Technical Session, January 16-17, 2019
Diavik – Processed Kimberlite to Mine Workings Water Licence Amendment
(W2015L2-0001)

Location:
Explorer Hotel, Katimavik A Boardroom, Yellowknife
For those joining via teleconference, please contact Board staff for call-in details.

Expert CVs:
We anticipate that some, if not all, parties are planning on having technical experts participate in the Technical Session. Please submit CVs for all technical experts in advance of the Technical Session.

Purpose:
This two-day Technical Session is meant to provide a forum where parties can discuss their questions and concerns about the Diavik Diamond Mines (2012) Inc. (DDMI) Water Licence (W2015L2-001) Amendment Application for Processed Kimberlite (PK) to Mine Workings directly with the proponent and its consultants. It is the Wek’eezhìi Land and Water Board’s (WLWB or Board) hope that such a discussion, as facilitated by Board staff, will increase each party’s understanding of the issues, as well as of the perspectives of others. In our experience, technical sessions can be useful both in focussing the content of parties’ subsequent interventions to the public hearing and in reducing the number of outstanding issues between parties. Although it would be helpful if some issues are resolved during the session, there is no requirement to do so; Board staff will guide questions and discussions to ensure parties have sufficient information to submit evidence that the Board can use to assess the Application and inform the preliminary screening determination. Discussions at the Technical Session may reveal the need for further information requests of the proponent or other parties. The work plan¹ for this review process includes time for parties to fulfill information requests, if required, prior to the deadline for public hearing interventions.

Approach:
During the Technical Session, Board staff will facilitate a discussion of comments made during the public review periods² grouped by the topics identified in the agenda below. Note that comment numbers with the suffix “a” represent comments raised during the initial public review of the Amendment Application, whereas comment numbers with the suffix “b” represent comments raised during the public review of DDMI’s Response to the

² Public Reviews: PK to Mine Workings Amendment Application and DDMI Response to WLWB Information Request
WLWB’s Information Request. Parties are requested to review the Proponent’s response to each of their questions and come prepared to: (1) indicate whether their concern has been adequately addressed and if not, what additional information would be required to address it, (2) take the opportunity to follow up on issues raised during the public review period, and (3) ask any additional questions. Coffee, cold drinks, and snacks, as well as lunch on both days, will be provided.

Please note that the Technical Session is not a public hearing, as such, Board members and their legal counsel will not be participating. The Technical Session will not be transcribed but will be recorded so the audio file can be made available to any Party who requests it. It is the Board’s wish that the technical session be as informal as possible in order to promote discussion. Final recommendations for the Water Licence should be made in the formal written interventions submitted to the Board prior to the public hearing.
Agenda:
The order of topics is subject to change. All parties and their support staff are requested to be available for the entire two days. DDMI will provide short introductory presentations for many of the topics to help initiate discussion.

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<th>Day 1 – Wednesday January 16, 2019</th>
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<td>(8:30 am arrival for 8:45am start, lunch provided)</td>
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**Round-Table Introductions and Opening Comments** (Board Staff)

**Application Introduction**
- DDMI Presentation
- General Questions

**PK Deposition Considerations**
- DDMI Presentation
- Density and Volume Estimates for PK and PK Slimes (EMAB comment 17a; WLWB staff comments 3a, 4a, 20b, and 21b)
- Void Volume Estimates (WLWB staff comments 5a and 6a)
- PK Movement and Placement Methods (EMAB comment 28a; WLWB staff comment 10a, 22b, and 25b)
- Operational Water Level (WLWB staff comments 9a and 34a)
- A418 Pit Wall Failure (EMAB comment 15a)
- Seepage Flows to A154 (EMAB comment 16a)
- PK Containment in Mine Workings Design Report (EMAB comment 41a)
- Alternatives Methods for PK storage (EMAB comment 36a; WLWB staff comment 2a)
- Feasibility and Considerations Related to Relocating PK Slimes (EMAB comments 8a, 9a, and 12a; GNWT comment 4a; WLWB staff comment 15a)
- Considerations for Coarse PK (EMAB comment 14a; GNWT comment 3a)
- Proposed Deposition to A154 and A21 (DFO comment 3a; ECCC comment 2a; EMAB comment 13a; WLWB staff comments 14a and 25b)
- General Questions
## Pit Water Quality at Closure/Post-Closure

