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BAFFINLAND IRON MINES CORPORATION
MARY RIVER PROJECT

SITE WATER MANAGEMENT PLAN
(REF. NO. NB102-00181/10-5)

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EXECUTIVE SUMMARY

This site water management plan was developed for use at Baffinland Iron Mines Corporation's Mary River Project. It is used by the field crews to determine the surface water management requirements throughout the site. The following describes the specific sections of the report.

Drilling Descriptions

For the purposes of this water management plan the drilling program has been divided into two types; exploration and geotechnical. Exploration drilling involves coring into bedrock while the geotechnical drilling consists primarily of drilling overburden. Both types of drilling will be completed using the same type of drill rigs; however, the quantity of water consumption is generally higher for the exploration drilling.

Hydrology and Predicted Flow Rates

The average anticipated surface water runoff flows for the area are presented. The effect of these flows is reviewed with respect to the quantities required for the drill rigs and in particular how the flows may affect the drill schedule. Some locations that are not situated near a larger water body may need to be completed during periods of highest flows to be within the requirements of the permits.

General Mitigation Measures

General surface water mitigation measures are discussed for use during the field season. The measures that may be used include silt fences, diversion/collection channels or berms, containment berms, in-ground sumps and portable containment sumps. Other measures will be used as required.

Water Management Areas

Each area where work is planned was reviewed and the following information provided; a description of the area including the site and the activities to be completed during the 2007/2008 field work season, a description of the surface water quantity and direction within the area and mitigation measures expected to be required to control the surface water runoff.

Monitoring Requirements

A summary of the monitoring and reporting requirements that will be completed by the field crews are outlined. Adaptive management strategies are discussed to review the situation and modify the mitigation measures if required.

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SECTION 1.0 - INTRODUCTION

1.1 PROJECT

The Mary River Project (the Project) is an iron ore exploration project in the North Baffin region of Nunavut. The Project is located about 160 km south of Mittimatalik (Pond Inlet) and 270 km southeast of Ikpiarjuk (Arctic Bay) as shown on Figure 1.1.

Knight Piésold Ltd. is conducting environmental, social and traditional knowledge baseline studies on behalf of Baffinland Iron Mines Corporation (Baffinland) for the Mary River Project. Knight Piésold is also conducting engineering studies to evaluate foundation conditions in advance of future applications that would be required to support a full-scale mining proposal.

The Mary River Project includes the following components which define the aerial extent of the project area as shown on Figure 1.2:

- Mary River Project site (Including Deposit Nos. 1, 2, 3, 3B and 4)
- Existing Tote Road
- Milne Inlet port site and adjacent marine areas
- Potential future transportation corridor heading south from Mary River to Steensby Inlet
- A future potential port site at Steensby Inlet and adjacent marine areas
- A future potential hydro-electric generating station location

This report provides updated information on the Site Water Management Plan for the work to be completed during the 2007 and 2008 field seasons. This report will be updated if work programs change.

1.2 WATER LICENCE REQUIREMENTS

This document has been prepared to fulfill the requirements of the water license to resubmit the Site Water Management Plan (as stated on page 5 of the license and in Part B, Items 6 and 7) and to provide an Environmental Monitoring Plan (as stated on page 5 of the license and in Part I, Item 1).

A summary of the specific requirements of the water licence as it relates to site water management is as follows:

- The volume of water extracted for the project for the purposes of this licence shall not exceed 535 cubic metres per day (60 cubic metres for potable water and the remainder for drilling purposes)

