

# APPENDIX E.8.7.2 INITIAL AND FOLLOW UP SPILL REPORTS OTHER

(Part 5)



November 21, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Jonathan.Mesher@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-392 Mary River Project - Water Licence No. 2AM-MRY1325

#### Summary:

On October 23rd 2017, a fuel tank on the Mile Port refueling station was being filled using a tanker truck, when the overflow valve on the truck began leaking onto the ground. Initial investigation indicated a newly installed generator powering the fuel pump had been installed incorrectly. As a result, the pump did not operate as designed, which subsequently reversed the flow of fuel. An estimated 200 L of fuel was released before the operator was able to stop the flow, impacting an area of approximately 6m². The spill was confined to the fueling station's lined engineered containment berm, which was covered with compacted snow. The spill occurred >200m from Philips Creek with no possibility of migrating.

#### Immediate and Follow-Up Action:

The fuel pump station was shut off and valves from the fuel tank were closed. Spill booms and adsorbent pads were deployed in strategic locations to ensure the spill remained within the lined engineered containment berm. The overflow release on the fuel tanker was plugged to prevent ongoing release. The contaminated snow was collected and deposited in an engineered containment berm at Milne Port, specific for hazardous storage. The newly installed generator was reconfigured to power the fuel pump in the intended and labelled direction, addressing the potential for the incident to be repeated.

#### Recommendations:

Inspection of generator configuration including a bump test conducted by an electrician after all new installations and servicing.

#### **Current Status:**

The fuel pump station and fuel tanker are currently back in operation and the generators powering the fuel pump station are in the correct configuration for the direction of flow labelled on the pump.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden at (647) 253-0596 x6016, Connor Devereaux (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x5098

Prepared by: Reviewed by:

B. Widdowson

Ben Widdowson Environmental Coordinator William Bowden

**Environmental Superintendent** 

Bell Bander

Attach: Photos, Map, Baffinland NT-NU Spill Report

cc. Todd Burlingame, Sylvain Proulx, William Bowden, Connor Devereaux, Allan Knight, Gerald Rogers, Tim Sewell, (Baffinland), Stephen Bathroy (QIA), Erik Allain, Sarah Forte, (INAC)





Photo 1. Overflow release port



Photo 2. Fuel pump, switch, and valve



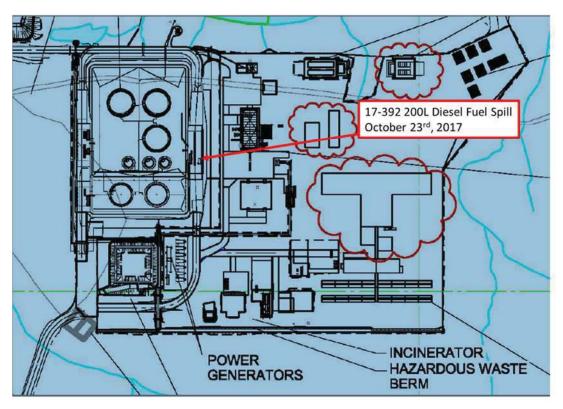


Figure 1. Map of Spill Location

#### NT-NU Spill Report (Baffinland)





### NT-NU SPILL REPORT OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

									REPORT LINE USE ONLY
Α	10-23-2017		T	15:00	IME		CORIGINAL SPILL REP	PORT,	REPORT NUMBER
В	10-23-2017	DAY - YEAR		5:25	NCE TIME		TO THE ORIGINAL SPIL	LREPORT	17 . 392
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Е			SECONDS 32	- 1	ONGITUDE DEGREES	79	MINUTES 22	si	CONDS 24
F	RESPONSIBLE PARTY OR VESS Baffinland Iron Mir		2275 Midd				oo, Oakville, C	N L6H	0C3
G	ANY CONTRACTOR INVOLVED N/A		N/A	DDRESS (	R OFFICE L	OCATION			
	PRODUCT SPILLED		QUANTITY IN LITE	RES, KILO	GRAMS OR	CUBIC METRE	S U.N. NUMBER		
Н	Diesel fuel		Approx. 200 L				N/A		- 1
п	SECOND PRODUCT SPILLED (IF	APPLICABLE)	QUANTITY IN LITE	RES, KILC	GRAMS OR	CUBIC METRE	S U.N. NUMBER N/A		
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J	FACTORS AFFECTING SPILL OR		DESCRIBE ANY A	SSISTAN	CE REQUIRE	D	HAZARDS TO PER	SONS, PRO	PERTY OR EQUIPMENT
	ADDITIONAL INFORMATION, CO	MMENTS, ACTIONS PROPOS	SED OR TAKEN TO	CONTAIN	RECOVER	OR DISPOSE (		AND CONTA	MINATED MATERIALS
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L	William Bowden	Env. Superint		MPLOYE Baffin			LOCATION CALLING FR Mary River		Ext 6016
М	ANY ALTERNATE CONTACT Tim Sewell	POSITION Head of HSE	1-	MPLOYE Baffin			ALTERNATE CONTACT		LTERNATE TELEPHONE 416 364 8820
$\overline{}$			REPORT LINE	USE ON	LY				
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1		STATION OPERATOR					YELLOWKNIFE, NT	0	867) 920-8130
<u> </u>	AGENCY DEC DCCG DGN	WT GN DILA DINAC	□ NE8 □ TC	SIGNII	FICANCE [	MINOR O MA	OR CUNKNOWN	FILE STATI	JS [] OPEN [] CLOSED
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FIRS	T SUPPORT AGENCY								
SEC	OND SUPPORT AGENCY								
THIR	D SUPPORT AGENCY								

