

Fish Habitat Management P.O. Box 358 Iqaluit, Nunavut X0A 0H0

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Richard Roy NordQuest 110 Cure Roy Val d'Or, Quebec J9P 3B5

Fax: (819) 874-4446

<u>RE</u>: NIRB File # 02EN067, Water Licence Application, Exploratory Drilling, Twin Mining Corp., Brodeur Peninsula area (west of Arctic Bay, NU).

Dear Mr. Roy:

This letter is to advise that The Department of Fisheries and Oceans, Fish Habitat Management (DFO-FHM) received your Water Licence Application for exploratory drilling, in the Brodeur Peninsula area, submitted on your behalf by Nunavut Impact Review Board. The proposed project involves drilling and bulk sampling. In addition the proponent has indicated that no permanent road will be constructed prior to approval by DFO-FHM. 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 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.
- When using explosives, please follow the *Guidelines for the Use of Explosives In or Near Water* (DFO, 1998) available on request. If, for any reason these guidelines cannot be followed, please contact DFO, as an Authorization may be required.
- 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 DFOFHM 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.
- 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 nonbiodegradable 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-FHM 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.

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 Pete Cott at 669-4913 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 Pete Cott – A/Arctic Habitat Co-ordinator, DFO-FHM Winston Fillatre – A/C&P Supervisor/Fishery Officer

