



August 5, 2010

Phyllis Beaulieu, Manager of Licensing
Richard Dwyer, Licensing Administrator
Nunavut Water Board
P.O. Box 119, Gjoa Haven NU X0B 1J0

Dear Ms. Beaulieu / Mr. Dwyer:

**RE: Mary River Project - Water License 2BB-MRY0710
Summer Field Geotechnical Drilling Program**

This letter has been prepared by Baffinland Iron Mines Corporation (Baffinland) and provides details regarding the planning of the geotechnical drilling program at its Mary River Project. The program involves drilling at Milne Inlet and at locations along and adjacent to the Tote Road for the purposes of infrastructure and quarry assessment. The program includes a total of approximately 23 drillholes at an estimated depth of 15 m per drillhole. The information generated from the geotechnical drilling program is a necessary requirement that will support the completion of our Environmental Impact Statement (EIS) which is currently in preparation.

Geotechnical drilling is an approved activity under the above referenced water licence and is covered generally in the March 26, 2007, Nunavut Impact Review Board (NIRB) Screening Decision on the exploration and geotechnical drilling program. By way of this letter, Baffinland is also providing notification to the Qikiqtani Inuit Association (QIA) and Indian and Northern Affairs Canada (INAC) regarding the start-up and details for the geotechnical drilling program.

The specific requirements of our above reference water licence related to the planning of the geotechnical drilling program include the following items:

- Part C, Items 3 and 4, which state that streams cannot be used as water sources and that water use volumes can't be used such that draw down of the water source occurs;
- Part F, Item 2 which states that for the purpose of geotechnical investigations, drilling can be conducted within 30 m of the high water mark of any water body, provided that the activities are consistent with the license and that a request has been submitted and received by the NWB at least ten (10) days in advance. The submission must include maps and GPS coordinates of proposed drilling activities along with planned mitigation measures;
- Part F, Item 4 which states that drill wastes will be disposed to a sump or natural depression located at least 30 m away from the high water mark of any adjacent water bodies;
- Part I, Item 17 which requires submission of GPS locations of all water sources, prior to utilization.

With regard to Part C, Items 3 and 4 and Part F, Item 2, above, Baffinland is requesting NWB approval for the use of two rivers for the purpose of drilling water sources. The volume of water required for each drillhole is estimated to be less than 15 m³ and will not represent any risk to the downstream watercourse. Attached Table A.1 presents drillhole general locations, proximity to water bodies, and relevant data such as historical flow data and anticipated water utilization for the planned drillholes. The data indicate that the volume of water to be used for the geotechnical drilling program is very small in comparison to average flows for these rivers, even during low flow periods. Figures 1 to 4, incl., present the locations of planned drillholes including those which are less than 30 m from water

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bodies. The program also involves advancing test pits in the vicinity of existing borrow locations. Note that the exact number and locations of drillholes are subject to minor adjustment based on the information obtained through the course of this program.

In accordance with the intent of Part F, Item 1, drillholes for the summer season have been planned, to the extent possible, at locations greater than 30 metres away from the ordinary high water mark of any adjacent water body. There are currently eight (8) drillholes planned at locations closer than 30 metres from the high water mark of adjacent waters. Mitigating measures as required under Part F, Item 2 are provided in the attached drilling standard (refer to Attachment B).

Water sources to support drilling operations have been selected in concordance with Part C, Items 3 and 4, of the water license. A desktop threshold of 5% maximum water withdrawal has been used to guide water source selection. The approximate location of water sources, where applicable, is provided in Table A.1, Attachment A.

We hope that the information provided in this monthly report is acceptable and should you have any questions regarding this report please contact Jim Millard at 902-403-1337 or by e-mail at jim.millard@baffinland.com.

Regards,

A handwritten signature in black ink, appearing to read "J. Millard", written over a horizontal line.