PAGE 1 OF \_\_\_



December 24, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Jonathon.Mesher@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-428, Reported on November 26, 2017

Mary River Project - Water Licence No. 2AM-MRY1325

#### Summary:

At 14:15 HRS on November 25<sup>th</sup>, 2017, an operator was relocating a tote of waste oil within the Mine Site Hazardous Waste Berm (MS-HWB-7). While he was placing the tote adjacent to a second stationary tote, the unnoticed damaged frame punctured the stationary tote. The operator immediately used a spill pad to slow the release of used oil and turned the tote on its side to contain the remaining product. Approximately 300 L of waste oil was released onto the pad, impacting an area approximately 6 m² within MS-HWB-7. The location of the spill was confined to the MS-HWB-7 which is an engineered lined containment facility. The spill occurred >400m from the closet water body with no possibility of migrating.

#### Immediate and Follow-Up Action:

The tote was immediately placed on its side to prevent further oil being spilt. The spill was then cleaned up using spill pads and the contaminated snow was scrapped up and placed into Quatrex bags, which will be transported to the Snow Dump in Milne Inlet.

#### Recommendations:

Ensure that operators are inspecting totes for structural stability before handling or preparing them for transport.

#### **Current Status:**

The tote has been emptied, the affected area has been cleaned up, and the contaminated snow will be treated using the oily water treatment facility during the open water season.

Should you require further information or clarification on the above noted spill, please feel free to contact the undersigned, William Bowden at (647) 253-0596 x6016 or Allan Knight at (647) 253-0596 x5098.

Prepared by: Reviewed by:

Connor Devereaux

**Environmental Superintendent** 

Timothy Ray Sewell Head of Health, Safety and Environment

Attach: Photos, Map, NT-NU Spill Report

. J.

cc. Todd Burlingame, Megan Lord-Hoyle, Sylvain Proulx, Gerald Rogers, Francois Gaudreau, William Bowden, Allan Knight (Baffinland), Stephen Bathroy (QIA), Erik Allain, Sarah Forte(INAC)



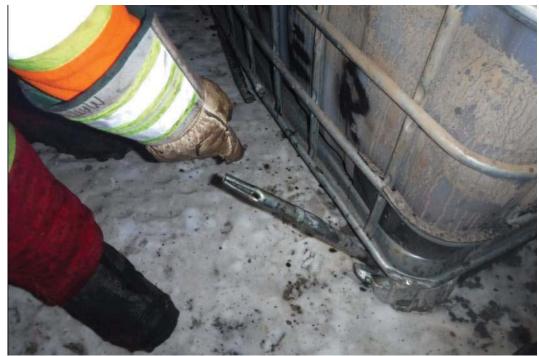


Photo 1. Damaged metal frame which caused the puncture



Photo 2. Absorbent booms and pads to prevent migration of the used oil





Photo 3. Clean up of affected snow and ice.

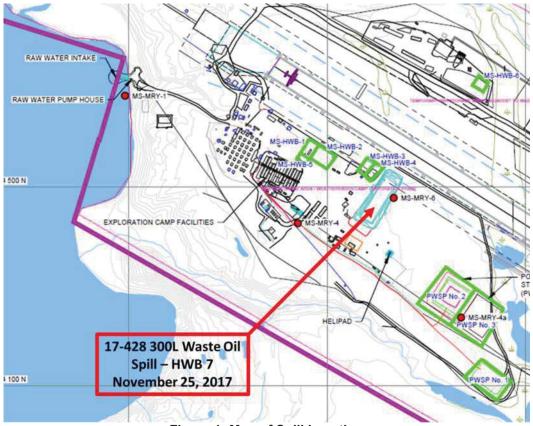


Figure 1: Map of Spill Location







NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: SDIIS@000V.nt.ca

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9 63				400		52			REPORT LINE USE ONLY
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G	York Contracting		CONTRACTOR	ADDRESS	OR OFFICE LOCATIO	N.			
r.	Waste Oil		Approx.	Production of the Property	OGRAMS OR CUBIC N	METRES	N/A		
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L	Connor Devereaux	Env. Superin	tendent	Baffir		0.00	cation calling FR Mary River	5	6016
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THIR	RD SUPPORT AGENCY								

