APPENDIX E.8

Regulatory Correspondence

APPENDIX E.8.1

CIRNAC Inspection Reports

August 11, 2020

Jonathon Mesher
Water Resources Officer, CIRNAC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0

RE: Water Licence 2AM-MRY1325 February 2020 Inspection – Follow Up

The following submission from Baffinland Iron Mines Corporation (Baffinland) is a follow up in response to the Water Licence Inspection conducted on February 17-18, 2020, at Baffinland's Mary River Project (the Project) by Crown-Indigenous Relations Northern Affairs Canada (CIRNAC) Water Resource Officer. The attached Table 1 provides a summary of the Inspector's remaining key observations and concerns. Baffinland has detailed responses to these items in Table 1.

Should you require further information, please feel free to contact the undersigned at (647) 253-0596 Ext. 6016.

Prepared by:

Connor Devereaux
Environmental Superintendent

Reviewed by:

Christopher Murray
Environmental & Regulatory Compliance Manager

Cc: Assol Kubeisinova, Karén Kharatyan (NWB)
Chris Spencer (QIA)
Justin Hack, Jeremy Fraser (CIRNAC)
Tim Sewell, Megan Lorde-Hoyle, Lou Kamermans, Shawn Stevens, Aaron MacDonell, Amanda McKenzie (Baffinland)

Attachments

Attachment 1: 2AM-MRY1325 February 2020 Inspection Report

Attachment 2: Table 1- Baffinland's Responses

Attachment 1

2AM-MRY1325 February 2020 Inspection Report

INSPECTION FORM

☒ Original
☐ Follow-Up Report

Licensee	Licensee Representative
Baffinland Iron Mines Corporation(BIMC)	William Bowden
Licence No. / Expiry	**Representative's Title**
2AM-MRY1325	Environmental Superintendent
Land / Other Authorizations	**Land / Other Authorizations**
8BC-MRY1416, 2BE-MRY1421	N2014X0012, N2014Q0016, N2014C0013
Date of Inspection	**Inspector**
February 17-18, 2020	Jonathan MESHER

Activities Inspected

☒ Camp ☐ Drilling ☒ Mining ☐ Construction ☐ Reclamation ☐ Fuel Storage
☒ Roads/Hauling ☐ Other: ☐ Other: Municipality

SECTION 1 ☒ **Comments** (s.__) ☐ **Non-Compliance with Act or Licence** (s.__) ☐ **Action Required** (s.__)

Inspector Statement

A water licence inspection was conducted at Mary River and Milne Inlet to ensure compliance with the terms and conditions of the Water Licence 2AM-MRY1325. This inspection was conducted by Water Resource Officer JONATHAN MESHER on February 17th through 18th, 2019.

Inspection

1. **Tote Road, Bridges and associated Water management structures.**
   - **a)** During the inspection the licensee was still utilizing Ice roads to cross the river usually crossed by bridges.
   - b) Water management structures throughout the tote road were snow covered making it difficult to identify any concerns.

2. **Ore Stockpile and associated water management structures.**
   - **a)** In the previous inspection (September 2019) the Inspector noted the following "The Inspector identified discrepancies between the Ore Stockpile Pad and the provided AS-BUILT/ Issue for construction drawings (IFC) produced by HATCH (H349000-2133-10-035-0002). The Pad appears to be missing outer berms and the ditches on the SE side near the entrance. Once identified, the inspector requested the licensee to install the required ditches within 30 days as of September 17, 2019 and is to install all berms described in the engineered drawings." During this inspection it had appeared that the missing structures were installed but, the facility was mainly snow covered making it had to verify. A more detailed inspection will conducted in spring of 2020 to verify the water management structures are built to the specification described in the As- built drawings.
   - b) All the containment ponds associated with this structure appeared to be pumped out to prepare for Freshet. See photo 1 for MP-05 and Photo for MP-06.
   - c) The newly constructed pond on the Ore Stockpile Pad (Pond number 3) is not complete, the licensee plans to have it operational prior to Freshet 2020.
   - d) The Berms and gradient on the South side of the Ore Stockpile Pad has not been constructed properly, the licensee states that it will require pumps to get the water to the associated containment ponds.
     - I. PART D, Item 17 states; The Licensee shall supervise and field check through an appropriately qualified Engineer, all construction of Engineered Structures in such a manner that the project specification can be enforced, and where required, the quality control measures are followed. The inspector is requesting the licensee provide proof that the construction of this facility has been supervised and field checked by qualified Engineer, due to previous water management structures failing because of the lack of engineer oversight at the time of construction and requirement of the Licence 2AM-MRY1325 described in Part D, Item 17.

3. **Waste Rock Stockpile and associated Water management structures.**
   - **a)** At the time of the inspection, the Waste Rock Stockpile Containment Pond was complete, the construction had completed in January 2020, The inspector is requesting the licensee provide the exact date of completion of this facility and ensure that the plans described in PART G, Item 6 are submitted within the timeframe given. See Photo 4 for the Waste Rock Stockpile containment pond.

   - **b)** The licensee had cleared the area between the pile and the recently installed ditches on east side of the Waste Rock Stockpile, the licensee stated that this area was cleared and a layer of Non-acid generating (NAG) waste rock has been laid prior to any deposits of potentially acid generating (PAG). See Photo 3 for the cleared area on the East side of the stockpile.

   - **c)** The Waste Rock Stockpile and water management structures were snow-covered at the time of the inspection making it hard to identify and potential concerns.

4. **Ore Crushing Pad and associated water management structures.**
   - **a)** In the previous inspection (September 2019) the Inspector noted the following "the ditch system around the stockpile was not functioning as intended. The licensee is currently pumping water into the ponds from the pooling water on the Pad." The ditches are still not operational; the licensee is still planning to have them repaired prior to Freshet 2020. This facility will be thoroughly inspected in 2020 to ensure the facility is constructed as described In the approved engineered drawings.

   - **b)** Since May, 2016 CIRNAC has identified pooling water within the crusher pad, the inability of BIMC to effectively manage surface water in the facility is a continual problem on this unlined Pad. This Pad is only approved as described in the As-built and IFC drawings, in the engineered drawings the surface water should flow to the ditches without the need for human intervention such as pumps, due to the slope of the pad. The licensee is to develop a plan to ensure this facility is appropriately maintained, the inspector is requesting that this plan include schedules for grading of the facility to ensure that this pooling discontinues, grade is maintained throughout the seasons and the ditches surrounding the facility are operating as intended. See photos 5 and 6 for the ore crushing pad.

