Rio Tinto

Mr. Joseph Heron
Resource Management Officer III (Inspector)
Land & Water North Slave Region
Environment and Climate Change
Government of the Northwest Territories
#140 Bristol Avenue
Yellowknife NT, X1A 3T2

April 14, 2023

Our reference: DDMI Incident Number 1000633364
Your reference: GNWT Spill 2023102

Dear Mr. Heron,

Subject: Follow-up Report to GNWT Spill 2023102

Summary:

On February 7th, 2023, at approximately 11:00am, underground dewatering water was released from a broken section of the 9105 underground dewatering pipeline within the North Inlet Containment Facility (Figure 1). It was determined that extreme cold weather conditions had forced the pipeline to come apart at a joint (Figure 2). Notice of the release was not communicated to the Environment Department, as the department responsible for the maintenance of the pipeline mistakenly understood that because the water was reporting to the North Inlet Containment Facility and fully within containment, that it was not considered a spill and could be repaired in the spring. Environmental staff became aware of the situation on March 13th, with initial reporting provided to the Inspector March 14th. In total, approximately 450,000 m³ of underground dewatering water released from the broken pipeline section and flowed into the North Inlet Containment Facility during this time.

Figure 1. Spill 2023102– Broken pipeline location in the North Inlet Containment Facility (red circle).

Figure 2. Spill 2023102 – Water flow at damaged dewatering pipeline in the North Inlet Containment Facility area.

Immediate Action:

When the Environment Department was made aware of the leak, the area owner was contacted, and an investigation took place. It was determined that the pipeline could not be immediately repaired at the joint due to significant ice build-up and there being no safe access for heavy equipment, and so water was diverted to a bypass pipeline that also flows

directly into the North Inlet Containment Facility on March 16th (Figure 3). Dewatering of the underground continued during this period.

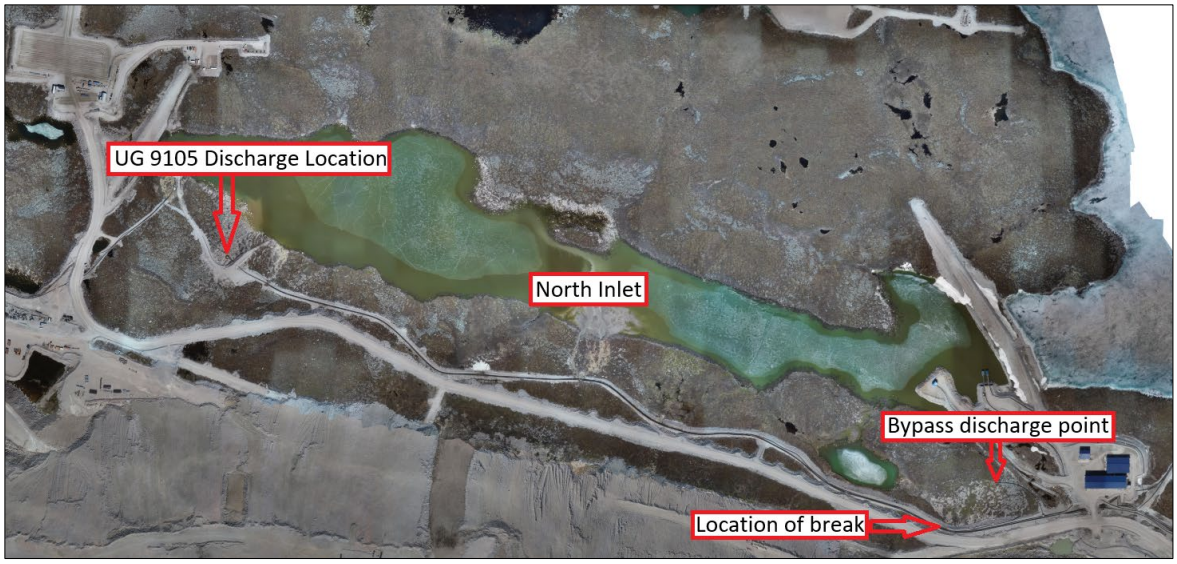

Figure 3. Bypass discharge point, as well as original UG 9105 discharge location and location of break

Repairs on the pipeline break were completed by April 3rd. It was then discovered that the pipeline section downstream of the original break location was frozen due to the partial flow through it between Feb 7th and March 16th. On April 8th, an attempt was made to divert flow back into the original pipeline to clear the ice blockage, but this was unsuccessful. DDMI will continue utilize the bypass pipeline until consistent warmer temperatures thaw the original pipeline and water can be diverted back to the 9105 discharge line. DDMI notes that this temporary updated pipeline configuration does not change the North Inlet water balance and is only a change in the exact location of where the water enters the facility. At no point does water discharge to the receiving environment, and all water continues to be treated at the North Inlet Water Treatment Plant prior to entering Lac de Gras.

Follow-up Action

DDMI reviewed the incident with crews, and the Environment Department conducted educational outreach on the importance of immediate reporting of all unplanned discharges to the Environment Department, regardless of the location of the discharge (within or outside of containment). Incident escalation procedures were redistributed sitewide with emphasis on environmental reporting requirements to prevent future communication breakdowns.

Should you require further information or clarification on the above noted spill, please feel free to contact the undersigned.

Yours sincerely,

Kyla Gray
Advisor, Environment

cc Marie-Eve Cyr, WLWB
Anneli Jokela, WLWB