PAGE 1 OF 1

Figure 2: NT-NU Spill Report



January 20, 2018

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Jonathan.Mesher@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-451

Mary River Project - Water Licence No. 2AM-MRY1325

#### Summary:

At 16:00 HRS on December 21st, an employee conducting routine lift station inspections observed that the influent line to the Weatherhaven greywater lift station had separated at a coupling. Upon initial investigation, the pipe installed between fittings appeared too short and had separated from adjoining couplings. Approximately 600L of greywater was released into the lift station building, migrating out under the base, impacting an area of 15m2. The location of the spill was confined to the Weatherhaven Complex pad. The spill is >200m from Camp Lake which is ice covered.

#### Immediate and Follow-Up Action:

Sources to the lift station were immediately shut off. Greywater released inside the building and surrounding camp pad was sucked up using a vac truck and taken to the Polishing Waste Stabilization Pond. The pipes and fitting were replaced before the lift station was put back into service. The contaminated snow was collected and deposited in an engineered containment berm at Milne Port.

#### Recommendations:

Routine inspections of the water lines and lift stations will continue to be completed to ensure all components are functioning as designed.

#### **Current Status:**

The lift station is currently back in operation and inspected regularly.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden or Connor Devereaux at (647) 253- 0596 x6016.

Come Dung

Prepared by: Reviewed by:

Dominic Ritgen Connor Devereaux

Environmental Coordinator Environmental Superintendent

Attach: Photos, Map, Baffinland NT-NU Spill Report

cc. Todd Burlingame, Sylvain Proulx, Tim Sewell, William Bowden, Allan Knight, Gerald Rogers, Francois Gaudrau (Baffinland), Stephen Bathroy (QIA), Erik Allain, Sarah Forte(INAC)

# Baffinland

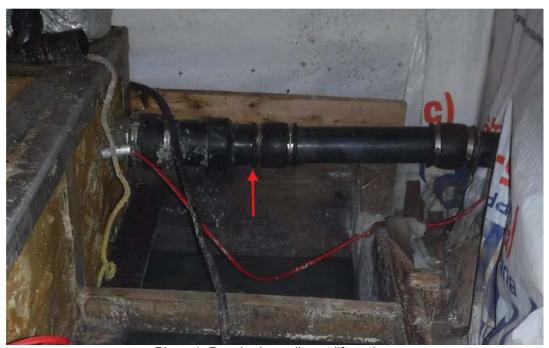


Photo 1. Repaired coupling at lift station.

## Baffinland

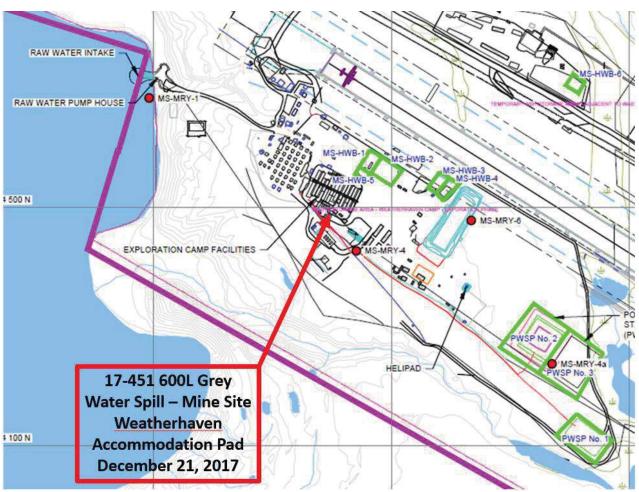


Figure 1. Map of Spill Location



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L	Connor Devereaux	Env. Superi	ntendent	Baffinl		Mary Rive	900 FEB. 00	416 364 8820	
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С	IOL - Commercial Lo		-		AM-MRY132 TREGION	25 Type "A"			
B	12-21-2017 LAND USE PERMIT NUMBER (IF A	PPLICABLE)		16:00	ATER LICENCE NUM	TO THE ORIGINA BER (IF APPLICABLE)			
D	12-22-2017 OCCURRENCE DATE: MONTH - D	AY - YEAR		17:00 OCCURREN	ICE TIME	OR □ UPDATE #		17 - 451	
A	40 00 0047			REPORT TO	W.C.	CORIGINAL SPIL	LL REPORT	0.0000000000000000000000000000000000000	

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Figure 2. Baffinland NT NU Spill Report

FIRST SUPPORT AGENCY
SECOND SUPPORT AGENCY
THIRD SUPPORT AGENCY



January 23, 2018

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Jonathan.mesher@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17- 452, Reported on December 23, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

#### **Summary:**

On December 23, 2017 at 9:15 HRS, a Site Services Fixed Plant employee observed fluid outside BA wing south lift station while conducting routine lift station inspections. Upon initial investigation, it was determined that the influent line into the lift station had separated at a Fernco coupling. Approximately 150 litres of raw sewage and grey water was released onto the adjacent ground, affecting an area of approximately 5 m2. The location of the spill was confined to the Port Site Complex pad. The spill is >150 m from the nearest water body which is currently frozen.