5. **Landfill**
   - a) At the time of the inspection the new fence surrounding the landfill was completed, the landfill was left unlocked and unmanned.

   - b) The inspector noted small amounts food waste within the Landfill, see photo 7 for the food waste identified. In section 3.7 of BIMC's Waste Management Plan (BAF-PH1-830-P16-0028) Baffinland states that: "Disposal of all domestic (food) waste, hazardous and biomedical materials at the Landfill Facility is prohibited." BIMC is encouraged to continue to educate its employees in order to prevent further unapproved deposits of food waste into this facility.

   - c) There was also a large pile of cigarette butts found in the landfill, I am not certain if the cigarette is intended to be deposed of within this land fill. The inspector will correspond with the NWB to determine if this is an appropriate activity. See photo 8 for the cigarette butts.

6. **New Fuel facility at Mary River site.**
   - a) At the time of the inspection the hose used for fuel transfer was actively leaking, the snow within the containment berm had a strong smell of Diesel Fuel. The licensee explained that this leak was from a gasket on the coupling. See Photo 9 for the leaking coupling and 10 for the hose sitting outside the drip tray.

7. **Spill identified during the inspection.**

a) While on site the inspector identified a spill at the km 60 rest stop.

Comments	☒ Non-Compliance with Act or Licence	☒ Action Required

The following is a list of non-compliance and actions required by the Licensee.

a) The inspector is requesting the licensee provide proof that the construction of the recent water management structures have been supervised and field checked by qualified Engineer, due to previous water management structures failing because of the lack of engineer oversight at the time of construction and requirement of the Licence 2AM-MRY1325 described in Part D, Item 17.

b) The inspector is requesting the licensee provide the exact date of completion of the Waste Rock Stockpile sedimentation pond and ensure that the plans described in PART G, Item 6 are submitted within the timeframe given.

c) The licensee is to develop a plan to ensure that the ore stockpile pad is appropriately maintained, the inspector is requesting that this plan include schedules for grading of the facility to ensure that this pooling discontinues, grade is maintained throughout the seasons and the ditches surrounding the facility are operating as intended.

Licensee or Representative	Inspector's Name
	Jonathan Mesher
Signature	**Signature**
	
Date	**Date**
	10/8/2019

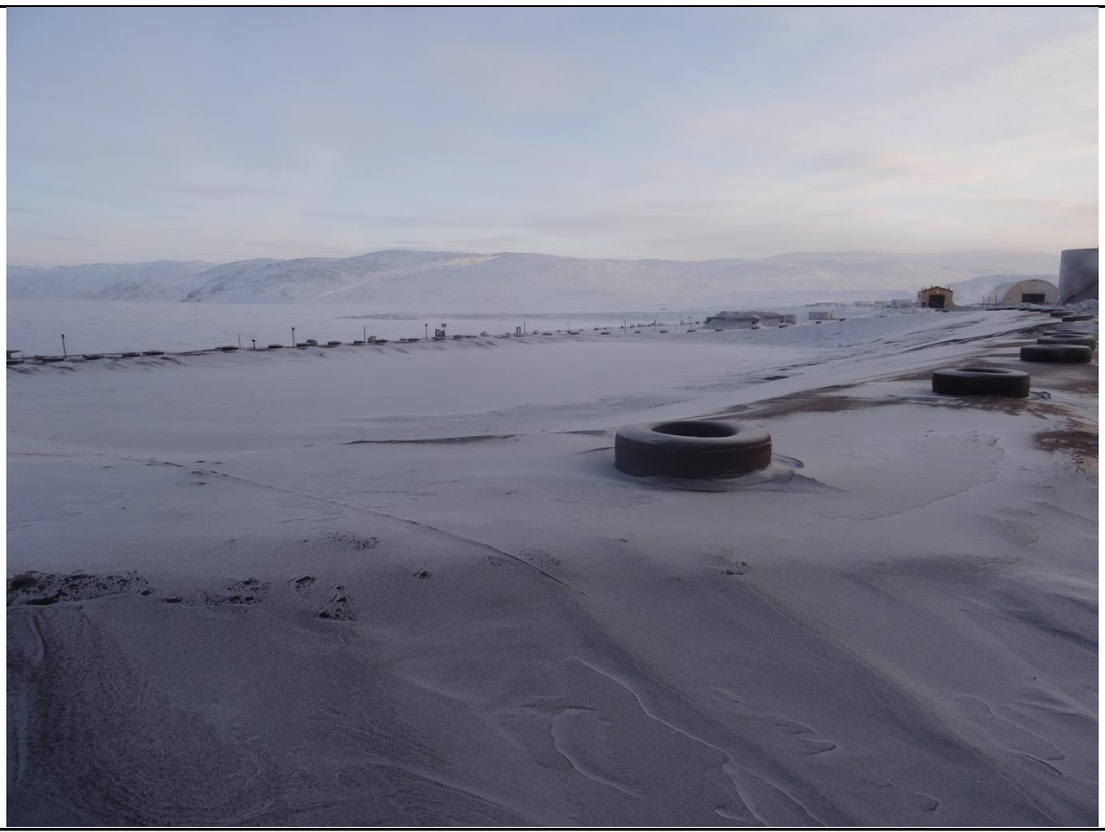
Office Use Only:	Follow-up report to be issued by Inspector	☐ Yes	☐ No