- GPS coordinates (in degrees, minutes, seconds) of all locations where water is used will be recorded and reported to the Inspector prior to use
- Daily quantities of water use will be measured and recorded, in cubic metres, for camp, drilling and other purposes
- Surface water samples are collected throughout the Mary River Exploration Property, including Deposit No. 4, and at sites near Milne Inlet and Steensby Inlet. Subsequent laboratory analytical results are used to identify water quality trends and potential impacts to surface water.
- Quantities of domestic waste, sewage, and hazardous waste hauled off-site for disposal will be measured and recorded, in cubic metres. The location and name of the disposal facility(s) and the date that waste was hauled off-site will be recorded.
- All water for domestic purposes shall be obtained from Camp Lake at Monitoring Station MRY-1 and Phillips Creek at Monitoring Station MRY-2 and at an unnamed lake at km 32 along the tote road or at an alternate location approved by the NWB
- All water intake hoses shall be equipped with a screen of an appropriate mesh size to ensure fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen
- Camps will not be located, nor material stored, on the frozen surface of a stream or lake, except where for immediate use
- Water Supply Facilities shall be maintained to the satisfaction of the inspector
- Streams cannot be used as a water source unless authorized and approved by the Board
- Water use for drilling will be taken from sources adjacent to drill locations or as otherwise approved by the NWB
- No land based drilling shall be conducted within 30 m of the ordinary high water mark of any water body, unless approved
- Drill waste, including water, chips, muds and salts, in any quantity or concentration, from land-based drilling, will be disposed of in a properly constructed sump or an appropriate natural depression located at least 30 m from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts will be created
- If artesian flow is encountered, drillholes will be immediately sealed and permanently capped. If encountered, artesian flow will be reported to the NWB
- If the bottom of permafrost is broken through by the drill, the depth and location will be recorded and reported to the NWB
- If water is required in sufficient volume as to cause drawdown of the water body, approval will be obtained 30 days prior to use. Details to be submitted include: volume required, hydrological overview of water body, details of impacts and proposed mitigation measures.
- Stream banks will not be cut and material shall not be removed from below the ordinary high water mark of any water body unless authorized
- The licensee will not cause erosion to the banks of any body of water and shall provide necessary controls to prevent such erosion
- With respect to access roads, pad construction, and other earthworks, debris and sediment will not be deposited into or on any water body. The materials will be deposited at least 30 m from the ordinary high water mark in such a fashion that they do not enter the water. Chemicals, fuels, or wastes associated with this will not be allowed to enter any water body.

- Stream crossings will be located so as to minimize approach grades. Approaches will be stabilized during construction and upon completion in order to control runoff, erosion, and subsequent siltation to any water body.
- Machinery will not travel up the streambed of a water body. Fording will be kept to a minimum and limited to one area and a one-time event for each piece of equipment, where possible. Equipment will be well cleaned and free of oil and grease and fluid leaks.
- Pollutants from machinery fording water crossings will not enter the water
- Activities will be conducted so as to minimize impacts on surface drainage, and will undertake corrective measures if surface drainage is impacted
- Sites will be prepared in such a manner as to prevent surface rutting
- Fill material used during construction will be from an approved source and free of contaminants
- Sediment and erosion control measures shall be implemented prior to and maintained during the operation to prevent entry of sediment into water
- Equipment storage holding areas will be located on gravel, sand or other durable land, at least 30 m from the ordinary high water mark of any water body to minimize impacts on surface drainage and water quality
- Equipment and vehicles will not be used unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of vehicles will cease if rutting occurs.
- An area will be designated for deposition of excavated and stockpiled material that is at least 30 m from the ordinary high water mark of any water body
- In-stream activity will be limited to low water periods, and will not be undertaken during fish migration
- Except where approved, winter lake and stream crossings will be constructed entirely of water, ice, or snow, with disturbance minimized by situating ice bridges in areas with minimal approach grading and short crossing routes. Stream crossings will be removed or the ice notched prior to spring break-up.
- GPS coordinates (in degrees, minutes, seconds) will be determined for all locations of temporary and permanent storage areas where wastes associated with camp, drilling and infrastructure operation are deposited. These locations will be reported to the Inspector prior to depositing wastes.
- All waste disposal areas shall be located a minimum of 30 m from the ordinary high water mark of any water body, such that the quality, quantity, or flow of water is not impaired, unless otherwise approved
- All Polishing / Waste Stabilization Pond (PWSP) discharges will be released in a manner that minimizes surface erosion
- PWSP's will be bermed to ensure there is no seepage
- All greywater not directed to the Waste Water Treatment Facility (WWTF) will be contained in a sump located at least 30 m from the ordinary high water mark of any water body, at a site where direct flow into the water body is not possible and additional impacts are not created, unless otherwise approved
- Latrines will be located at least 30 m from the ordinary high water mark of any water body
- The Inspector will be notified of any discharge from waste facilities at least 10 days prior to the discharge

The water licence currently prohibits on-ice drilling, whereas this was an activity previously approved by the NWB licence No. 2BE-MRY0708. On-ice drilling has been included in this plan on the basis that Baffinland will seek clarification from the Board as it relates to this activity.

SECTION 2.0 - DRILLING PROGRAMS

2.1 EXPLORATION DRILLING

The exploration drilling program is carried out to identify the quality and quantity of the ore located at Mary River Deposit Nos. 1, 2, 3, 3B and 4, as well as providing information on geomechanical and geochemical aspects necessary for the mine design.