#### Immediate and Follow-Up Action:

Fernco coupler was replaced and insulated. A wood block was placed to add extra support for the coupler. The contaminated snow was collected and deposited in the Polishing Waste Stabilization Pond.

#### Recommendations:

Routine inspections of the pipes and inlets will continue to be completed to ensure all components are functioning as designed and there are no worn out or damaged parts. Investigation into the functionality of Fernco couplings currently being used versus another type of coupling.

#### **Current Status:**

The lift station is currently back in operation and inspected regularly.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden or Connor Devereaux at (647) 253- 0596 x6016.

Prepared By: Reviewed by:

Benjamin Widdewern Come Tom

Ben Widdowson Connor Devereaux
Environmental Coordinator Environmental Superintendent

Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Sylvain Proulx, Gerald Rogers, Francois Gaudrau, Tim Sewell, William Bowden, (Baffinland), Stephen Bathroy (QIA), Erik Allain, Sarah Forte (INAC)

### Baffinland



Photo 1 – Fernco coupler separated on the 4" gravity line into the lift station





Photo 2 – New coupler and wood support installed on 4" gravity line

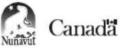




Figure 1 – Map of spill location







### NT-NU SPILL R**e**port

IL GASOLINE CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

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PAGE 1 OF 1

Figure 2 – NT-NU Spill report 17-452

2275 Upper Middle Road East, Suite 300 | Oakville, ON, Canada L6H 0C3 Main: 416.364.8820 | Fax: 416.364.0193 | www.baffinland.com



January 24, 2018

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Jonathan.mesher@aandc-aadnc.gc.ca Manager, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17- 453, Reported on December 24, 2017
Mary River Project - Water Licence No. 2AM-MRY1325

#### **Summary:**

On December 24, 2017 at 08:45 HRS an employee observed steam coming from the perimeter of the BD wing south lift station while conducting daily inspections. Upon initial investigation, it was determined the lift station pump was not operational due to a failed electrical thermostat inside the lift station enclosure causing the main breaker to trip. Therefore no power to float switches or pumps causing the holding tank to overflow. Approximately 300 L of sewage was released to the adjacent camp pad ground surface, impacting an approximately 8 m2 area. This location is greater than >100 m to the nearest water course (which is currently frozen).

#### Immediate and Follow-Up Action:

The thermostat was replaced, system reset and monitored to ensure system was functioning properly. All sewage within lift station box was pumped back through WWTP. The contaminated snow was collected and deposited in the Polishing Waste Stabilization Pond.

#### Recommendations:

Routine inspections of the pipes and inlets will continue to be completed to ensure all components are functioning as designed.

#### **Current Status:**

The pump and thermostat are working properly. Routine daily inspections are ongoing.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden or Connor Devereaux at (647) 253- 0596 x6016.

Prepared By: Reviewed by:

Benjamin Widdewern Come Dong

Ben Widdowson Connor Devereaux
Environmental Coordinator Environmental Superintendent

Attach: Photos, Map, NT-NU Spill Report

cc. Todd Burlingame, Sylvain Proulx, Gerald Rogers, Francois Gaudrau, William Bowden, Tim Sewell (Baffinland), Stephen Bathroy (QIA), Erik Allain, Jonathan Mesher, Sarah Forte (INAC)

### Baffinland



Photo 1 – Water Pooling on the inside of the Lift Station December 24, 2017





Figure 1 – Map of spill location









### NT-NU SPILL REPORT

DIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIAL

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

								REPORT LINE USE ONLY	
A	REPORT DATE: MONTH - DAY	-YEAR		REPORT	TIME	180	RIGINAL SPILL REPORT,		
^	12-25-2017			12:00		OR		REPORT NUMBER	
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	GEOGRAPHIC PLACE NAME O		-		REGION	0 1 1	/		
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G	N/A		N/A	ADDRESS	OR OFFICE LOCATION				
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Н	SECOND PRODUCT SPILLED (	(IF APPLICABLE)	N/A	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES N/A			U.N. NUMBER N/A		
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J	FACTORS AFFECTING SPILL O		DESCRIBE AN	Y ASSISTAN	CE REQUIRED		HAZARDS TO PERSONS, PRO	OPERTY OR EQUIPMENT	
U	Congested area, s  ADDITIONAL INFORMATION, C	Constitution of the second	N/A				N/A		
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SEC	OND SUPPORT AGENCY							-	
THIE	RD SUPPORT AGENCY								

PAGE 1 OF 1

Figure 2 – NT-NU Spill report 17-453



April 20 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-088, Reported on March 21, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

#### **Summary:**

On March 20th, 2017 at approximately 18:00, a fire was reported at KM 70 on the Milne Port Tote Road. The Mine rescue team was dispatched to extinguish the fire. The fuel and hydraulic tanks on the truck were not breached by the fire. Approximately 4m3 of water was used to extinguish the fire. No foam or chemical suppressants were used.

