



Independent Environmental Monitoring Agency

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Violet Camsell-Blondin
Chair, Wek'eezhii Land and Water Board
#1-4905 48th St, Yellowknife, NT
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April 21, 2017

Dear Mrs. Camsell-Blondin,

Re: 2016 Closure and Reclamation Progress Report

The Independent Environmental Monitoring Agency (Agency) has reviewed Dominion Diamond Ekati Corporation's (DDEC) 2016 Closure and Reclamation Progress Report. The Agency submits the following comments and recommendations for your consideration.

1. Continuing Slippage of Reclamation Schedule

Delays in reclamation and research remain a serious concern for the Agency. Appendix C - *2016 Reclamation Research Plans Update* provides an update of the research plans and tasks along with a summary of research undertakings and findings in 2016. After reviewing the Closure and Reclamation Progress Report (Progress Report) and Appendix C, the Agency has concluded that, with the exception of Old Camp, the Koala underground and salvage of topsoil, reclamation activities generally remain in the research and interim planning stages while key uncertainties, including pit stability, groundwater, Long Lake Containment Facility (LLCF) and seepage water quality, wildlife safety and the sustainability of vegetative cover following closure, remain to be resolved.

The Agency is confident that the Wek'eezhii Land and Water Board (WLWB) shares the Agency's concern over these research delays. In its Reasons for Decision dated June 15, 2016 the WLWB directed that *"... by July 31, 2016, DDEC is to submit an updated reclamation research plan schedule which identifies anticipated end dates for all reclamation research tasks in order to provide all parties a comprehensive outline of timelines for reclamation research."*

While the Agency recognizes the operational challenges faced by Dominion Diamond Ekati Corporation (DDEC) in 2016 as a result of the process plant fire and the need to re-direct human and financial resources to the Jay Project, we believe DDEC has not fully complied with its commitments as outlined in the approved Interim Closure and Reclamation Plan (ICRP) and with direction provided by the WLWB in its June 15, 2016 Reasons for Decision.

Recommendation #1

Clarify when, and how, DDEC will provide an updated reclamation research plan which identifies anticipated start and end dates for all reclamation research tasks.

2. Reporting on Pertinent Traditional Knowledge

In its Reasons for Decision dated June 15, 2016 the WLWB reported that it "... supports DDEC's commitment to report on pertinent Traditional Knowledge offered by community members during reclamation site visits ...". The Agency could not locate any references in the Progress Report to Traditional Knowledge that may have been offered by community members during the October 2016 reclamation site visits. Appendix A- *2016 Engagement Site Visits* only provides a summary of visit dates, affected parties, DDEC participants and purpose of the engagement site visit. DDEC needs to report on the actual input offered during the site visits and explain how it is being considered or incorporated into operations or monitoring at the Ekati Mine.

Recommendation #2

Clarify how DDEC has fulfilled its commitment to report on pertinent Traditional Knowledge offered by community members during reclamation site visits.

3. Reclamation Schedule

Successful reclamation is achieved when all closure activities are completed and associated criteria are met for each mine component. Section 3.1 *Mine Schedule* states the Panda, Koala North and Koala pits have been reclaimed. A description of the activities that went into reclaiming the pits, underground, and what closure criteria are being achieved is not provided.

Recommendation #3

Clarify the reclamation activities that have been completed and the closure criteria that have been met for those disturbed areas that are described as having been "reclaimed".

4. 2016 Reclamation Research Summary

Section 4.2.3 - *Waste Rock Storage Area (WRSA) Research* confirms that three reclamation research reports were provided to the WLWB under Research Plan (RP) 3.1 *Permafrost Growth* and RP 3.2 *WRSA Seepage and Water Quality*. While results from the WRSA thermal modelling and seepage risk assessment are summarized in section 4.2.3, results from the seepage water quality modelling are not provided.

Recommendation #4

Include a summary of the WRSA seepage water quality modelling results.

5. Old Camp Reclamation

Section 5.1.1 states *“Due to the process plant fire that occurred in June of 2016, resources were not available for the completion of the remaining Old Camp reclamation activities. The current status of the Old Camp Area does not pose any potential risk for environmental impact and DDEC will evaluate the completion of the following remaining reclamation activities (Old Camp Pad; Phase 1 North Pond; Grading and Debris Clean-up) outlined in the Old Camp Closure and Reclamation Plan.*

As part of DDEC’s 2013 request for approval of the Old Camp Closure and Reclamation Plan, the accompanying cover letter outlined a three year, staged approach to implementation, starting in 2014 with reclamation of Phase 1 South Pond; continuing with reclamation of Phase 1 North Pond in 2015; and ending with reclamation of the Old Camp Pad in 2015/2016. The WLWB approved the proposed staged reclamation timeline in its Reasons for Decision dated April 16, 2014.

