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Yellowknife, NT X1A 2R3

April 1, 2021

Attention: Jacqueline Ho  
Regulatory Officer  
Mackenzie Valley Land and Water Board  
P. O. Box 2130, YELLOWKNIFE NT X1A 2P6

**Re: Gordon Lake Group Remediation Project - MV2016L8-0006  
Annual Water Licence Submittals 2020**

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Dear Ms. Ho,

Please accept the 2020 Geotechnical Inspection Report, Year 2 Long Term Monitoring Report (2020) and 2020 Surveillance Network Program Report for the Gordon Lake Group Remediation Project respectfully submitted by Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) – Contaminants and Remediation Division (CARD). The submission of these Reports are intended to satisfy conditions 10, 31 and Annex A of Water Licence MV2016L8-0006, respectively. Included in this cover letter is a concordance table which outlines how the Year 2 Long Term Monitoring Report satisfies the information requirements of the Annual Water Licence Report (Appendix A) as well as the 2020 Engagement Log (Appendix B).

If you have any questions or concerns regarding this report please contact Project Officer Jessica Wilson (email: [jessica.wilson@canada.ca](mailto:jessica.wilson@canada.ca) ph: 867-446-3494) or myself (email: [dawn.keim@canada.ca](mailto:dawn.keim@canada.ca) ph: 867-444-0065).

Sincerely,

Dawn Keim  
Project Manager, Contaminants and Remediation Division  
Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)

Enclosed:  
2020 Geotechnical Inspection Report  
Year 2 Long Term Monitoring Report  
2020 Surveillance Network Program Report

Appendix A:

**Gordon Lake Group Remediation Project**

Type B Water Licence – MV2018L8-0006

Condition 31 – Annual Report

**Summary of Water Licence Report Requirements encompassed within the Year 2 LTM Report (i.e. 2020)**

Requirement	Section in the LTM Report	Additional Details/References
Summary of the calibration and status of the meters and devices referred to in Part B, item 9 of this Licence	N/A	No compliance assessment activities occurred in 2020, as no meters, devices, or other such methods were used for measuring the volumes of water used and waste discharged during the reporting period.
Monthly and annual quantities in cubic metres of fresh Water obtained from all sources	N/A	No water was withdrawn during the reporting period.
A summary of engagement activities conducted in accordance with the approved Engagement Plan, in Part B of this Licence, undertaken during the previous calendar year and shall include a brief description of activities planned for the forthcoming year	N/A	Refer to Appendix B within this letter.
A summary of Construction activities conducted in accordance with Part D of this Licence, undertaken during the previous year calendar year.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
An updated schedule for the undertaking	Table B-2 Appendix B	The project is now in the Phase I Long-Term Monitoring (LTM) Phase. LTM monitoring frequency is described in Table B-2 (Appendix B).
A summary of Modification activities and major maintenance work conducted in accordance with Part E of this Licence, undertaken during the previous calendar year	N/A	No modification activities or major maintenance work were conducted during the reporting period.

**Summary of Water Licence Report Requirements encompassed within the Year 2 LTM Report (i.e. 2020)**

Requirement	Section in the LTM Report	Additional Details/References
A summary of activities conducted in accordance with the approved <b>Waste Management Plan</b> , required in Part F of this Licence, undertaken during the previous calendar year, including:	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
i. A summary of updates or changes to the process or facilities required for the management of waste.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
ii. The monthly and annual quantities in cubic metres of non-hazardous and hazardous waste generated during remediation activities.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
iii. Monthly and annual quantities in cubic metres of all solid waste deposited and used as backfill, identified by location.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
iv. Monthly and annual quantities in cubic metres of all liquid waste deposited, identified by location.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
v. Monthly and annual quantities and geochemical characteristics of all Potentially Acid Generating (PAG) and metal leaching waste rock, tailings and any other mineral materials deposited / managed, identified by location.	N/A	Moderate risk waste rock left in place is to be monitored quinquennially (i.e. Years 1 and 5). Monitoring of moderate risk waste rock left in place was not applicable to Year 2 (2020) LTM Monitoring.
vi. The estimated monthly and annual quantities in cubic metres of sewage deposited into the sewage disposal facilities.	N/A	A sewage disposal facility was not constructed as part of the project. Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.