The location of the spill was confined to the Tote Road surface, on IOL, with no possibility of migrating and is greater than 1km from the closest water body which is currently frozen.

#### Immediate and Follow-Up Action:

After fire was confirmed extinguished clean up began. Spill pads, secondary containment and heavy equipment were used to mitigate the spill and the contaminated snow was scraped up and disposed of in Quatrex bags. An inspection was done of the surrounding area to ensure no additional fuel or coolant was released on to the ground following the removal of the Ore Haul truck.

#### Recommendations:

Preventative maintenance inspection programs on Ore Haul trucks are continuing to be implemented to reduce operational breakdowns and resultant spills.

#### **Current Status:**

The scene of the fire has been cleaned up and the contaminated snow was placed in a lined engineered containment facility. The Ore Haul truck was floated back to maintenance for repair.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden or Laura Taylor at (647) 253-0596 x6016.

Prepared By:

Reviewed by:

Katherine Babin

**Environmental Coordinator** 

William Bowden

**Environmental Superintendent** 

Attach: Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Robert Gagne, Lyle Hemmerling Shawn Perry (Baffinland) Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC)





Photo 1: Impacted water contained on the surface of the Tote Road



Photo 2: Ore Haul truck front cab tire-source of fire





Photo 3: Grader removing contaminated snow for placement into Quatrex Bags

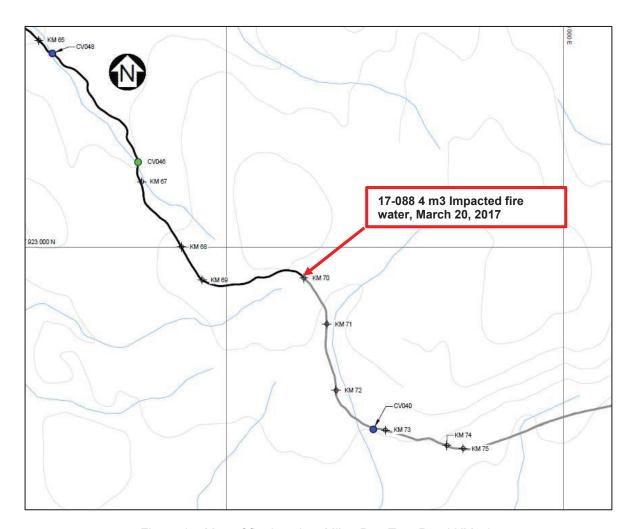


Figure 1 – Map of fire location, Milne Port Tote Road KM 70



#### NT-NU SPILL REPORT

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: spills@gov.nt.ca

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS REPORT LINE USE ONLY REPORT DATE: MONTH - DAY - YEAR DEDODTTIME X ORIGINAL SPILL REPORT, 03-21-2017 17:45 HRS REPORT NUMBER OCCURRENCE DATE: MONTH - DAY - YEAR OCCURRENCE TIME UPDATE # 17 - 088 В TO THE ORIGINAL SPILL REPORT 03-20-2017 18:00 HRS LAND USE PERMIT NUMBER (IF APPLICABLE) WATER LICENCE NUMBER (IF APPLICABLE) IOL - Commercial Lease: Q13C301 2AM-MRY1325 Type "A" GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION D Mary River Mine Site, Baffin Island, NU □ NWT X NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN LATITUDE LONGITUDE Е DEGREES 80 DEGREES 71 MINUTES 24 ECONDS 12 02 SECONDS 59 MINITES RESPONSIBLE PARTY OR VESSEL NAME RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION Baffinland Iron Mines Corp. 2275 Middle Road East, Suite 300, Oakville, ON L6H 0C3 ANY CONTRACTOR INVOLVED CONTRACTOR ADDRESS OR OFFICE LOCATION G١ N/A PRODUCT SPILLED QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES U.N. NUMBER Impacted Fire Water Approx. 4 m3 N/A SECOND PRODUCT SPILLED (IF APPLICABLE) QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES U.N. NUMBER N/A N/A N/A SDILL SOLIDCE SPILL CAUSE AREA OF CONTAMINATION IN SQUARE METRES ı Fire/ Fire Fighting Egiupment Approx 100m2 Fire Fighting FACTORS AFFECTING SPILL OR RECOVERY DESCRIBE ANY ASSISTANCE REQUIRED HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT Fire, Frozen Conditions **Heavy Equipment** ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS On March 20th, 2017 at approximately 18:00, a fire was reported at KM 70 on the Milne Port Tote Road. The Mine rescue team was dispatched to extinguish the fire. The fuel and hydraulic tanks on the truck were not breached by the fire. Approximately 4m3 of water was used to extinguish the fire. No foam or chemical suppressants