While the Agency recognizes the operational challenge faced by DDEC as a result of the recent process plant fire, the closure and reclamation of Old Camp remains behind schedule. Section 5.1.1 of the Progress Report does not provide adequate assurance that reclamation activities at Old Camp will be re-initiated in 2017/18, nor does it provide an updated schedule for completion of approved activities under the Old Camp Closure and Reclamation Plan.

Recommendation #5

Provide an updated schedule for completion of reclamation activities approved under the Old Camp Closure and Reclamation Plan.

6. Reclamation Security Held

Table 7.1-1 provides a summary of the security held by the Government of the Northwest Territories (GNWT) for the Ekati Diamond Mine as of December 31, 2016:

Water Licence W2012L2-001	\$256,540,000
Ekati Environmental Agreement	\$19,991,424
Pigeon Land Use Permit W2008D0008	\$427,000
<u>Total</u>	<u>\$278,853,258</u>

The Agency notes that the sum of the securities (water licence, Environmental Agreement and Pigeon Land Use Permit) described in Table 7.1-1 does not coincide with the total security.

Further, section 7.3 outlines the RECLAIM updates proposed by DDEC for WLWB review and approval as part of the Progress Report. The proposed changes would result in an increase of \$1,153,040 to the current RECLAIM estimate for *“a new grand total of \$267,833,088.”*

The Agency is unclear what the value of security held by the GNWT for the Ekati Diamond Mine is from the figures provided in sections 7.1 and 7.3.

Recommendation #6

Clarify the amount of security held by the GNWT for the Ekati Diamond Mine and explain the discrepancy between the totals in Sections 7.1 and 7.3.

7. Proposed Ekati RECLAIM Updates – Panda Diversion Channel

The Agency does not support DDEC's request for a decrease of \$596,803 associated with residual risk surrounding stabilization of the Panda Diversion Channel (PDC), leaving \$60,000 to complete recommendations made by Tetra Tech following its inspection of PDC stabilization work on August 22, 2016.

A similar request to decrease security to \$60,000 for stabilization of the PDC was included as part of the 2015 Progress Report. At that time, the Agency recommended that the full security be held until all relevant closure objectives for the PDC have been achieved and closure monitoring demonstrates no evidence of instability, movement or failure for a period of 10 years, which is consistent with commitments made by DDEC in Table 5.1-6j - *Closure Monitoring Frequency – Dams, Dikes and Channels* in the approved ICRP. In its Reasons for Decision dated June 15, 2016 the WLWB reported its decision to accept the GNWT's suggested approach of maintaining the "contingency amount" of \$656,803.

Following this decision, the WLWB sought clarification from the GNWT on the approach it recommended. In its letter to the GNWT dated July 29, 2016 the WLWB suggested a standardized process is required. The Agency is unaware that any significant progress has been achieved in further resolving this matter.

Recommendation #7

The Government of the Northwest Territories, in cooperation with the Wek'eezhii Land and Water Board, develop a written policy, guideline or directive (e.g. a standardized process) for determining whether, and what portion of, security should be held back for future liabilities upon completion of reclamation activities.

Recommendation #8

The Wek'eezhii Land and Water Board hold back the current security of \$656,803 for stabilization of the PDC until a standardized process has been developed or until closure monitoring, as described in Table 5.1-6j - *Closure Monitoring Frequency – Dams, Dikes and Channels* of the ICRP demonstrates that all relevant closure objectives and criteria have been achieved.

8. Appendix C Table C-1

The research schedule information provided in Table C-1 of the Progress Report is more limited than information provided in Table C-1 of the previous 2015 Progress Report. The omitted information includes: research work that is on-going from previous reporting years and proposed changes to the research schedule. The Agency believes these changes are inconsistent with the intent of the

WLWB's June 15, 2016 direction that parties be provided an updated reclamation research plan schedule.

A legend of symbols used in Table C-1 has not been provided as part of the table. This makes interpretation of the presented information difficult.

Recommendation #9

Revise Table C-1 - *2016 Reclamation Research Schedule* to identify research work that is on-going from previous reporting years and proposed changes to the research schedule.

Recommendation #10

Include a legend of symbols used in Table C-1.

Should you have any questions concerning these comments, the Agency is pleased to discuss these at your convenience.

Sincerely,



Jaida Ohokannoak
Chairperson

Cc: Dominion Diamond Ekati Corporation – April Hayward
Tlicho Government - Sjoerd van der Wielen
Yellowknives Dene First Nation – Alex Power
Lutsel K'e Dene First Nation – Lauren King
North Slave Metis Alliance – Shin Shiga
Kitikmeot Inuit Association – Jared Ottenhof
Government of the Northwest Territories – Laurie McGregor
Indigenous and Northern Affairs Canada – Jennifer O'Neil