**Summary of Water Licence Report Requirements encompassed within the Year 2 LTM Report (i.e. 2020)**

Requirement	Section in the LTM Report	Additional Details/References
vii. Monthly and annual quantities in cubic metres of wastewater discharged from the wastewater treatment facilities.	N/A	There are no wastewater treatment facilities on site. Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
viii. A summary of any updates or changes to the process or facilities required for the treatment of Petroleum Hydrocarbons (PHC) contaminated soil and rock.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
ix. The monthly and annual quantities in cubic metres of PHC-impacted soil and rock placed in the Landfarm.	N/A	The Landfarm facility was removed from the design. Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
x. The monthly and annual quantities in cubic metres of PHC contaminated groundwater and free-phase product removed from the Landfarm and a description of how this material was managed.	N/A	The Landfarm facility was removed from the design. Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
xi. Any other item as directed by the Board.	N/A	No additional items directed by the Board in 2019.

**Summary of Water Licence Report Requirements encompassed within the Year 2 LTM Report (i.e. 2020)**

Requirement	Section in the LTM Report	Additional Details/References
<p>A summary of activities conducted in accordance with the approved <b>Sediment and Erosion Control Plan</b>, referred to under Part F, item 4.</p>	<p>Appendix D Section 4.1.2</p>	<p>Backfilled/covered areas identified for LTM are to be monitored biennially (i.e. Years 1, 3, 5) as outlined in Table B-2 (Appendix B) of the LTM Plan. Monitoring was completed in Year 1 and no major concerns were identified. No backfilled/covered area monitoring was required in Year 2.</p> <p>Closures of mine openings identified for LTM are to be monitored quinquennially (i.e. Years 1 and 5) as outlined in Table B-2 (Appendix B) of the LTM Plan. Monitoring was completed in Year 1 and deficiencies were identified which were considered triggers for adaptive management. These were therefore included in Year 2 monitoring.</p>
<p>i. A description of any erosion susceptible areas encountered, and a summary of activities undertaken to prevent or mitigate erosion.</p>	<p>Appendix D Section 4.1.2</p>	<p>Erosion and Settlement Inspection Forms (Appendix D).</p>
<p>ii. A report of the performance of erosion mitigations applied in previous years, if applicable; and</p>	<p>Appendix D Section 4.1.2</p>	<p>Erosion and Settlement Inspection Forms (Appendix D).</p>
<p>iii. Any other item as directed by the Board.</p>	<p>N/A</p>	<p>No additional items directed by the Board in 2019.</p>
<p>A summary of all monitoring results and any Action Level exceedances in accordance with the approved <b>Construction and Post-Construction Monitoring Plan</b>, referred to under Part F, item 6 and Schedule 3, item 4 of this Licence.</p>	<p>N/A</p>	<p>Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.</p>

**Summary of Water Licence Report Requirements encompassed within the Year 2 LTM Report (i.e. 2020)**

Requirement	Section in the LTM Report	Additional Details/References
A summary of all monitoring results and Action Level exceedances in accordance with the approved <b>Long-Term Monitoring Plan</b> , referred to under Part F, item 7 and Schedule 3, item 5 of this Licence.	4.0	Summaries of all monitoring results are outlined in Section 4.0.
A summary of activities conducted in accordance with the approved <b>Spill Contingency Plan</b> , required in Part G of this Licence, undertaken during the previous calendar year, including:	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
i. A list and description for all unauthorized discharges that occurred during the previous calendar year, including the date, NWT spill number, volume, location, summary of the circumstances and follow-up actions taken, and status (i.e. open or closed), in accordance with the reporting requirements in Part G of this Licence; and	N/A	No unauthorized discharges were reported during the reporting period.
ii. An outline of any spill training and communications exercises carried out during the previous calendar year.	N/A	No additional spill training or communications exercises were carried out in 2020. Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
A summary of activities conducted in accordance with the <b>Remedial Action Plan</b> , required in Part H of this Licence, undertaken during the previous calendar year.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
i. A summary of updates or changes to the process or facilities required for the management of waste rock and tailings.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.