James Millard, M.Sc., P.Geo.
Senior Environmental Superintendent

cc. Stephen Bathory, QIA
Bryan Rayner, INAC
Kevin Robertson, INAC

Attach: Attachment A and B

Attachment A

Table A.1: Summer Geotechnical Drilling Program

Figures 1 to 4: Drillhole Location Plans

Table A.1: Summer Geotechnical Drilling Program

Drillhole ID and Coordinates			General Location	Road / Land Access	Helicopter Access	Proximity to Water Body - Planned Water Source
ID	N	E				
BH10-01	7,976,184	503,475	Milne Inlet	√		> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-02	7,976,194	503,585	Milne Inlet	√		> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-03	7,975,721	503,594	Near Milne Tote Road		√	> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-04	7,975,357	503,947	Near Milne Tote Road		√	> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-05	7,974,417	504,100	Near Milne Tote Road		√	> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-06	7,973,637	504,532	Near Milne Tote Road		√	> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-07	7,972,911	505,153	Near Milne Tote Road		√	> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-08	7,972,174	505,791	Near Milne Tote Road		√	> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-09	7,971,770	506,254	Near Milne Tote Road		√	> 30 m - nearby pond/lake or Phillips Creek - see note 1 below
BH10-10	7,965,986	513,627	Adj.to Box Culvert Crossing	√		< 30 m - Phillips Creek - see note 1 below.
BH10-11	7,965,738	513,531	Adj.to Box Culvert Crossing	√		< 30 m - Phillips Creek - see note 1 below.
BH10-12	7,962,810	517,215	Near Milne Tote Road		√	> 30 m - nearby pond/lake
BH10-13	7,947,310	522,850	Near Milne Tote Road		√	> 30 m - nearby pond/lake
BH10-14	7,941,893	523,978	Near Milne Tote Road		√	> 30 m - nearby pond/lake
BH10-15	7,937,590	525,908	Near Milne Tote Road		√	> 30 m - nearby pond/lake
BH10-16	7,927,427	529,166	Near Milne Tote Road		√	> 30 m - nearby pond/lake
BH10-17	7,926,902	529,276	Adj.to Box Culvert Crossing	√		< 30 m - box culvert river - see note 2 below
BH10-18	7,926,712	529,534	Adj.to Box Culvert Crossing	√		< 30 m - box culvert river - see note 2 below
BH10-19	7,922,234	542,080	Adj.to Box Culvert Crossing	√		< 30 m - adjacent lake.
BH10-20	7,922,151	542,359	Adj.to Box Culvert Crossing	√		< 30 m - adjacent lake.
BH10-21	7,915,046	554,242	Near Milne Tote Road		√	> 30 m - nearby pond/lake
BH10-22	7,914,623	555,655	Adj.to Box Culvert Crossing	√		< 30 m - box culvert river - see note 2 below
BH10-23	7,914,902	555,981	Adj.to Box Culvert Crossing	√		< 30 m - box culvert river - see note 2 below