CC: Licensing Department, NWB
Justin Hack, Manager of Field Operations, CIRNAC

PHOTO LOG

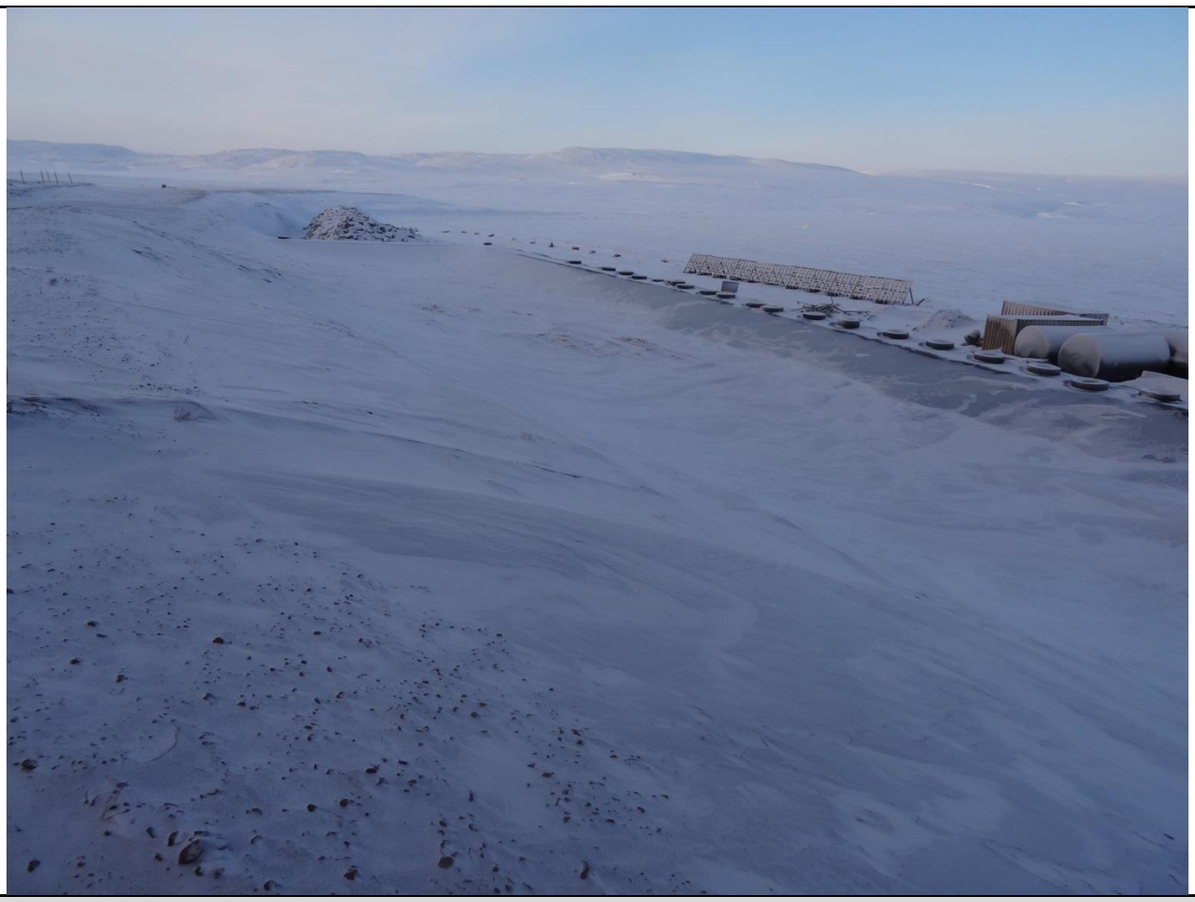
Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY
Photo Log		**Location Iqaluit**	

Photo 1



Description: MP-05 sedimentation pond

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY
Photo Log		**Location Iqaluit**	
Photo 2			

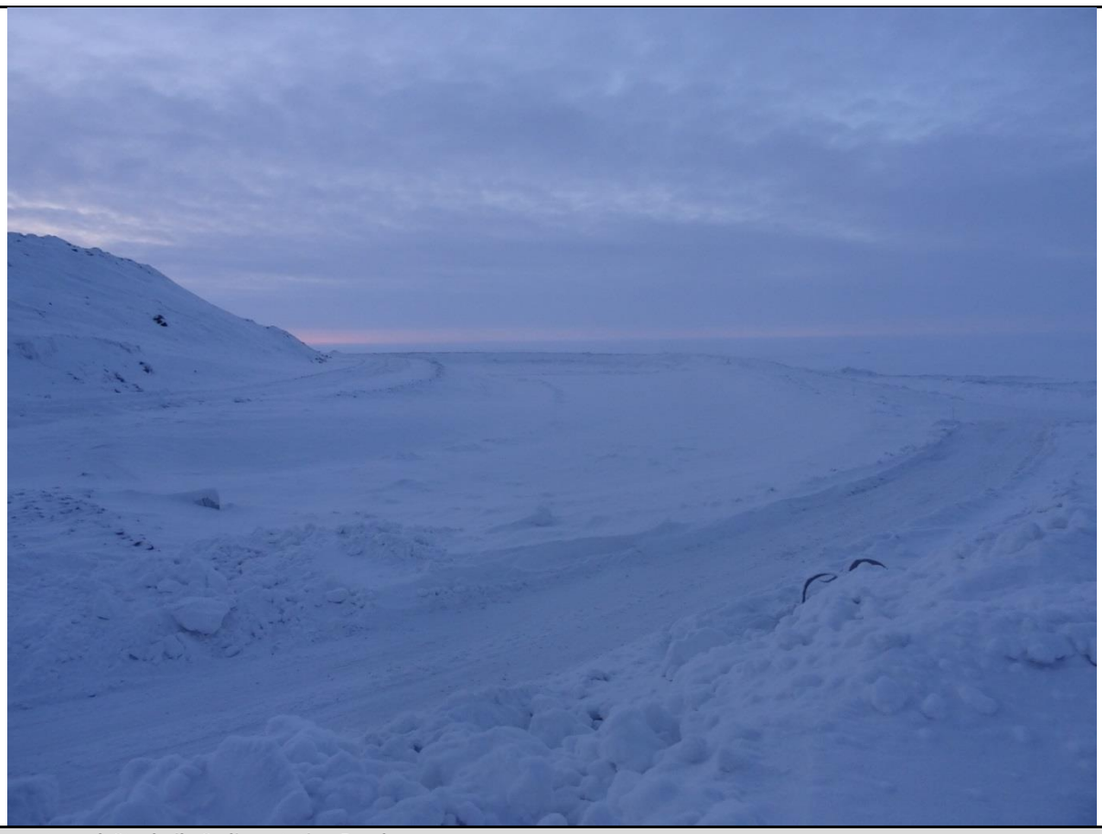


Description: MP-06 Sedimentation pond.

