline for Site Remediation*.

Winter Roads

Existing winter road routes and trails should be used whenever possible to avoid unnecessary land clearing.

Drill Sumps

The sumps should only be used for inert drilling fluids, not any other materials or substances. All effluent from sample washing site including trenches must not be allowed to flow directly into the lake/river. It should be allowed to go to a depression (sump) that does not drain in any active aquatic system. The sumps should be properly closed out.

Garbage Disposal

Garbage should be removed from the camp periodically; alternatively, all combustible wastes can be incinerated on site and non-combustibles collected and removed upon termination of the activity or periodically.

Incineration

For camps of less than 10 people, it is recommended that a draught barrel be employed to burn wastes. A draught barrel is essentially a 45 gallon drum or equivalent, with a hole in the bottom to facilitate air intake, and is closed at

the top with a lid and a chimney for the exhaust. EPS does not consider burning wastes in a draught barrel to be true incineration, however, for small camps, this is an acceptable means to deal with camp wastes. The draught barrel should be operated so that a high temperature burn is maintained at all times. This will promote complete combustion and eliminate pollutant and odor concerns.

For camps of more than 10 people, it is recommended that a forced air incinerator be used to manage wastes. Once again maintaining a high temperature burn to reduce wastes is imperative.

Kitchen wastes, cardboard, paper products, packaging and untreated wood wastes are suitable for burning in a draught barrel and a forced air incinerator. Industrial wastes and non combustible wastes should be removed from the camp and disposed of at a designated landfill or other approved facility. Under no circumstance should hazardous wastes be managed through burning or incineration.

For camps of greater than 50 people, it is recommended that a municipal waste incinerator, which produces emissions that meet CCME air quality guidelines, be used to dispose of camp wastes. The manufacturer will specify operating conditions and types of wastes that can be disposed of in the incinerator in order to meet the specified CCME standards. It is recommended that municipal waste incinerators be operated to meet manufacturer specifications.

The aforementioned comments are a brief thumbnail sketch of what DSD suggests that a proponent should be implementing to mitigate any damage or alterations to the environment during the course of their proposed activities. The proponent is referred to the Government of Nunavut's acts, regulations and environmental guidelines for a details.

Acts, Regulations and Environmental Guidelines

The Environmental Protection Service, Department of Sustainable Development derives its regulatory authority and operational mandate from the Government of Nunavut's *Environmental Protection Act* (EPA). A number of regulations and guidelines have been developed and adopted under the EPA; some, or all of which might prove to be of assistance to a proponent in planning their activities. The guidelines are listed here for the information of the proponent and are available to the public at any DSD office in Nunavut or from DSD's Headquarters office located at:

Department of Sustainable Development
Environmental Protection Service
Government of Nunavut

Box 1340
Iqaluit, NU
X0A 0H0
(867) 979-5119
e-mail: reno@gov.nu.ca or ebaddaloo@gov.nu.ca

Acts and Regulations

{PRIVATE }Environmental Protection Act{tc \ 5 "Environmental Protection Act"}

Environmental Protection Act: Simplified Summary

Environmental Rights Act

{PRIVATE }Spill Planning and Reporting Regulations{tc \ 5 "Spill
ContingencyPlanning and Reporting Regulations"}

{PRIVATE }A Guide to Spill Contingency Planning & Reporting{tc \ 5 "A Guide
to Spill Contingency Planning & Reporting"}

{PRIVATE }Asphalt Paving Industry Emission Regulations{tc \ 5 "Asphalt
Paving Industry Emission Regulations"}

{PRIVATE }Pesticide Act{tc \ 5 "Pesticide Act"}

{PRIVATE }Pesticide Regulations{tc \ 5 "Pesticide Regulations"}

*Used Oil and Waste Fuel Management Regulations (undergoing completion;
proposed for June 2000)*

{PRIVATE }Environmental Guidelines{tc \ 5 "Environmental Guidelines"}

{PRIVATE }Dust Suppression{tc \ 5 "Dust Suppression"}

{PRIVATE }General Management of Hazardous Waste{tc \ 5 "General
Management of Hazardous Waste"}

{PRIVATE }Industrial Projects on Commissioner's Lands{tc \ 5 "Industrial
Projects on Commissioner's Lands"}

{PRIVATE }{tc \ 5 ""}

{PRIVATE }Industrial Waste Discharges{tc \ 5 "Industrial Waste Discharges"}

{PRIVATE }Ozone Depleting Substances{tc \ 5 "Ozone Depleting Substances"}

{PRIVATE }Site Remediation{tc \ 5 "Site Remediation"}

{PRIVATE }Sulphur Dioxide & Suspended Particulates{tc \ 5 "Sulphur Dioxide & Suspended Particulates"}

{PRIVATE }Waste Antifreeze{tc \ 5 "Waste Antifreeze"}

{PRIVATE }Waste Asbestos{tc \ 5 "Waste Asbestos"}

{PRIVATE }Waste Batteries{tc \ 5 "Waste Batteries"}

{PRIVATE }Waste Paint{tc \ 5 "Waste Paint"}

Waste Solvents

Wildlife

1. Bear-People Conflicts

The operation is in an area where bears may be encountered. Proper food handling and garbage disposal procedures should be followed to reduce the likelihood that bears will be attracted to the operation. Careful planning and attention to details of camp design and maintenance will decrease the attraction of bears to camp.