The following drills were used during the 2007 field program and were shared between the exploration and geomechanical/geotechnical drilling programs:

- One - LM30 drill (HQ and NQ core)
- Two - LF70 drills (PQ, HQ, NQ and/or BQ core)
- Three - LY38 drills (PQ, HQ, NQ and/or BQ core)

Calcium chloride brine is used as the drilling fluid during the exploration drilling due to the cold temperatures at the site and the presence of permafrost. This prevents the drill rods from freezing in the deep exploration holes. The brine consumption rate for the drilling is a maximum of 12 gallons per minute per drill rig during periods of drilling based on the capacity of the pumps serving the drills. Drilling additives are also used to increase operational efficiencies. Drilling additives used include polymers such as DR-133 Polymer and W-OB Polymer.

The mixing station that produces the calcium chloride brine is a steel tank equipped with hydraulic mixers. Water is added to the tank from a water pumping station. Salt is transported to the mixing station in bags and is added to the tank to be mixed with the water. The entire station is located more than 33 m from any water body. Special care is taken to ensure housekeeping measures are completed at all times at the salt mixing station. The quantity of salt added is kept to a minimum.

The water pumping stations are located on bodies of water of sufficient quantity (i.e. Mary River) so as not to cause drawdown of the water level in the water body. Screens have been placed over the intake hoses to ensure that fish are not entrained. The pumping rate is also kept at a rate to ensure that fish do not become impinged on the screens, and minimize water use.

Where feasible, the potential for recirculation of the on-site drilling fluid will be evaluated so as to minimize the amount of chloride brine and fresh water used but also to maintain efficient and effective drilling progress.

2.2 GEOTECHNICAL DRILLING

The geotechnical program is conducted to identify and qualify the types and depth of soils at the project sites. Information from the geotechnical drilling is used to assist in foundation design for project infrastructure.

The geotechnical drilling program consists of overburden drilling and limited coring to confirm bedrock contact. The holes drilled for the geotechnical program are generally shallow; most are less than 30 m deep.

The following drills were in use during the 2007 field program and were shared between the exploration and geotechnical drilling programs:

- One - LM30 drill
- Two - LF70 drills
- Three - LY38 drills

Calcium chloride brine has not been used for the geotechnical drilling. Less water is generally required for geotechnical drilling as opposed to exploration drilling. During periods of drilling, the maximum water use rate is approximately 10 gallons per minute based on the capacity of the pumps servicing the drills.

The water pumping stations are located on bodies of water of sufficient quantity so as not to cause drawdown of the water level in the water body. Screens have been placed over the intake hoses to ensure that fish are not entrained. The pumping rate is kept at a rate to ensure that fish do not become impinged on the screens, and minimize water use.

SECTION 3.0 - GENERAL MITIGATION MEASURES

The following measures are used to mitigate potential issues from discharge of water from the water management areas. If a need is identified, additional measures are implemented.

3.1 SILT FENCE

Description

Silt fences are a geotextile or fabric barrier that impedes the flow of surface water which potentially may cause suspended sediment to be deposited. Silt fences are typically supported using wooden stakes (usually attached to the fabric by the manufacturer) and may be placed using a variety of methods such as digging a trench and backfilling material to ensure stability. Attempts are made to install silt fence in lines of equal elevation (along contour lines) to prevent channelling or focusing of the runoff.

Standards for installation including trench excavation, insertion of fabric, and backfilling and compacting can be found on the Ontario Provincial Standard Drawing (OPSD) 219.110 - Light Duty Silt Fence Barrier and 219.130 - Heavy Duty Silt Fence Barrier.

Typical Locations of Use

Silt fences are used in areas where surface water could potentially come into contact with disturbed sites causing elevated suspended solids. Typical installation locations are:

- Downstream of drill rigs
- Along roads where surface runoff is expected
- Surrounding stockpiles of material or drill cuttings

Substitutes

Free standing silt fences are considered for use in areas where typical silt fence is impractical i.e. on rock or impenetrable surfaces. Diversion/collection channels or berms are used in certain locations.

3.2 DIVERSION/COLLECTION CHANNEL OR BERM

Description

Diversion/collection channels or berms are used to locally direct surface water runoff.

When required, the structures are constructed using suitable materials to divert the surface water without causing erosion or suspension of additional sediment. Excavation of channels may be an option; however, construction of berms using soil or man-made structures such as sand bags/tubes are also evaluated.