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY
Photo Log		**Location Iqaluit**	
Photo 3			

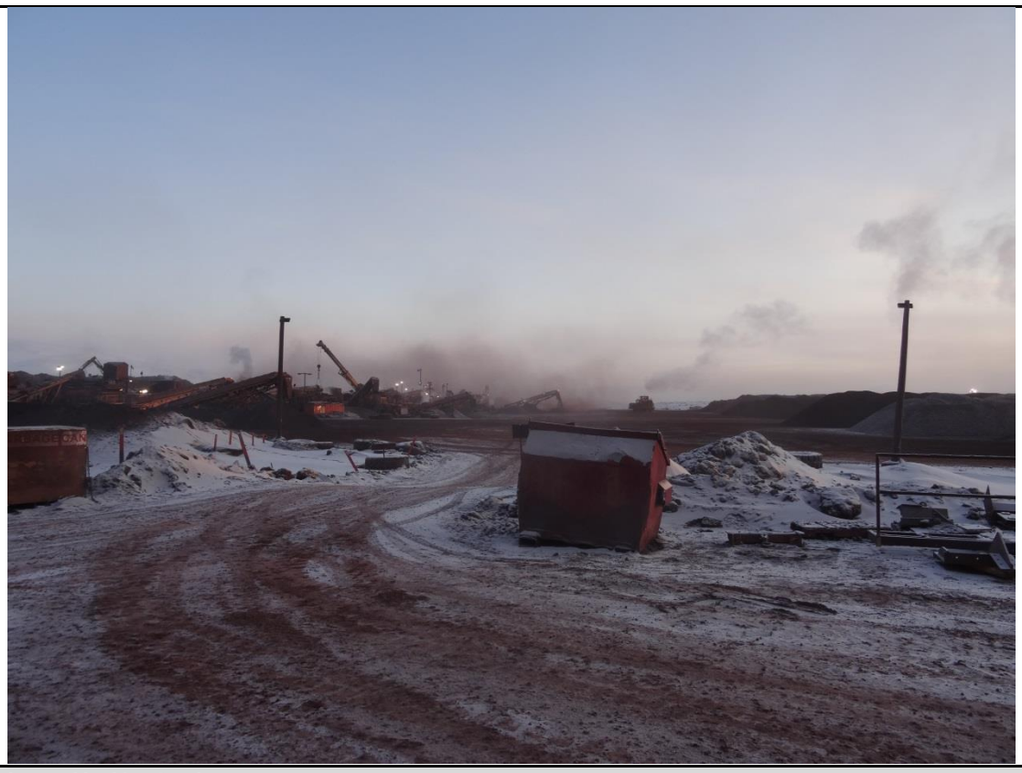
Description: WRSP- cleared area to allow for pile increase.

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY
Photo Log		**Location Iqaluit**	
Photo 4			



Description: waste rock Stockpile Sedimentation Pond.

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY
Photo Log		**Location Iqaluit**	
Photo 5			



Description: Crusher pad looking Southwest.

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY

Photo Log **Location Iqaluit**

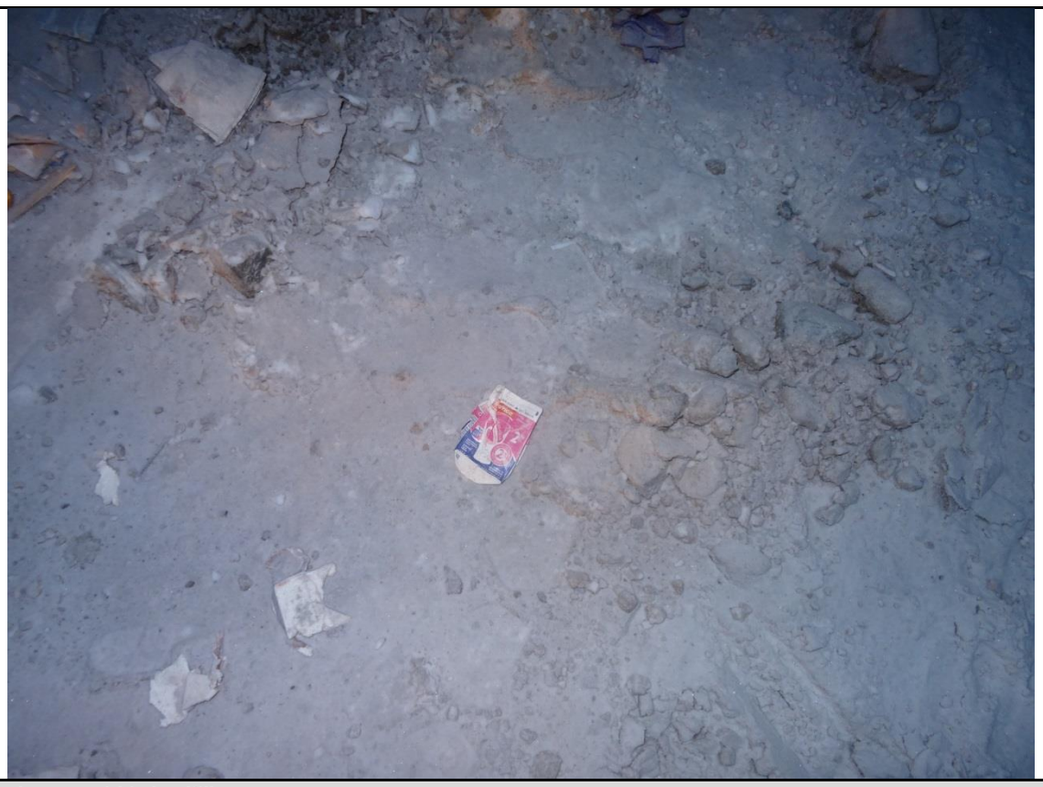
Photo 6

Description: Crushing area looking Northeast.

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY

Photo Log **Location Iqaluit**

Photo 7



Description: Food waste within landfill.