The applicant should follow procedures outlined in the "Safety in Bear Country Manual", and should contact the Regional/Area Biologist or the Renewable Resource Officer indicated below for information and advice on measures which should be taken to minimize the possibility of bear-people conflicts.

DSD Contacts

Manager, Wildlife, Fisheries

- Ian Ellsworth, (867) 857-2828

Renewable Resource Officer,

- nearest community to the land use activity

Biologist, Kivalliq Region, Arviat

- Mitch Campbell, (867) 857-2828

2. Caribou Protection Measures

See attached. [Recommendation of these conditions is not restricted to the Kaminuriak and Beverly herds (i.e., they may be applied to other herds as well).]

3. Peary Caribou (for Banks Island and High Arctic islands; not for Victoria Island)

Peary Caribou are a critically endangered subspecies which must not be harassed in any way. The applicant should be instructed not to harass these caribou, and to contact the Regional Biologist or Caribou Biologist in Pond Inlet (819) 979-8819 to obtain information on procedures required to prevent unintentional harassment.

4. Raptor Nesting Areas

The project area includes known raptor nesting sites and other areas where it is likely that raptors nest. To minimize negative impacts of this operation on raptors, the applicant should be advised to:

(a) take care not to disturb nesting raptors from 15 April to 1 September by staying at least 1.5 km away from them when in transit by aircraft, and to avoid approaching them closely while on foot, and

(b) contact the Regional Biologist in Arviat (857-2828) to identify areas which should be avoided.

The following clause could be included in the covering letter: "If raptors are disturbed during the nesting period, they often abandon the eggs or young. Loud, repeated noises and close approach by humans on foot are particularly harmful."

5. Low Level Flights

Aircraft activity with no specific requirements for low level flying should be restricted to a minimum altitude of 300m above ground level.

6. Storage of Chemicals Containing Salts

Chemicals containing salts, which may attract wildlife to the site, should be stored so that they are inaccessible to wildlife.

CARIBOU PROTECTION MEASURES¹

1. (a) The Permittee shall not, without approval, conduct any activity between May 15 and July 15 within the Kitikmeot region.

(b) A Permittee may, upon approval by the Land Use Inspector (DIAND) or Land Manager (KIA), operate within the Kivalliq region beyond the May 15 deadline set out in 1(a), provided that when caribou cows are approaching the area of operation, the Permittee will implement 1 (c).

(c) During the period of May 15 to July 15, the Permittee will suspend all operations, particularly blasting, overflights by aircraft at any altitude of less than 300 metres above ground level, and the use of snowmobiles and ATV's (all-terrain vehicles) outside the immediate vicinity of the camp, and all personnel will remain quietly in camp or, upon advice from the Land Use Inspector (DIAND) or Land Manager (KIA), the Permittee will remove all personnel from the site who are not required for the maintenance and protection of the camp facilities and equipment.

(d) The Permittee may resume activities prior to July 15 if the caribou cows have ceased to use the area for calving or post-calving.

2. (a) During migration of caribou, the Permittee shall not locate an operation so as to block or cause substantial diversion to migrating caribou.

(b) The Permittee shall cease activities that may interfere with migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.

3. The Permittee shall not construct any camp, cache any fuel or conduct blasting within 10 km, or conduct any diamond drilling operation within 5 km, of

¹ Based on the Caribou Protection Measures (Qamanirjuaq and Beverly Herds) 1988, DIAND

any "Designated Crossing" as outlined on the map annexed to a Land Use Permit.

4. Concentrations of caribou should be avoided by low-level aircraft at all times.

Note: These caribou protection measures are provided as guidance for land users. There are a number of ways that these measures might be used. The following is from a Kitikmeot Inuit Association land use permit and is provided for illustration:

Protection measures would apply to industrial activity, though not necessarily tourism, outfitting or other activities. They could be implemented at least three different ways: as part of a regional land use plan (zoning); through the Nunavut Wildlife Management Board (wildlife regulations); and through terms and conditions attached to land use authorizations (land use regulations). For example, the Kitikmeot Inuit Association attaches caribou protection measures to permits it grants to companies seeking to work on its lands.²

35. The Permittee is given permission to conduct the approved land use operations between May 15 and July 15, provided that when caribou and muskox cows are approaching the area of operation, the Permittee shall cease blasting, over-flights by aircraft at any altitude less than 300 meters above ground level, and the use of snowmobiles and ATV's (all terrain vehicles) outside the immediate vicinity of the camp. Other activities shall also be suspended if caribou approach the immediate vicinity of the specific operation and the monitoring work described in clause indicates that there is stress on the animals.
36. During the presence of caribou and muskox within sight and sound of a camp, all personnel will remain quietly in camp.
37. The Permittee may resume activities prior to July 15 if the caribou and muskox cows have ceased to use the area for calving and post-calving.
38. Raptor nesting sites and concentrations of nesting or moulting waterfowl should be avoided by aircraft at all times.
39. The Permittee shall not locate any operation so as to block or cause substantial diversion to migration of caribou.
40. The Permittee shall cease activities that may interfere with migration or calving, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.
41. The Permittee shall not conduct any operation within 5 km of any "Designated Crossing" as outlined on the map annexed to this Land Use Permit.