Typical Locations of Use

Channels or berms are used in locations where it is required to divert or collect surface water. Diversion structures are installed to prevent runoff from entering a site where the surface soil has

been disturbed and would cause suspension of sediment. Additionally collection channels or berms may be constructed to collect runoff emerging from an area of soil disturbance.

One possible use of a diversion/collection channel or berm is to ensure runoff is directed to a constructed mitigation measure such as an in-ground sump.

Substitutes
Silt fences can be used as an alternative to constructing a channel or berm.

3.3 CONTAINMENT BERM

Description
A containment berm can be constructed to establish a sump, basin or pond to contain or collect water. The sump could be used to contain discharge water to allow suspension of sediment prior to discharge or to temporarily contain the water for re-circulation. The berm is constructed using native soils or other suitable man-made products.

Care is taken when constructing berms to ensure the base is on a solid foundation. Soil placed to construct the berms is nominally compacted to provide strength for the structure. Berm heights are minimized (<1 m).

Typical Locations of Use
Containment berms are constructed across small valleys or around natural depressions to augment the capacity of the berms.

Substitutes
In-ground sumps or portable containment sumps or tanks are used in place of a containment berm.

3.4 IN-GROUND SUMP

Description
An in-ground sump can be constructed to establish a sump, basin or pond to contain or collect water, similar to the containment berm. An in-ground sump is constructed by excavating a depression into soil to provide water containment. Excavated material from the sump can be used to construct a containment berm surrounding the sump to augment the capacity of the sump.

Typical Locations of Use
In-ground sumps are used in some areas where excavation of soil is possible.

Substitutes
Containment berms, or portable containment sumps or tanks can be used in place of an in-ground sump.

3.5 PORTABLE CONTAINMENT SUMP

Description

Portable containment sumps are used to establish a sump to contain water from a source such as a drill rig. The portable sump requires only minimal excavation or construction to provide a level base for the sump.

A series of portable containment sumps can be connected together to provide additional containment or settling capacity if required.

Collected sediment or drill cuttings from the portable containment sumps are removed from the sumps as necessary and disposed of in pit locations approved by Baffinland management and located at distances of at least 30 m from water bodies.

Typical Locations of Use

Portable containment sumps are used in areas where containment berms or in-ground sumps are impractical such as steep topography or in areas where overburden is not readily available.

Substitutes

Containment berms or in-ground sumps are used in place of a portable containment sump.

3.6 ACID ROCK DRAINAGE AND METAL LEACHING

Description

The potential for acid rock drainage (ARD) and metal leaching (ML) is considered to be low and is only a concern for the pits and waste rock and weathered ore stockpiles at Deposit No. 1. Temporary ore stockpiles are not considered to be an issue with respect to ARD and/or ML. If evidence of ARD and/or ML is noted, it will be confirmed that up gradient surface runoff is routed around the pit and/or stockpile of concern. Where necessary, readily available neutralizing material that is not ML will be placed in the pits and mixed with the stockpiles to effectively neutralize any potential acid conditions. Nearby Cambrian-Ordovician dolostone and limestone south of the deposit or local acid buffering overburden material would be used as the neutralizing agent if necessary.

Typical Locations of Use

ARD and ML mitigation would be used in areas where ore is stored, crushed, stockpiled, excavated or otherwise handled.

Substitutes

Several local materials can be used as the neutralizing agent, including dolostone, limestone or acid-buffering overburden material.

SECTION 4.0 - HYDROLOGY AND PREDICTED SURFACE WATER RUNOFF RATES

4.1 SURFACE WATER RUNOFF EVALUATION

Regional Water Survey of Canada flow gauging stations were identified based on proximity to the project site and are identified as: Apex River, Allen River, Mecham River and Marcil Creek. Details of the stations are shown on Table 4.1 and the locations are shown on Figure 4.1.

A flow gauging station (H5) was installed on the Mary River and was operational for most of summer 2006 and for the open water season of 2007 (i.e. June through September). The location of H5 is shown on Figure 4.1. The flow data recorded at H5 were insufficient to be relied on; however, preliminary interpretation of the data was completed. The preliminary flow estimates are based on an un-calibrated rating curve and professional judgement for the flows from June to October, 2006. The H5 flows were compared to the regional flow gauging stations and found to be of similar magnitude. The flows from H5 and the regional stations are shown on Figure 4.2.