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY

Photo Log **Location Iqaluit**

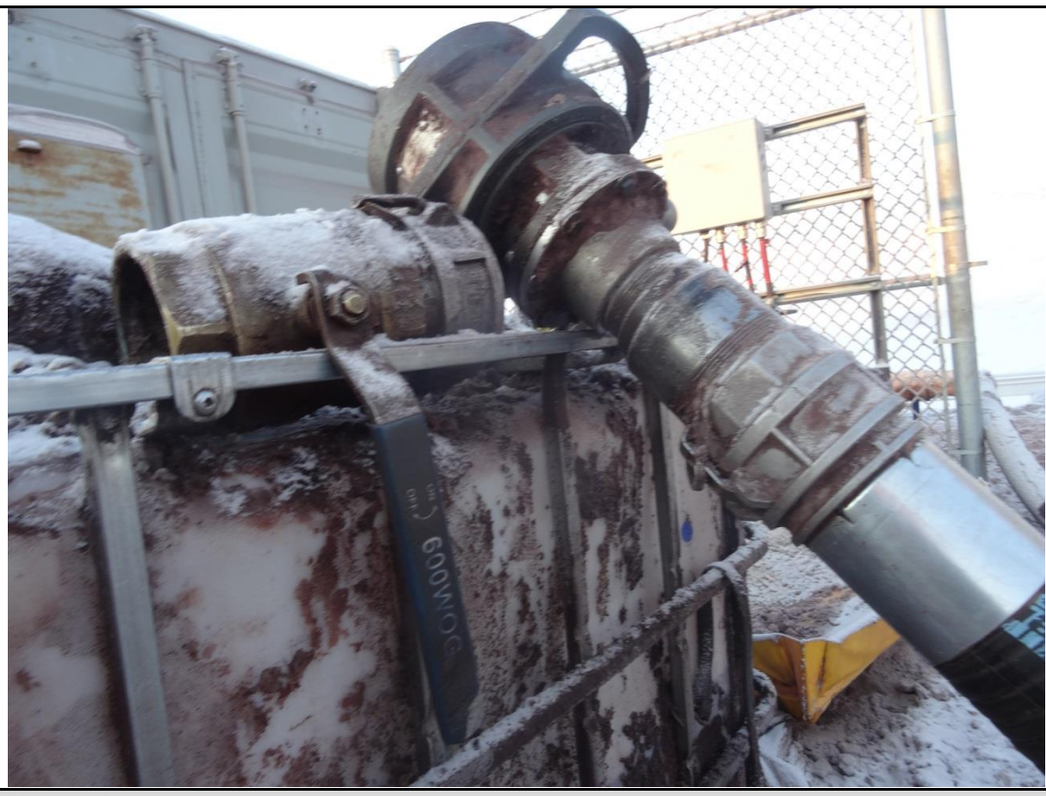
Photo 8

Description: Cigarette butts within the lanfdill.

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY

Photo Log **Location Iqaluit**

Photo 9

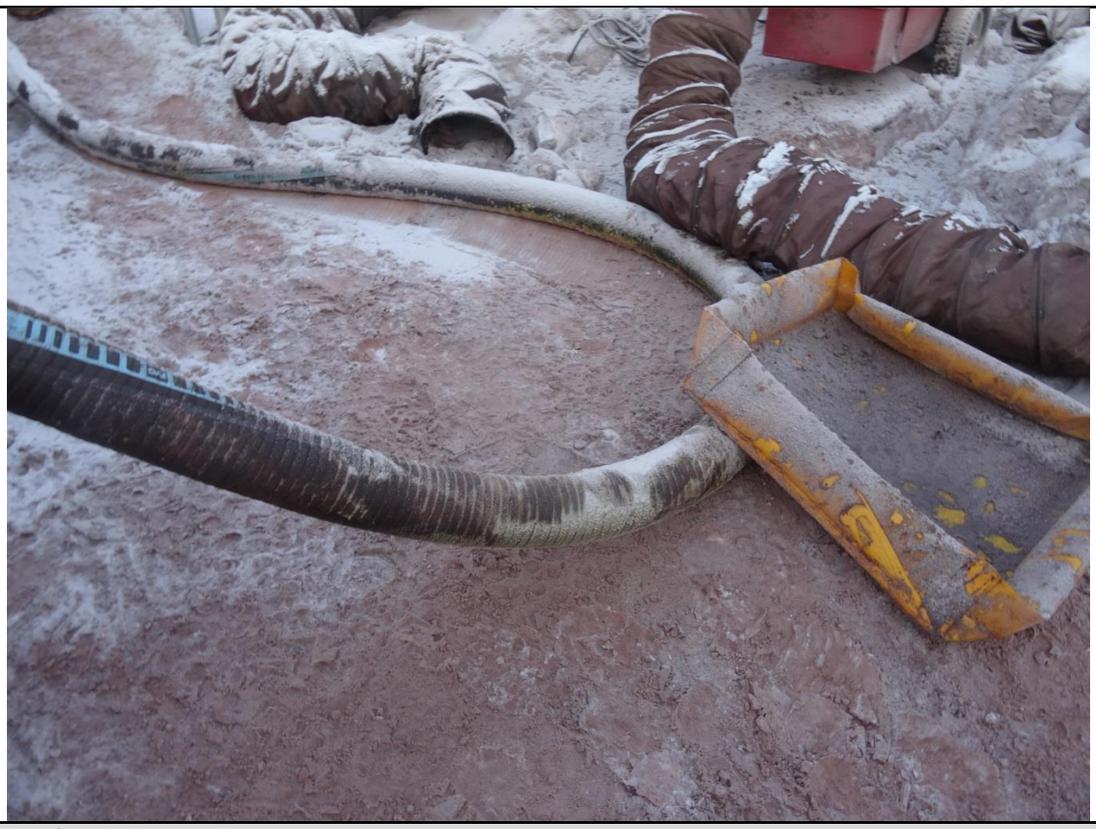


Description: leaking coupling.

Date	Camera	Inspector	Authorization
	Sony Cyber-shot	J.Mesher	2AM-MRY

Photo Log **Location Iqaluit**

Photo 10



Description: hose from leaking coupling.

Attachment 2

Response Summary Table

Table 1 – Baffinland Responses to CIRNAC Water Licence Inspection

#	Description of Concern or Finding	Response
Tote Road, Bridges and Associated Water Management Structures		
1	a) During the inspection the licensee was still utilizing ice roads to cross the river usually crossed by bridges. b) Water management structures throughout the Tote Road were snow covered making it difficult to identify any concerns.	Temporary ice road crossings were constructed to cross the river during the 2019-2020 winter season to accommodate Tote Road travel during routine bridge maintenance activities. Decommissioning of the temporary 2019-2020 winter ice road was completed prior to freshet 2020. The decommissioning involved the removal of all crossing materials (delineators, stop signs, gravel, etc.) and of all impacted snow from the crossing. The ice bed was subsequently notched to ensure free flow during melt conditions.
Ore Stockpile and Associated Water Management Structures		
2	a) In the previous inspection (September 2019) the Inspector noted the following "The Inspector identified discrepancies between the Ore Stockpile Pad and the provided AS-BUILT/ Issue for construction drawings (IFC) produced by HATCH (H349000-2133-10-035-0002). The Pad appears to be missing outer berms and the ditches on the SE side near the entrance. Once identified, the inspector requested the licensee to install the required ditches within 30 days as of September 17, 2019 and is to install all berms described in the engineered drawings." During this inspection it had appeared that the missing structures were installed	Baffinland has prepared a technical memorandum to document the Ore Stockpile Pad regrading strategy to assist in mitigating standing water by ensuring water is directed toward ponds and ditches. This memorandum outlines the grading work to be undertaken, and the frequency in which grading is to be performed to prevent the pooling of water on and around the Ore Stockpile Pad. The Ore Stockpile Pad Regrading technical memorandum was submitted to CIRNAC as part of the Water Licence 2AM-MRY1325 September 2019 Inspection - Follow Up document on May 15, 2020.