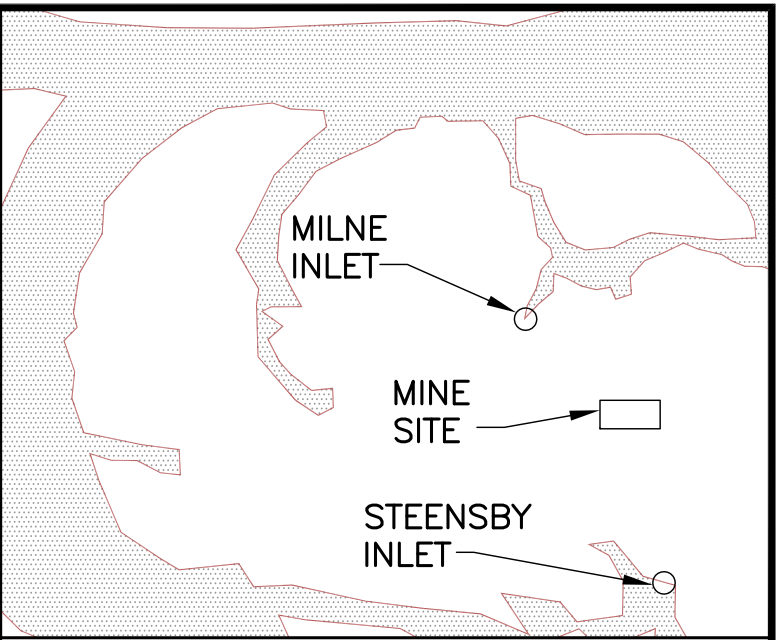
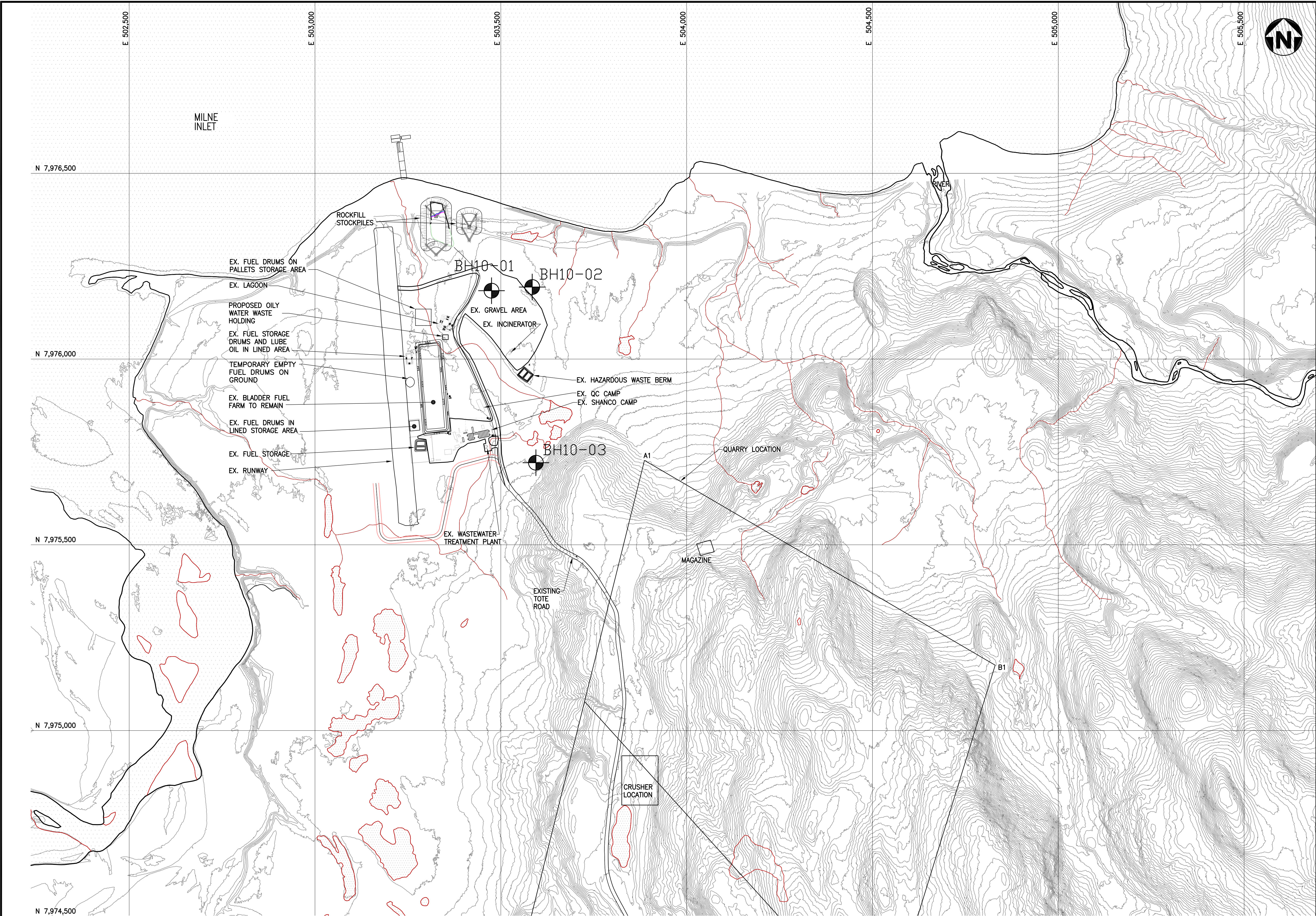
Notes: Shading denotes Nunavut Water Board approval is requested for proposed water source.