Average monthly unit flow rates based on the preliminary rating curves H5 were calculated and were:

Month (2006)	Average Monthly Unit Runoff Rate (cu.m/s/sq.km)
January to May	0.0000
June	0.0083
July	0.0500
August	0.0233
September	0.0167
October to December	0.0000

Note: Each of the unit flow rates are presented in cubic metres per second per square kilometre of catchment area.

4.2 WATER USAGE FOR DRILLING

The unit flow rates calculated for the Mary River gauging station H5 show the distribution of runoff flow rates for 2006. The estimated runoff values indicate that from October to May there is no runoff and that just over half of the flows occur in July.

Based on the flow evaluation, special consideration for drill water requirements was made when creating the drilling schedules. Drilling in locations not adjacent to larger water bodies are scheduled during periods of high flow to ensure drawdown will not occur. Drillholes located adjacent to larger bodies of water are completed when suitable.

Drilling programs are undertaken such that any consumption of water from ponds, lakes and rivers will not result in measurable drawdown of the water bodies. No water is used from streams where there is a potential for drawdown effect without first obtaining regulatory approval as required.

SECTION 5.0 - WATER MANAGEMENT AREAS

5.1 MARY RIVER CAMP SITE

Description

- A personnel camp with a design capacity of approximately 200 people
- Domestic water from Camp Lake
- Sewage treatment using pre-engineered plants with discharge to Sheardown Lake or polishing pond.
- Air strip (4,100 foot long summer strip, and 5,000 foot winter strip)
- Helicopter landing pad (one area with a built-in central fuel berm and refuelling system with capacity for four helicopters)
- Fuel storage areas for bulk fuel and barrel fuel, as well as waste storage areas. Each will consist of a lined containment area.
- The location of the site is shown on Figure 1.2

Surface Water Direction and Quantity

The catchment areas for the Mary River Camp Site are shown on Figures 5.1 and 5.2. Ultimately the surface water at the site is directed towards Camp, Sheardown and Mary Lakes. The estimated surface water runoff quantities for each catchment area are shown on Table 5.1.

Mitigation Procedures

The Mary River Camp Site is not expected to have significant areas of disturbed soils and as such should not have sediment and erosion issues. The site will be regularly monitored (as discussed in the Monitoring section of this report). If mitigation measures are required to control sediment and erosion they will be selected and installed as previously discussed in the section General Mitigation Measures.

5.2 MARY RIVER DRILLING AREA

Description

- No permanent structures or buildings
- A historic camp from the exploration work in the 1960's located on the way to the Deposit No. 1 has been partially remediated
- No camps
- Exploration drilling focused on Deposit Nos. 1, 2, 3 and 3B
- Geotechnical and exploration drilling
- Water Pumping Station - water will be pumped from either Mary River or Sheardown Lake to the salt mixing station.
- Salt Mixing Station - salt is mixed with the water to create a brine solution. This solution is pumped from the salt mixing station to drill rigs. The brine may be heated in colder temperatures. Drill additives will be added as required. These are discussed above.
- Drill water discharge (using mitigation measures previously discussed)
- Fuel is stored at the Mary River Camp Site within the storage facility and transported to the drill sites and to the pumping stations as required
- The location of the site is shown on Figure 1.2

Surface Water Direction and Quantity

The catchment areas for the Mary River Drilling Area are shown on Figure 5.2. Ultimately the surface water at the site is directed towards Camp, Sheardown and Mary Lakes. The estimated surface water runoff quantities for each catchment area are shown on Table 5.1.

During the field seasons there is additional surface water discharge from the drill rigs. This flow is estimated to be a maximum of 12 gallons per minute per drill during periods of drilling. An estimated maximum of four drill rigs may operate at any one time at the Mary River Drilling Area.

Mitigation Procedures

Sediment and erosion control measures are periodically required and are installed as per the previous section: General Mitigation Measures. The site is regularly monitored (as discussed in the Monitoring section of this report).

5.3 ACCESS ROAD - MARY RIVER CAMP SITE TO MARY RIVER DRILLING AREA

Description

- Historic dirt road constructed in the mid 1960's
- No permanent structures or buildings
- No camps
- The location of the site is shown on Figure 1.2

Surface Water Direction and Quantity

The catchment areas for the Mary River Drilling Area are shown on Figure 5.2. Ultimately the surface water at the site is directed towards Camp, Sheardown and Mary Lakes. The estimated surface water runoff quantities for each catchment area are shown on Table 5.1.