were used. After fire was confirmed extinguished clean up began. Spill pads, secondary containment and heavy equipment were used to mitigate the spill and the contaminated snow was scraped up and disposed of in Quatrex bags. The location of the spill was confined to the Tote Road surface, on IOL, with no possibility of migrating and is greater than 1km from the closest water body which is currently frozen. The investigation is ongoing and further details of the incident will be provided in the follow-up report. This spill is being reported as required by the conditions of water license no. 2AM-MRY1325, Part H, item 9 (b) as per subsection 12(3) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act. REPORTED TO SPILL LINE BY EMPLOYER OCATION CALLING FROM TELEPHONE William Bowden Env. Superintendent Baffinland 647-253-0596 ext. 6016 ANY ALTERNATE CONTACT EMPLOYER ALTERNATE CONTACT ALTERNATE TELEPHONE M Wayen McPhee Env. Director 416-996-5523 **Baffinland** Ext 5088 REPORT LINE USE ONLY POSITION LOCATION CALLED REPORT LINE NUMBER RECEIVED AT SPILL LINE BY EMPLOYER STATION OPERATOR YELLOWKNIFE, NT 867) 920-8130 LEAD AGENCY = EC = CCG = GNWT = GN = LA = INAC = NEB = TC SIGNIFICANCE - MINOR - MAJOR - UNKNOWN FILE STATUS - OPEN - CLOSED AGENCY CONTACT NAME CONTACT TIME REMARKS LEAD AGENCY FIRST SUPPORT AGENCY SECOND SUPPORT AGENCY THIRD SUPPORT AGENCY

Figure 2 – NT-NU Spill report 17-088

PAGE 1 OF 1



April 24, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-092, Reported on March 25, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

#### **Summary:**

At 03:45 HRS on March 25 an operator was loading sump water totes from the maintenance shop onto the stake truck to deliver the contaminated water tote to the Mine Site Hazardous Waste Berm (MS-HWB-7). While removing the forks the operator noticed structural damage to the tote. The operator then attempted to lower the tote to the ground. At this time it tipped over releasing approx. 400 L of contaminated water to the surrounding camp pad and access road, contaminating an area of approximately 300 m². The location of the spill was confined to the maintenance shop pad and access road, occurred on IOL, and is greater than 200 metres from the closest water body which is currently frozen

#### Immediate and Follow-Up Action:

A loader was used to clean up the contaminated snow which was disposed of in a lined engineered containment facility.

#### Recommendations:

Ensure that operators are inspecting totes for structural stability before handling or preparing them for transport. A spotter should be used when possible to ensure safe handling of totes.

#### **Current Status:**

The contaminated snow has been cleaned up and disposed of in an lined engineered containment facility. The contaminated snow will be treated using the oily water treatment facility during the open water season.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden or Laura Taylor at (647) 253-0596 x6016

Prepared By:

Reviewed by:

Katherine Babin

**Environmental Coordinator** 

William Bowden

Bell Bonder

**Environmental Superintendent** 

Attach: Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Robert Gagne, Eric Steinmetzer, Gordon Mudryk, Jeff Bush, Jimmy Puk (Baffinland) Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC)





Photo 1: Damaged tote spilled while being loaded for transport to MS-HWB-7



Photo 2: Affected area after cleanup and snow removal

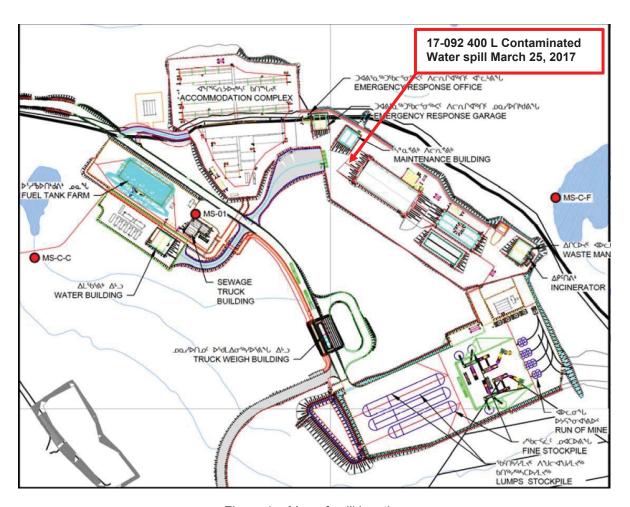


Figure 1 – Map of spill location



NT-NU 24-HOUR SPILL REPORT LINE TEL: (867) 920-8130 FAX: (867) 873-6924 EMAIL: Spills@gov.nt.ca