	but, the facility was mainly snow covered making it had to verify. A more detailed inspection will be conducted in spring of 2020 to verify the water management structures are built to the specification described in the As-built drawings. The licensee is to develop a plan to ensure that the ore stockpile pad is appropriately maintained, the inspector is requesting that this plan include schedules for grading of the facility to ensure that this pooling discontinues, grade is maintained throughout the seasons and the ditches surrounding the facility are operating as intended.	
	b) All the containment ponds associated with this structure appeared to be pumped out to prepare for Freshet. See photo 1 for MP-05 and Photo for MP-06.	CIRNAC's comment is noted. No update is required for this finding.
	c) The newly constructed pond on the Ore Stockpile Pad (Pond number 3) is not complete, the licensee plans to have it operational prior to Freshet 2020.	Pond 3 was completed to design prior to project demobilization from site in late 2019. The Stockpile No. 1 expansion Construction Summary Report including the as-built drawing for Pond 3 is being prepared and will be submitted upon completion.
	d) The Berms and gradient on the South side of the Ore Stockpile Pad has not been constructed properly, the licensee states that it will require pumps to get the water to the associated containment ponds.	Construction of the water management structures was supervised by a qualified Engineer; final review of the designs will be stamped and signed off by a qualified Engineer with the Construction Summary Report. The expansion Construction Summary Report including the as-built drawings for the south berm is currently being prepared.

	i. PART D, Item 17 states; The Licensee shall supervise and field check through an appropriately qualified Engineer, all construction of Engineered Structures in such a manner that the project specification can be enforced, and where required, the quality control measures are followed. The inspector is requesting the licensee provide proof that the construction of this facility has been supervised and field checked by qualified Engineer, due to previous water management structures failing because of the lack of engineer oversight at the time of construction and requirement of the Licence 2AM-MRY1325 described in Part D, Item 17. The inspector is requesting the licensee provide proof that the construction of the recent water management structures have been supervised and field checked by qualified Engineer, due to previous water management structures failing because of the lack of engineer oversight at the time of construction and requirement of the Licence 2AM-MRY1325 described in Part D, Item 17.	The south berm of the Ore Stockpile Pad expansion was constructed to design, however, an issue with drainage at the tie-in point to Pond 3 currently necessitates the need for active pumping as a temporary method of moving water into Pond 3. The drainage issue will be corrected when Project personnel remobilize to site.

Waste Rock Stockpile and Associated Water Management Structures		
3	a) At the time of the inspection, the Waste Rock Stockpile Containment Pond was complete, the construction had completed in January 2020. The inspector is requesting the licensee provide the exact date of completion of this facility and ensure that the plans described in PART G, Item 6 are submitted within the timeframe given. See Photo 4 for the Waste Rock Stockpile containment pond. The Waste Rock Stockpile and water management structures were snow-covered at the time of the inspection making it hard to identify and potential concerns. The inspector is requesting the licensee provide the exact date of completion of the Waste Rock Stockpile sedimentation pond and ensure that the plans described in PART G, Item 6 are submitted within the timeframe given.	The Construction Summary Report including the as-built drawings was submitted to the Nunavut Water Board on May 25, 2020.
	b) The licensee had cleared the area between the pile and the recently installed ditches on east side of the Waste Rock Stockpile, the licensee stated that this area was cleared and a layer of Non-acid generating (NAG) waste rock has been laid prior to any deposits of potentially acid generating (PAG). See Photo 3 for the cleared area on the East side of the stockpile.	See above comment.

	c) The Waste Rock Stockpile and water management structures were snow-covered at the time of the inspection making it hard to identify and potential concerns.	CIRNAC's comment is noted and no action is required for this finding.
Ore Crushing Pad and Associated Water Management Structures		
4	a) In the previous inspection (September 2019) the Inspector noted the following "the ditch system around the stockpile was not functioning as intended. The licensee is currently pumping water into the ponds from the pooling water on the Pad." The ditches are still not operational; the licensee is still planning to have them repaired prior to Freshet 2020. This facility will be thoroughly inspected in 2020 to ensure the facility is constructed as described in the approved engineered drawings.	Baffinland provided a response to this comment in the Water Licence 2AM-MRY1325 September 2019 Inspection – Follow Up document submitted on April 30, 2020. As indicated in this previous submission, additional remedial works would be planned when ground conditions and resources permitted. Please refer to communication Response #5a regarding the remedial works plan submitted on April 30, 2020. Further to the previous response, Baffinland conducted a tracer dye investigation on the ore crusher pad which indicated that contact water on the crusher pad is seeping through the crusher pad and down-gradient of the facility. The seepage through the crusher pad appeared to be flowing below the grade of the perimeter ditch system. Consequently, the remedial work which was scheduled to be completed to repair the compromised sections of the ditch system is currently on hold, as the work, as currently planned is being re-evaluated. Further investigation is underway to determine the appropriate corrective actions to effectively resolve the seepage. In the interim, sumps have been strategically installed at the foot of the downstream toe of the collection ditch, where seepage was

		present. A pumping system was installed to transfer collected seepage water from these sumps to Crusher Facility pond MS-06. Baffinland will continue to implement the Ore Crusher Pad Regrading Strategy to prevent the pooling of water on and around the Crusher Pad. A follow up spill report for the uncontrolled release of contact water through the Crusher Pad was submitted to CIRNAC and the NU-NT Spill Report Line on August 4, 2020, in accordance with Water Licence 2AM-MRY 1325, which provides additional details.
	b) Since May, 2016 CIRNAC has identified pooling water within the crusher pad, the inability of BIMC to effectively manage surface water in the facility is a continual problem on this unlined Pad. This Pad is only approved as described in the As-built and IFC drawings, in the engineered drawings the surface water should flow to the ditches without the need for human intervention such as pumps, due to the slope of the pad. The licensee is to develop a plan to ensure this facility is appropriately maintained, the inspector is requesting that this plan include schedules for grading of the facility to ensure that this pooling discontinues, grade is maintained throughout the seasons and the ditches surrounding the facility are operating as intended. See photos 5 and 6 for the ore crushing pad.	Due to the nature of the activity taking place on the Ore Crusher Pad, it is expected that the pooling of water will occur on occasion. Baffinland has prepared a technical memorandum to document the routine grading of the Ore Crusher Pad to assist in mitigating standing water by ensuring water is directed toward ponds and ditches. The technical memorandum details the frequency and work to be completed. Pooled water that cannot be eliminated through routing regrading, in addition to the implementation of stockpiling practices, is actively pumped from the pad directly to the pond. The Ore Crusher Pad Regrading technical memorandum was submitted to CIRNAC as part of the Water Licence 2AM-MRY1325 September 2019 Inspection - Follow Up document on May 15, 2020.