Mitigation Procedures

This traffic with the use of ATV's is currently only related to the transport drill crews to and from the drilling area. The road is being upgraded to a year-round all-weather road to support the increased traffic for the bulk sampling program. Sediment and erosion control measures are installed when required as per the previous section General Mitigation Measures. The area is regularly monitored (as discussed in the Monitoring section of this report).

5.4 MILNE INLET CAMP SITE

Site Description

- A camp consisting of: a Shanco Camp Services facility with sleeping, dining and wash areas, several ATCO style trailers, a heated sea container used as a muster area, and a few wooden structures
- Drinking water is sourced from Phillips Creek during the summer months and an unnamed lake along the tote road at km 32 during the winter season
- Sewage is treated using a pre-engineered plant with discharge to Milne Inlet via a local drainage ditch

- Air Strip
- Fuel storage areas for bulk fuel and barrel fuel, as well as waste storage areas. Each will consist of a lined containment area.
- Geotechnical drilling
- Water taking for drilling (water is taken directly from the ocean by pumping or transporting if required)
- Drill water discharge (using mitigation measures previously discussed)
- The location of the site is shown on Figure 1.2

Surface Water Direction and Quantity

The catchment areas for the Milne Inlet Camp Site are shown on Figure 5.3. The surface water at the site is ultimately directed to Milne Inlet. The estimated surface water runoff quantities for each catchment area are shown on Table 5.2.

Mitigation Procedures

The Milne Inlet Camp Site is not expected to have significant areas of disturbed soils and as such should not have sediment and erosion issues. The site is regularly monitored (as discussed in the Monitoring section of this report). If mitigation measures are required to control sediment and erosion they will be selected and installed as previously discussed in the previous General Mitigation Measures section.

5.5 MILNE INLET ON-ICE DRILLING AREA

Description

- No permanent structures or buildings
- No camps
- No fuel storage
- On-ice geotechnical drilling
- Water for drilling is drawn from the inlet
- Drill water discharge (see Mitigation Procedures below)
- On-ice probing (no water taking or discharge)
- The location of the site is shown on Figure 1.2

Mitigation Procedures

No drill water is discharged on the ice. Only geotechnical drilling is completed on the ice. All water comes out of the hole at the casing/ocean bottom interface. If drilling continues into bedrock the drill water is discharged into a portable containment sump and removed from the ice. The water and cuttings contained in the portable containment sump are disposed of in a pit location at least 30 m from water, which is determined by Baffinland and Knight Piésold.

No fuel is stored on the ice. Any fuel required for the on-ice drilling is transported to the site in large plastic containers. Drip pans are used under the tanks to prevent fuel contamination.

There is no further on-ice drilling planned for the 2008 field season.

5.6 STEENSBY INLET CAMP SITE

Description

- Seasonal drill camp with water flown in and toilet wastes buried on site
- Grey water sump used for kitchen and wash tent
- Air strip - there is no fixed runway at the Steensby Inlet Camp Site. A seasonal runway is used on a lake 15 km NNW of the site.
- Fuel storage area consisting of one lined containment berm with a capacity for approximately 60 drums (205 litre drums)
- Geotechnical drilling
- Water for drilling is obtained from sources adjacent to the drilling locations
- Drill water discharge (using mitigation measures previously discussed)
- The location of the site is shown on Figure 1.2

Surface Water Direction and Quantity

The catchment areas for the Steensby Inlet Camp Site are shown on Figure 5.4. The surface water at the site ultimately reports to Steensby Inlet. The estimated surface water runoff quantities are shown on Table 5.3.

Mitigation Procedures

The Steensby Inlet Camp Site is not expected to have significant areas of disturbed soils and as such should not have sediment and erosion issues. The site is regularly monitored when in use (as discussed in the Monitoring section of this report). If mitigation measures are required to control sediment and erosion they are selected and installed as previously discussed in the section General Mitigation Measures.

5.7 STEENSBY INLET ON-ICE DRILLING AREA

Description

- No permanent structures or buildings
- No camps
- No fuel storage
- On-ice geotechnical drilling
- Water for drilling is taken from the ocean
- Drill water discharge
- On-ice probing (no water taking or discharge)
- The location of the site is shown on Figure 1.2

Mitigation Procedures

Only geotechnical drilling is completed on the ice, and no drill water is discharged on the ice. All water comes out of the hole at the casing/ocean bottom interface. If drilling continues into bedrock the drill water is discharged into a portable containment sump and removed from the ice. The water and cuttings contained in the portable containment sump are disposed of in a pit location at least 30 m from water to be determined by Baffinland and Knight Piésold.