**Summary of Water Licence Report Requirements encompassed within the Year 2 LTM Report (i.e. 2020)**

Requirement	Section in the LTM Report	Additional Details/References
ii. The monthly and annual quantities in cubic metres of excavated tailings for placement into landfills and any excavation contingency measures implemented.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
iii. The monthly and annual quantities in cubic metres of PAG waste rock excavated and deposited into trenches, pits or underground workings.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
iv. The monthly and annual quantities in cubic metres of soil and rock placed below waste rock covers, placed above waste rock covers and used elsewhere on site.	N/A	Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.
v. Any geochemical inspection reports, as appendices to the Annual Water Licence Report.	N/A	Moderate risk waste rock left in place is to be monitored quinquennially (i.e. Years 1 and 5). Monitoring of moderate risk waste rock left in place was not applicable to Year 2 (2020) LTM Monitoring.
vi. Any outline of anticipated activities for the next year; and	5.0 Table B-2 Appendix B	Monitoring in accordance with the Phase I LTM Plan is ongoing as outlined in Table B-2 within Appendix B. Recommendations are included in Section 5.0.
vii. Any other item as directed by the Board.	N/A	No other items directed by the Board in 2020.
Any other details on water use or waste disposal requested by the Board by November 30 of the year being reported.	N/A	No additional details on water use or waste disposal was requested by the Board by November 30, 2020.

**Summary of Water Licence Report Requirements encompassed within the Year 2 LTM Report (i.e. 2020)**

Requirement	Section in the LTM Report	Additional Details/References
<p>Tabular summaries of all data and information generated under the <b>Surveillance Network Program</b> and graphical summaries of parameters with effluent quality criteria referred to in Part F, at the points of compliance (SNP stations 2016-2, 2016-3, 2016-4 and 2016-6), in excel or an electronic and printed format acceptable to the Board. The Licensee shall provide raw data in electronic form to the Board.</p>	<p>4.3  SNP Report (separate document)</p>	<p>Analytical results from samples collected for SNP Stations 2016-7 and 2016-11 were reported in an SNP report, and are also discussed in Section 4.3 if the LTM Report.</p>
<p>A summary of actions taken to address concerns, non-conformances, or deficiencies in any reports filed by an Inspector.</p>	<p>N/A</p>	<p>Construction/remediation activities were completed in 2019. The project is now in the Phase I Long-Term Monitoring (LTM) Phase.</p>



Appendix B:

**Gordon Lake Group Remediation Project**  
 Type B Water Licence – MV2018L8-0006  
 Engagement Log

<b>Gordon 2020 Engagement Log</b>					
<b>Date</b>	<b>Attendees/ Addressee</b>	<b>Engagement Type</b>	<b>Issue(s) raised by stakeholder</b>	<b>Recommendation from Stakeholder</b>	<b>Proponent Response/Commitments</b>
January 9 2020	<b>YKDFN:</b> Johanne Black, Sarah Gillis <b>CIRNAC-CARD:</b> Joel Gowman, Ron Breadmore, Dawn Keim, Murray Sommers, George Lafferty	In person meeting	Discussions on funding for training and participation in project activities	N/A	N/A
February 25 2020	<b>YKDFN Leadership</b> – Bobby Drygeese (Councillor) <b>YKDFN Lands and Environment</b> – Johanne Black, Mary Black, William Lines <b>YKDFN Community members</b> – update open to all YKDFN members	In person meeting	Questions regarding subsidence at Kidney Pond Portal and debris at site which were answered in the meeting. Request for funding to assist with rebuilding structures purchased from remediation contractor.	N/A	N/A
	Update to NSMA was cancelled due to COVID-19				