	Develop a plan to ensure this facility is appropriately maintained, the inspector is requesting that this plan include schedules for grading of the facility to ensure that this pooling discontinues. This plan was to help address the continual pooling of water within the facility and the water pooling next to the facility (outside of containment).	
Landfill		
5	a) At the time of the inspection the new fence surrounding the landfill was completed, the landfill was left unlocked and unmanned.	CIRNAC's observation is noted. The main gate of the Landfill Facility is the single point of access to the facility, and is to be kept closed at all times.
	b) The inspector noted small amounts food waste within the Landfill, see photo 7 for the food waste identified. In section 3.7 of BIMC's Waste Management Plan (BAF-PH1-830-P16-0028) Baffinland states that: "Disposal of all domestic (food) waste, hazardous and biomedical materials at the Landfill Facility is prohibited." BIMC is encouraged to continue to educate its employees in order to prevent further unapproved deposits of food waste into this facility.	Baffinland is committed to adhering to the current Waste Management Plan, and is conducting weekly inspections of the Landfill Facility. The inspections are documented and the reports will be shared with CIRNAC. In January 2020, the Environment Department assessed the life cycle of waste from source control to segregation and final disposal of products across the Project. Through the assessment, items requiring corrective action were identified and follow up actions implemented. Findings from the waste assessment were shared with employees across site through the departmental bi-weekly safety meetings. In addition to ongoing employee education, routine inspections of Landfill Facility operations are completed with a focus on waste volume, composition and overall conformance to the

		Project's Waste Sorting Guidelines. These inspections are part of the weekly inspections of structures designed to contain, withhold, divert or retain waters or wastes during periods of flow; conducted in accordance with Part E Item 11 of the Water Licence. Copies of these inspection reports are submitted to CIRNAC.
	c) There was also a large pile of cigarette butts found in the landfill, I am not certain if the cigarette is intended to be deposed of within this land fill. The inspector will correspond with the NWB to determine if this is an appropriate activity. See photo 8 for the cigarette butts.	Cigarette butts are a chemical waste type which are collected in cigarette butt receptacles, located outside each main building entrance. The final disposal of cigarette butts is through incineration. An Environmental Notice on proper waste segregation of cigarette butts was submitted site wide on February 19, 2020. In addition to employee education, routine inspections of Landfill Facility operations are completed with a focus on waste volume, composition and overall conformance to the Project's Waste Sorting Guidelines.
New Fuel Facility at Mary River Site		
6	At the time of the inspection the hose used for fuel transfer was actively leaking, the snow within the containment berm had a strong smell of Diesel Fuel. The licensee explained that this leak was from a gasket on the coupling. See Photo 9 for the leaking coupling and 10 for the hose sitting outside the drip tray.	A minor drip into secondary containment from an API coupler occurred in late February when fuel was being transferred from Tank 5. The coupler was subsequently replaced and the area remediated in accordance with Baffinland's Spill Contingency Plan. A copy of the Incident Report is attached as Appendix A.
Spill Identified During the Inspection		
7	While on site the inspector identified a spill at the km 60 rest stop.	Following observation of the spill at KM 60, the Road Maintenance department was notified to implement remediation actions in accordance with Baffinland's Spill Contingency Plan. To effectively

		manage spill response, Baffinland has adopted a tiered classification scheme for spills that occur onsite. Each level of spill, based on the significance of the event, requires varying degrees of response, effort and support. Once the KM 60 spill was identified, the spill volume was quantified, and the area remediated by the Road Maintenance Department in accordance with the Spill Contingency Plan and Environmental Protection Plan.

Appendix A

Incident Investigation Form

Baffinland Incident Report

STEP 1. INITIAL REPORT OF THE INCIDENT (Supervisor)

Date of Event	Time of Event	Date Reported	Time Reported	Main Person Involved	Reported By
20-Feb-20	2:00pm	20-Feb-20	2:05 pm	jason bennett	Connor Devereaux

Employer	Contractor (If Applicable)	BIM Department	Location
Baffinland		Surface Works	Mine Site

Supervisor	Supervisor Certificate #	Detailed Location
Jeff Byers	2019-687	Tank #5 (p-50 fuel storage)

Health & Safety	Environment	Operations	Reputation
☐ Injury	☒ Spill/Release	☐ Property Damage	☐ Security
☐ Illness	☐ Wildlife Interaction	☐ Vehicle Accident	☐ Non-compliance
	☐ Land disturbance	☐ Fire	☐ Non-conformance

Brief Title

very slight fuel drip from API coupler when transferring fuel from tank #5 to fuel farm

Detailed Description

While tanker operator was transferring fuel from tank #5 it was reported that there was a slight drip from the API coupler that was hanging over at open tote with a duck pond surrounding it prior to the drip being reported. All valves at the present time were closed just a small amount of fuel in the 5 foot hose.

Immediate Actions Taken to Secure Scene, Protect People or Environmental and Equipment

secured the scene contacted supervisor, contacted millwright leak fixed immediately.

Preliminary Cause of the Incident

Extreme cold weather caused seals in API coupler to shrink and a slight drip occurred

Would you consider this a "near miss" incident? ☐

Is this a "Dangerous Occurrence" under Section 16.01 of the NWT/Nunavut Mine Health and Safety Regulations? ☐

Is this a "Serious Injury" under Section 16.01 of the NWT/Nunavut Mine Health and Safety Regulations? ☐

Using the Incident Classification Matrix the **Actual** Consequence of this incident was: Minor

Using the Incident Classification Matrix the **Reasonable Potential** Consequence of this incident was: Minor

Consequences	Minor	Medium	Serious	Major	Catastrophic
Health and Safety	No Injury, Bump & Scrape	First Aid	Medical Treatment or Restricted Work Injury	Lost Time Injury	Fatality
Environment	Non-reportable spill, No impact	Reportable Spill No impact	Reportable Spill Reversible Impact	Reportable Spill Long-Term Impact	Reportable Spill Irreversible Impact
Operations	< $5K Loss	$5K to $50K Loss	$50K to $250K	$250K to $1000K	> $1000K
Reputation	Community complaint - isolated and resolved Potential noncompliance with no impact	Low Level community impact Non-compliance with potential for fine or order	Community dissatisfaction Non-compliance with fine or order issued	Significant social harm Breach of license	Permanent social harm License Revocation

Incident Report

STEP 2. INFORMATION GATHERING (Investigator)

Investigator(s)

Lead Investigator: Jeff Byers

Others:

☐ Witnesses Present?