All coordinates in NAD83.

Estimated length of each drill hole is 15 m

Estimated water use is <1 m³ of water used per linear metre of drill hole advance. Therefore water usage for each drill hole is estimated to be <15 m³.

1. Phillips Creek is currently an approved water source for the Mary River Project.
2. Historical low flows for these rivers measured during 2008 and 2009 ranged between 1 and 3 m³/s. Therefore considering historical low flows and a total estimated water take from each river of 30 m³, no effect to downstream water courses is predicted.



KEYPLAN

LEGEND

- A1 PERIMETER POINT
- PROPOSED BOREHOLE LOCATION
- PROPOSED TEST PIT LOCATION

BOREHOLE COORDINATES		
BH-NO	NORTHING	EASTING
BH10-01	7,976,184	503,475
BH10-02	7,976,194	503,585
BH10-03	7,975,721	503,594

NOTE: ALL BOREHOLE AND TEST PIT COORDINATES ARE APPROXIMATE AND WILL BE CONFIRMED IN THE FIELD.

NOTES:

- COORDINATE GRID IS SHOWN IN UTM (NAD83) ZONE 17 AND IS IN METRES
- CONTOURS PROVIDED BY TERRAPOINT CANADA INC. CONTOURS AT 0.3m INTERVALS
- AS-BUILT INFO FROM GENIVAR, TIMMINS ONTARIO.
- QUARRY LOCATION PROVIDED BY KNIGHT PIESOLD CONSULTING.

PROGRESS PRINT
12/12/08

DRAFT

												Client Logo:		Client:		DRAWN BY: M.M.		PROJECT: MARY RIVER PROJECT TRUCKING FEASIBILITY OPTION		PROJECT NO.: TC101510	
														Baffinland Iron Mines Corporation		DESIGNED BY:				REVISION NO. A	
														AMEC Earth & Environmental		CHECKED BY: B.M.L.		TITLE: PROPOSED BOREHOLE LOCATION PLAN MILNE INLET		DATE: JULY 2010	
														160 Traders Boulevard East Mississauga, Ontario, Canada L4Z 3K7		REVIEWED BY:				SCALE: 1:25,000	
														amec		APPROVED BY:				DRAWING NO.: 001	

Attachment B

Proposed Mitigation Measures

Part F, Item 2 - Proposed Mitigation Measures

The following is a summary of the mitigation measures planned to be in place prior to, during and following drilling, as required, to protect waters. This information is primarily required for drillholes which will be situated within 30 m of the ordinary high water mark however similar measures will be taken for all drillholes.

Prior to Drilling Operations

The following mitigation measures will be taken at each drillhole location, prior to drilling operations:

- Any disturbance to the ground surface when setting up the drill area will be minimized as much as practical.
- Once the drill is in place, a temporary sump will be established adjacent to the drill to collect “dirty” drill water and cuttings. This sump may be, but not limited to, a natural depression, a pre-fabricated sump or may be constructed using other materials present on site.
- A sediment disposal location will be identified or established at least 30 m away from the ordinary high water mark and preferably such that any flow toward a surface water body or water course is minimized. “Dirty” drill water and cuttings will be relocated to the disposal location from the sump.
- Sediment and erosion control measures will be implemented to minimize spillage of sediment and entry of sediment into water. Sediment and erosion control measures may consist of silt fences or diversion/collection channels or berms.
- As a minimum, silt fences, diversion channels or berms will be installed downstream of drill rigs if required to contain sediment from the drill water runoff.