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Ë			ISED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERI						MINATED MATERIALS	
K	the contaminated forks the operator tote to the ground surrounding came which was disposed confined to the no- from the closest details of the inci- by the conditions	loading sump wat d water tote to the or noticed structur d. At this time it tip ap pad and access sed of in a lined en aintenance shop water body which ident will be provided of water license of	Mine Site I al damage pped over road. A lo ngineered pad and ad is current ded in the no. 2AM-M	Hazard to the releasi ader w contain ccess r ly froze follow- RY132 Tribun	ous Waste tote. The cong approx as used to ment facilities. The inverse total and the constant of the constant	e Berm operato . 400 L oclean lity. The rred on estigati This sp tem 9 (l	(MS-HWB-7).  r then attem; of contamina up the conta e location of IOL, and is g ion is ongoir bill is being r b) as per sul	. While pted to ated wa minate the spi greater ng and eported bsection	removing the lower the ater to the d snow ill was than 500m further d as required	
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_	William Bowden	Env. Superint	tendent	Baffin			47-253-0596 TERNATE CONTACT		ext. 6016	
M	Wayne McPhee	Dir. Sust Dev	elopment	Baffin			16-996-5523		Ext 5088	
Г		·	REPORT LIN	E USE ON	LY					
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IN		STATION OPERATOR				YE	LLOWKNIFE, NT	(	867) 920-8130	
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SEC	OND SUPPORT AGENCY									
THIE	RD SUPPORT AGENCY									

Figure 2 – NT-NU Spill report 17-092

PAGE 1 OF 1



May 4<sup>th</sup>, 2017

Resource Management Officer Nunavut Field Operations Indigenous and Northern Affairs Canada Box 100 Iqaluit, NU X0A 0H0 Justin.Hack@aandc-aadnc.gc.ca Director, Major Projects Qikiqtani Inuit Association P.O. Box 219 Iqaluit, NU X0A 0H0

Re: Follow-up to Spill #17-105, Reported on April 5<sup>th</sup>, 2017 Mary River Project - Water Licence No. 2AM-MRY1325

#### **Summary:**

At 10:30 HRS on April 5th, night shift superintendent notified environmental personnel that a loaded Ore Haul Truck had driven off the tote road while heading north bound. It was observed that the fuel tank was not punctured but was slowly over topping causing fuel to leak out as the truck was situated on an angle. Operators responded immediately by placing spill pads and a duck pond to collect the diesel being released. Approximately 100 L of fuel was released to the adjacent ground, impacting an area of less than 1m2. The location of the spill was confined to the side of the Tote Road at Km 54, and is greater than 50 meters from the closest water body which is currently frozen.

#### Immediate and Follow-Up Action:

A loader was used to remove the contaminated snow which was disposed of in a lined engineered containment facility.

#### Recommendations:

Preventative maintenance inspection programs on Ore Haul trucks are continuing to be implemented to reduce operational breakdowns and resultant spills.

#### **Current Status:**

The contaminated snow has been cleaned up and disposed of in a lined engineered containment facility. The contaminated snow will be treated using the oily water treatment facility during the open water season.

Should you require further information or clarification on the above noted spill, please feel free to contact William Bowden or Laura Taylor at (647) 253-0596 x6016

Prepared By: Reviewed by:

Connor Devereaux Laura Taylor

Environmental Coordinator Environmental Superintendent

Attach: Map, NT-NU Spill Report

cc. Todd Burlingame, Wayne McPhee, Sylvain Proulx, Eric Steinmetzer, Lyle Hemmerling, JP Provencher (Baffinland) Stephen Bathory (QIA), Erik Allain, Sarah Forte, Jonathon Mesher (INAC)





Photo 1: Ore Haul Truck off Tote Road at Km 54



Photo 2: Ore Haul Truck before extraction at Km 54 of Tote Road



Figure 1 – Map of spill location

B OCCURRENCE DUE: MONTH- DAY - YEAR DICOURRENCE TIME DI LIDIATE II DI LI	DD NOS 56		
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the tote road while heading north and was leaking fuel. It was observed that the fuel tank punctured but was slowly over topping as the truck was on its side. The workers respond immediately by placing spill pads and duck pond to collect the diesel. Approx. 100 L of fu impacting an area of less then 1m2. Once the truck is removed, the area will be cleaned to removing all contamination and transferring to the land-farm at Milne Port Site. The local spill was confined to the west side of the tote rd at Km 54, and is greater than 50 meters to closest water body which is currently frozen. The investigation is ongoing and further delincident will be provided in the follow-up report. This spill is being reported as required by conditions of water ilcense no. 2AM-MRY1325, Part H, Item 3 (b) pursuant to subsection Nunavut Waters and Nunavut Surface Rights Tribunal Act.	ded uel spilled, up by tion of the from the talls of the by the		
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Figure 2 – NT-NU Spill report 17-105