☒ Incident occur outdoors?

☐ Did the incident warrant a drug & alcohol test?

☒ Photos available of the Incident?

Weather Conditions

Temperature: -50 °C

Wind Speed & Direction: 5 km/h West

Light Conditions: partial daylight

General Weather Conditions: clear skies at almost dusk

Spill / Release

Spill / Release Details: API coupler at tank 5 had slight drip

Substance Spilled: Diesel

Quantity: 2

Unit: L

Habitat:

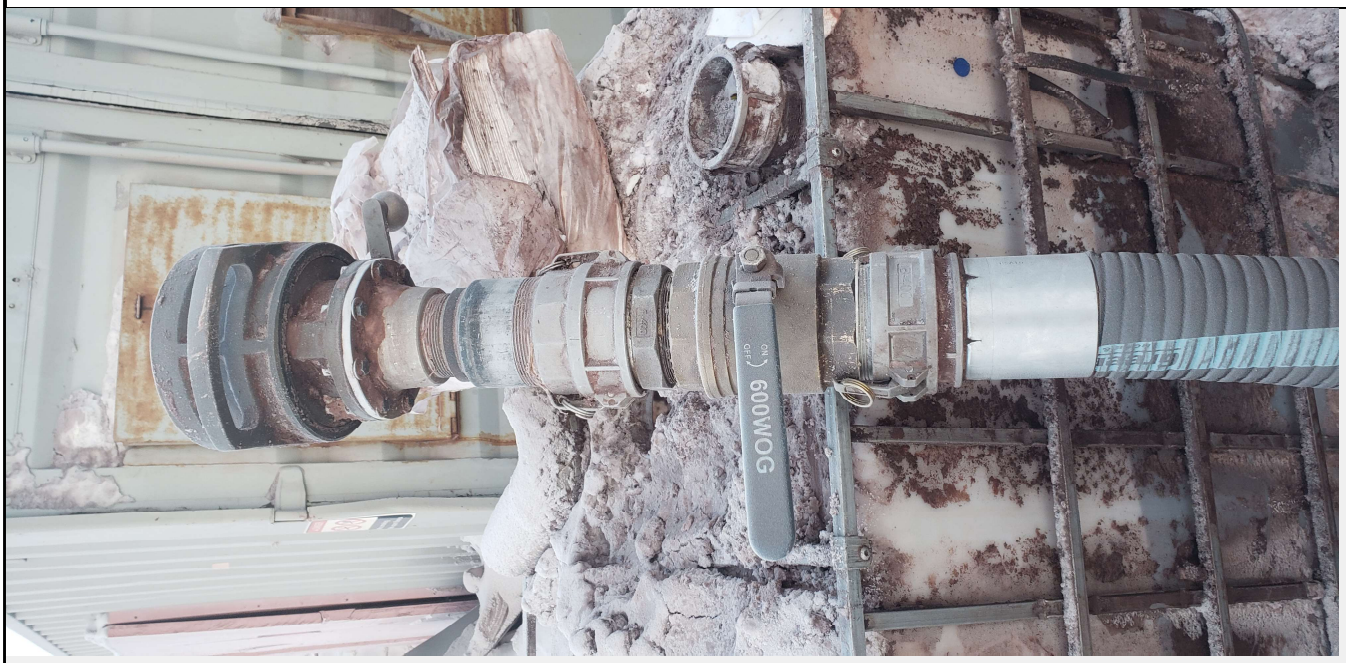
Initiating Event:

Method of Cleanup: spill pads soaked up fuel in duck pond

Baffinland

Incident Report

Photographs and Drawings



Incident Report

Add More

STEP 3: CAUSAL ANALYSIS (Investigator)
At least one must be selected (two or three are typical)

Equipment Failure Issues	Procedural Issues	Communication Issues	Engineering Issue
☒ 1.1 Defective Parts / Tools / Equipment	☐ 3.1 No Procedure	☐ 5.1 Shift Change Impact	☐ 7.1 Workplace/Roadway Layout/ Design / Conditions
☒ 1.2 Design Issue	☐ 3.2 Error in Procedure	☐ 5.2 Failure to Agree on How Task to be Performed	☐ 7.2 Congested Work Area / Restricted Action
☐ 1.3 Preventative Maintenance Issue	☐ 3.3 Procedure too Complex	☐ 5.3 Failure to Understand Communication	☐ 7.3 Inadequate display, signs, labels, alarms, warnings
☐ 1.4 Repeat Failure	☐ 3.4 Procedure not Followed	☐ 5.4 Inadequate Communication	☐ 7.4 Inadequate Guards or Barriers
☐ 1.5 Tolerable Failure		☐ 5.5 Cross-Department Communication Issue	☐ 7.5 Noise / Vibration / Light
			☐ 7.6 Poor Body Mechanics, Body Placement, Positioning, Repetitive

Natural Elements Issue	Training Issue	Work Direction Issue	Quality Control Issue
☐ 2.1 Temperature Extremes	☐ 4.1 No Training	☐ 6.1 No Direction Provided	☐ 8.1 No Quality Controls
☐ 2.2 Weather Conditions	☐ 4.2 Training not Followed, Unintentional	☐ 6.2 Inadequate Direction Provided	☐ 8.2 Inadequate Quality Controls
☐ 2.3 Ground Movement / Earthquake	☐ 4.3 Trained but Inexperienced	☐ 6.3 Failure to Follow Work Direction	☐ 8.3 Poor Compliance or Application of Controls
	☐ 4.4 Training not followed - Intentional	☐ 6.4 Distraction	**Other**
		☐ 6.5 Fatigue	☐ 9.1 Other (explain below)
		☐ 6.6 Impairment	

Cause Explanation (For Each Cause Identified in Casual Analysis - Provide a Brief Explanation of Why)

Code	Explanation
1.1	due to extreme cold seals in API coupler shrunk
1.2	was no ball valve at base of API coupler

Corrective Actions:

No.	Description	Issued To	Due Date
1.2	Installed ball Valve at base of API coupler	Jeff Byers	20-Feb-20

Investigation Team and Factors Limiting the Investigation (if Any)

Name	Position	Signature
Jeff Byers	Supervisor	Investigation Accepted ☒

Statement of Limiting Factors (if any):

STEP 4: FINAL COMMENTS BY INVESTIGATORS OR MANAGEMENT		
Name	**Comment**	**Date**
Jeff Byers	Ball Valve installed at base of API coupler immediately after report was made	21-Feb-20