- DDMI Presentation
- Water Quality Modeling Presented in IR Response – Inputs, Results, Conclusions
  - Water Quality Inputs and Results (ECCC comments 1b and 3b, EMAB comments 10b, 19b, 20b, 24b, 25b, 27b, 28b, 29b, and 30b; GNWT comments 3b and 9b; WLWB staff comments 1b, 6b, 7b, 9b, 10b, 16b, 20b, and 21b)
  - PK Characteristics and Consolidation (ECCC comment 2b; EMAB comment 15b; GNWT comment 4b; WLWB staff comments 1b, 2b, 3b, 11b, and 12b)
  - Groundwater and Runoff (ECCC comment 4b; EMAB comments 16b and 23b; GNWT comments 5b and 7b; WLWB staff comment 6b)
  - Base Case Establishment of Meromixis (EMAB comment 5b; GNWT comment 14b; WLWB staff comment 8b)
  - Water Circulation/Mixing (EMAB comments 9b, 26b, and 32b; GNWT comment 10b; WLWB staff comments 14b, 15b, 17b, 20b, and 21b)
  - Model Calibration (EMAB comment 14b; GNWT comment 8b)
  - Climate/Thermal Conditions (EMAB comments 17b, 18b, 21b, 22b, and 31b; GNWT comment 11b; WLWB staff comment 14b)
- Methods and Monitoring during Pit filling with water (ECCC comment 5b; GNWT comment 6b; WLWB staff comments 5b and 19b)
- Potential for and Impacts of Unanticipated Mixing (EMAB comments 6b, 10b, 12b, and 13b; WLWB staff comments 13b and 18b)
- Effects to Water Quality in Lac de Gras (GNWT comments 6a and 12b; WLWB staff comment 18b)
- Potential for Significant Adverse Effects/Risk Assessment (ECCC comment 3a; EMAB comments 6a, 29a, GNWT comment 13b)
- Final Elevation of PK and PK slimes (EMAB comment 30a; GNWT comment 6a)
- Closure Plan/Options for Pits (EMAB comments 18a and 25a; WLWB staff comments 16a and 18a)
- Mitigations (EMAB comment 35a; WLWB staff comment 18a)
- Water Quality Questions from Initial Amendment Application (EMAB comments 23a and 27a; GNWT comment 6a; WLWB staff comments 1a and 18a)
- Meromictic Condition Questions from Initial Amendment Application (EMAB comments 24a, 25a, 26a, and 34a; GNWT comment 6a; WLWB staff comment 17a)
- General Questions
# Day 1 – Wednesday January 16, 2019
(continued)

## Impacts to Fish and Fish Habitat

- DDMI Presentation
- Fisheries Authorization/No Net Loss Plan (DFO comments 1a, 2a, 3a, and 2b)
- Potential Impacts and Mitigation (EMAB comments 29a, 31a, 32a, 33a, 6b, 7b, 8b, 11b, and 30b; GNWT comment 6a; WLWB staff comments 19a, 20a, 21a, 23b and 24b)
- General Questions

## Day 2 – Thursday January 17, 2019
(8:30 am arrival for 8:45am start, lunch provided)

## Site Water Quality and Management

- DDMI Presentation
- Water Quality During Operations (EMAB comments 19a; WLWB staff comment 4b)
- Water Balance (EMAB comments 19a, 20a, 21a, and 22a; WLWB staff comment 13a)
- Decant Water Volumes/Groundwater Inflows (WLWB staff comments 7a and 8a)
- Decant Strategy (WLWB staff comment 7b)
- Seepage Through Bulkheads (WLWB comments 23a and 35a)
- Management of PKC Facility Pond (WLWB staff comment 11a)
- General Questions

## Closure Planning

- DDMI Presentation
- Monitoring Plan for Water Quality within the Open Pits (ECCC comment 3a)
- Closure Options/Plan for the PKC Facility (EMAB comments 8a, 9a, 10a, and 11a; GNWT comment 4a)
- Updates to Closure Objectives and Criteria (EMAB comments 37a, 38a, 33b, and 34b; GNWT comment 6a)
- General Questions
### Day 2 – Thursday January 17, 2019
(continued)

#### Other Topics
- List and Schedule for Additional Studies (EMAB comments 5a and 7a; WLWB staff comments 22a and 26b)
- Engagement (EMAB comment 35b)
- Capacity of PKC Facility (GNWT comment 5a)
- Update to Drainage Control and Collection System (WLWB staff comment 12a)
- General Questions

#### Potential Changes to the Water Licence
- Term Extension (EMAB comment 39a; GNWT comment 7a)
- Part A – Scope and Definitions (WLWB staff comments 24a, 25a, 26a, 27a, and 28a)
- Part B and Schedule 1 (WLWB staff comment 48a)
- Part C and Schedule 2
- Part D and Schedule 3
- Part E and Schedule 4 (WLWB staff comment 29a)
- Part F and Schedule 5 (GNWT comment 8a; WLWB staff comment 30a, 45a, and 46a)
- Part G (GNWT comment 9a; WLWB staff comment 31a)
- Part H and Schedule 6 (GNWT comments 2a and 12a; WLWB staff comments 24a, 32a, 33a, 36a, 37a, 38a, 39a, 40a, 45a, 47a, and 49a)
- Part I and Schedule 7
- Part J and Schedule 8 (EMAB comment 40a; GNWT comment 11a; WLWB staff comment 41a, 42a, 43a)
- Part K and Schedule 9
- SNP (WLWB staff comments 24a, 48a, and 50a)
- Miscellaneous: (GNWT comment 10a; WLWB staff comments 44a and 50a)
- General Questions

#### Description of Proceeding Going Forward (Board staff)