PAGE 1 OF 1

THIRD SUPPORT AGENCY



September 2, 2017

Justin Hack, Resource Management Officer
Nunavut Field Operations
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Indigenous Affairs and Northern Development Canada
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Iqaluit, NU XOA 0H0

Curtis Didham, Enforcement Officer
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Environment and Climate Change
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933 Mivvik Street
Iqaluit, NU XOA 0H0

RE: Update on Status, Actions Taken and Planned Corrective Actions for Waste Rock Stockpile Facility
Type A Water Licence 2AM-MRY1325 – Amend. No. 1

The purpose of this letter is to provide an update on the status of Mary River Project Mine Site Waste Rock Stockpile (Waste Rock Stockpile) and associated water management infrastructure. Included is an outline of actions taken to date to address previously identified concerns regarding the Waste Rock Stockpile Sedimentation Pond (Sedimentation Pond) and additional planned actions to be taken to address outstanding concerns.

#### **Background**

On August 16, 2017, Baffinland notified regulators and stakeholders that the water quality of surface water runoff originating from the Waste Rock Stockpile is not meeting discharge requirements and there was limited remaining capacity in the Sedimentation Pond.

#### **Update**

Subsequent to the notifying regulators and stakeholders, Baffinland was able to successfully batch treat the water contained in the Sedimentation Pond using soda ash and installed sedimentation mitigation measures. Controlled discharges from the treated Sedimentation Pond to the receiving environment have occurred since the treatment and will continue, as required, up until freeze up. Available water quality monitoring data indicate discharges met all applicable discharge criteria under the Type A Water Licence and Metal Mining Effluent Regulations (MMER), with the exception of total suspended solids. Compliance with applicable discharge criteria is confirmed upon receiving all water quality monitoring data from 3<sup>rd</sup> Party laboratories.

On August 23, 2017 during an inspection of the Mine Site Waste Rock Stockpile Sedimentation Pond with Environment and Climate Change Canada (ECCC) and Indigenous and Northern Affairs Canada (INAC), seepage was observed originating from the central toe of the Sedimentation Pond in approximately four (4) discrete but closely clustered locations. It is uncertain at this time as to the exact cause of the observed flows however initial inspections indicate that surface water runoff is potentially infiltrating below the liner inlet key in. An emergency containment ditch was completed shortly after on August 25, 2017 to contain the observed seepage.

The following paragraphs outline Baffinland's action plan to evaluate and stop the seepage from the toe of the Sedimentation Pond.

#### **Action Plan**

The pond design and field engineering during construction was completed by Hatch. Baffinland has contacted Hatch for their support and expertise for addressing this serious issue. Hatch has committed to sending a field engineer team to site to determine the root cause and develop a short term action plan to stop the seepage. The field engineer team's assessment is scheduled to commence on September 1, 2017. Baffinland has scheduled personnel and equipment from Sept 6, 2017 forward to conduct the earthworks required to execute Hatch's short term action plan.

If the investigation led by the field engineer team results in a short term solution that cannot be implemented before freeze-up, an interim solution will be put in place. The interim solution will ensure seepage is conveyed to the downstream emergency collection ditch, and will include a sump(s) that will be directed back to the pond up until freeze-up, if water quality is non-compliant with applicable discharge criteria. This interim solution will collect the observed seepage from Sedimentation Pond until Hatch's short term action plan can be implemented in 2018.

The upstream area of the pond, including the east collection ditch and pond liner key in will be re-graded regardless of whether Hatch's short term action plan can be implemented before freeze up. This will prevent water from pooling on the inlet of liner. The lack of proper grading is seen by Baffinland to be a major issue and will be resolved prior to freeze up.

In parallel, a long term plan is in development that involves expanding the Waste Rock Stockpile Facility and associated surface water management infrastructure, including the sedimentation pond, in 2018. The expansion would improve the surface water management infrastructure associated with the Mine Site Waste Rock Stockpile and incorporate additional water management contingency into the design. The expansion will be submitted to the Nunavut Water Board and appropriate agencies for approval in late 2017. Implementation of the expansion would not commence until all necessary approvals are received.

Sincerely,

Sylvain Proulx

Chief Operating Officer

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Cc: Stephen Williamson Bathory (Qikiqtani Inuit Association)

David Hohnstein, Sean Joseph (NWB)

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Jonathan Mesher, Sarah Forté, Karen Costello (INAC)

Todd Burlingame, Adam Grzegorczyk, Wayne McPhee, William Bowden, Andrew Vermeer, Laura

Taylor, Allan Knight (Baffinland)