During Drilling Operations

The following mitigation measures will be taken at each drillhole location, during drilling operations:

Drill Operations and Movements

- The drilling area will be kept clean and tidy at all times. No littering is permitted - all waste will be collected and packed for disposal at camp.
- No material, will be stored on the banks immediately adjacent to streams or lakes, unless that material will be used immediately.
- Operations will be carried out so as to minimize surface disturbance.
- Surface vehicles will not be used to move drill rigs or other equipment, without prior authorization of the Senior Environmental Superintendent or designate. The use of any vehicles off approved routes is prohibited. Equipment or vehicles will not be moved unless the ground surface is in a state capable of fully supporting the equipment or vehicles. Rutting and gouging will be minimized.

- Fuel will be transported in fuel drums or double walled day tanks. Drip pans will be used under tanks to prevent fuel contamination.
- Emergency spill response equipment (i.e. a spill kit) will be kept with each drill. Spill kits contain the appropriate type, size and quantity of equipment for the volume and type of product present at the storage location as well as the environment likely to be affected by a spill (e.g., ground, lake, river, ocean).
- Daily inspections will be carried out for fuel leaks, equipment condition, sediment and erosion control, water intakes and water management. Any leaks will be repaired immediately.
- Drill rigs will be equipped with oil absorbent materials in the event of leaks, releases and spills.
- No streams will be obstructed.
- Sediment and erosion control measures will be maintained during the drilling operation to minimize entry of sediment into water. There will be no erosion to the banks of water bodies. Additional erosion control structures, as appropriate, may be installed as the land use operation progresses.

Water Use

- Streams will not be used as a water source unless authorized and approved by the Nunavut Water Board.
- Water sources will be visually monitored to confirm that drawdown is not occurring.
- DFO approved screens will be placed over the intake hoses. The pumping rate will be kept sufficiently low to ensure that fish do not become entrained (drawn against the screen) and that water is withdrawn at a rate that fish do not become impinged on the screen.
- No natural materials will be removed below the high water mark of any water source.

Drill Water and Runoff

- Drill water will be contained to the fullest extent practicable to minimize discharge to water bodies. Drill water will be disposed of into a properly constructed sump, or a naturally occurring contained depression. Deleterious substances will not be disposed of into water bodies.
- Dirty drill water and cuttings will be relocated to the sediment disposal location established >30 m away from the ordinary high water mark of adjacent water bodies.
- The footprint of any drill water and cuttings spillage will be minimized by means of berms and/or other means of containment.
- The spreading of drilling waste to the surrounding lands or water bodies will be minimized; the footprint of any spillage will be minimized to the greatest degree practicable.
- If artesian flow is encountered, drillholes shall be immediately plugged and permanently sealed to prevent induced contamination of groundwater or salinization of surface waters.

- The artesian occurrence will be reported within 48 hr to the Engineer. All artesian flows, including location (GPS NAD83), will be reported in the annual report to the Project Manager for subsequent reporting to the Nunavut Water Board.

Following Drilling Operations

The following mitigation measures will be taken at each drillhole location, after drilling operations have ceased:

- If there is a spillage of dirty drill water and cuttings at locations within 30 m of a water body, periodic monitoring of the drill site will be conducted and a clean-up crew may be mobilized to the drill site at the direction of the Baffinland Project Manager and Senior Environmental Superintendant or designate..
- No materials (i.e. debris, drill cuttings) will be left within 30 m of the high water mark when there is potential for that material to enter the water.
- All drillholes will be plugged upon completion, and where possible drill cuttings at surface returned to the drillhole at all land-based drilling locations.
- All constructed drill sumps will be restored to the natural surrounding contours of the land upon completion of drilling.
- All other disturbed areas will be contoured and stabilized upon completion of work and restored to a predisturbed state as much as practical.
- Upon completion of a hole in rock, the casing will be removed. If the casing cannot be removed it will be cut off to be flush with surface and backfilled.
- All non-combustible garbage and debris will be removed from the land use area to an approved disposal site.
- Return all combustible waste and petroleum products to camp for proper management.