² West Kitikmeot Regional Land Use Plan, Draft produced for Informal Public Hearing, Ikalukutiak (Cambridge Bay) NT, 10-11 June 1998, pg. 84.

From KIA Land Use Permit BHP 197C141

COMMENT FORM FOR NIRE 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, NIRE would like to hear your concerns, comments and suggestions about the following project application:

Project Title: Renewal of Water Licence for Milladine
Proponent: WMC International
Location: Milladine Lake, Kivalliq NIRE#: 01W3005
Comments Due By: Friday February 9, 2001

Indicate your concerns about the project proposal below:

- | | |
|---|--|
| <input type="checkbox"/> no concerns | <input type="checkbox"/> traditional uses of land |
| <input type="checkbox"/> water quality | <input type="checkbox"/> Inuit harvesting activities |
| <input type="checkbox"/> terrain | <input type="checkbox"/> community involvement and consultation |
| <input type="checkbox"/> air quality | <input type="checkbox"/> local development in the area |
| <input type="checkbox"/> wildlife and their habitat | <input type="checkbox"/> tourism in the area |
| <input type="checkbox"/> marine mammals and their habitat | <input type="checkbox"/> human health issues |
| <input type="checkbox"/> birds and their habitat | <input checked="" type="checkbox"/> Other: <u>Informal Information</u> |
| <input type="checkbox"/> fish and their habitat | <u>Provide</u> |
| <input type="checkbox"/> heritage resources in area | |

Please describe the concerns indicated above:

When submitting any NIRE Screening, the Municipal Boundary should be shown on attached maps if the project is ~~within~~ in the vicinity of the Municipal Boundary

Do you have any suggestions or recommendations for this application?

Better mapping as described above.
Response time should be increased, 4 days is not enough.

Do you support the project proposal? YES ☒ NO ☐

Any additional comments?

If the project is outside the Municipal Boundary.

Name of person commenting: Robert C. [unclear] of Rankin Inlet
Position: Community Manager Organisation: CG&T
Signature: [Signature] Date: Feb 13/01

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Herbert Impact Review Board
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Environment
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Feb. 12, 2001

Our File: 4703 001 001

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**Re: WMC International Renewal Application - NIRB File 01WR005; Water Licence
NWB2MEL01 - Meliadine Lake Project**

I have reviewed the above application on behalf of Environment Canada (EC), and offer the following comments for your consideration.

WMC International proposes to continue delineation drilling using three small diameter diamond drills, based from their existing camp to the south of Meliadine Lake. Proposed mitigation addresses concerns which pertain largely to waste management, including:

- treatment of drill effluent with removal of cuttings to a landfill, for all lake-based drilling;
- sump disposal of land-based drilling cuttings, with subsequent remedial measures;
- spill contingency planning and availability of spill cleanup kits at drilling sites and fuel storage locations;
- incineration of sewage and camp wastes, with non-combustibles disposed to a landfill;
- sump disposal of greywater;
- removal of waste oil and hazardous wastes to Rankin Inlet for disposal;

Comments and Recommendations

Two additives are listed for use in drilling operations. It should be noted that an assessment of CaCl as a toxic substance under the *Canadian Environmental Protection Act* in the final stages, and that its use for ice-based drilling is discouraged. For use on land-based drilling, it is recommended that sump closure measures include documentation of effects on vegetation for holes which used CaCl as an additive. It should be ensured that any such sumps are a sufficient distance from water that runoff into streams or lakes doesn't occur.

Alan Sexton

Environnement Canada / Environment Canada



No details are provided at this time on drilling and sump locations. The following standard conditions should address concerns with siting and general 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) meters from the normal high water mark of any such waterbody.
2. EC encourages exploration companies, when storing barreled fuel at a location, to use a secondary container rather than relying on "natural depressions". There are self supporting instant berms now available from various suppliers within Canada and if these "insta-berms" are used properly it will virtually eliminate the possibility of ever having to deal with petroleum contaminated soils.
3. Drilling additives or mud 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. With respect to access road construction, pad construction or other earthworks, the deposition of slash, debris or sediment into any waterbody is prohibited. These materials shall be disposed of above the high water mark in such a fashion that they do not enter the water.
5. If artesian flow is encountered, drill holes shall be plugged and permanently sealed upon project termination.
6. The permittee shall not erect camps or store material on the surface ice of streams or lakes.

Please do not hesitate to contact me at (867) 669-4735 with any questions or comments regarding the foregoing.

Yours truly,



Anne Wilson
Water Pollution Specialist

cc: Steve Harbicht (Head, Assessment & Monitoring, EPB)
Paula Pacholek (Coordinator, EPB)
Wade Comin (Inspector, EPB Iqaluit)