



**Wek'èezhii**  
Land and Water Board

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October 17, 2006

Files: MV2001L2-0004  
MV2001L2-0008  
MV2002L2-0002  
MV2003L2-0013

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### **Regulation of Road Watering Activities at the Ekati Mine**

#### **1. 0 Background**

As you are aware, BHP Billiton Diamonds Inc. (BHPB) holds two Type B water licences that allow freshwater to be withdrawn and applied to roads for dust control: Water Licence MV2001L2-0004 and Water Licence MV2002L2-0002. The scope of these water licences are presented below:

##### **Water Licence MV2001L2-0004**

*This Licence entitles BHP Diamonds Inc. to use water for road watering from the Falcon road watering station for industrial undertakings in mining and milling production and associated uses by BHP Diamonds Inc., Ekati Minesite located at 110°36'39" - 110°36'48", 64°44'39" - 64°44'39" [sic], Northwest Territories.*

##### **Water Licence MV2002L2-0002**

*This Licence entitles BHP Diamonds Inc. to use water for road watering from Lac de Gras for industrial undertakings in mining and milling production and associated uses by BHP Diamonds Inc., Ekati Minesite located at 110°36'39" - 110°36'48", 64°44'39" - 64°44'39" [sic], Northwest Territories.*

#### **2.0 Proposed Regulatory Approach**

In order to more effectively regulate water use and waste disposal at the Ekati Mine, the Wek'èezhii Land and Water Board (the Board) is considering regulating these road watering activities under the provisions of BHPB's two Type A water licences:

- The Sable Haul Road watering activities under Water Licence MV2001L2-0004 would be regulated through a drawdown plan in accordance with part E, item 2 of Water Licence MV2001L2-0008<sup>1</sup> (the Sable, Pigeon, Beartooth expansion licence).
- The Misery Haul Road watering activities under Water Licence MV2002L2-0002 would be regulated through a drawdown plan in accordance with part D, item 1 of Water Licence MV2003L2-0013<sup>2</sup> (the main licence).

Implementing this approach would require the cancellation of the two Type B licences under the provisions of section 18(1)(c)(iii) of the *Northwest Territories Waters Act* (NWTWA), followed by BHPB's submission of the two drawdown plans described above. The drawdown plans would be subject to stakeholder review and would require approval by the Board before activities commence.

### 3.0 Factors for Consideration

For the Board to proceed with this approach to regulating road watering activities, it must be satisfied that the activities are within the scope of the corresponding Type A water licence; that the conditions of the corresponding Type A water licence allow for the activities; and that the conditions of the Type A licences ensure the

<sup>1</sup> Part E, item 1 of Water Licence MV2001L2-0008 reads as follows:

*Prior to the commencement of dewatering or draw-down of and lakes, the Licensee shall submit to the Board for approval, a Dewatering Plan for each lake that shall include, but not be limited to, the following information:*

- volume of water to be dewatered from each source;*
- the expected quality of water to be discharged to the receiving environment;*
- a schedule for dewatering and daily discharge rates;*
- pumping methods including locations of intake and outflow structures;*
- the design of any erosion protection structures in the discharge areas;*
- the description of procedures for visual inspections of any erosion along the affected water course;*
- the frequency and locations for water quality monitoring as referred to in the "Surveillance Network Program";*
- the frequency, location and procedures for monitoring flow rates in the discharge stream;*
- the design of pipeline and related facilities;*
- the procedures and rates for dewatering during the winter months to minimize erosion of the downstream watercourses, adjacent shorelines and damage to fish habitat; and*
- the identification of any treatment that may be used to ensure that effluent quality criteria are met, in accordance with Part G, Item 11(d).*

<sup>2</sup> Part D, item 1 of Water Licence MV2003L2-0013 reads as follows:

*Prior to the commencement of Dewatering or Drawdown of any natural water bodies, excluding the Drawdown of Grizzly Lake, Little Lake and Thinner Lake (Misery Camp), the Licensee shall submit to the Board for approval, a Dewatering or Drawdown Plan for each water body that shall include, but not be limited to, the following information:*

- volume of water produced by Dewatering or Drawdown of each water body;*
- a schedule for Dewatering or Drawdown and maximum pump rates;*
- pumping methods including locations of intake and outflow structures;*
- the design of any erosion prevention structures in the areas where water or Waste is discharged;*
- the description of procedures for inspecting any erosion along the affected watercourse;*
- a description of and mitigation measures for any predicted hydrological or water quality impacts to downstream water bodies;*
- the schedule and locations for water quality monitoring;*
- the frequency, location and procedures for monitoring flow rates in the discharge stream and in the receiving water body;*
- the design of any pipelines and related facilities; and*
- the procedures and rates for Dewatering or Drawdown to minimize erosion of downstream water bodies and adjacent shorelines, and, in winter, damage to spawning habitat from the development of icings, overflows or glaciation.*

protection of affected waters to an extent commensurate with the existing Type B licences.

### 3.1 Scopes of the Type A water licences

The scopes of the two Type A water licences<sup>3</sup> both allow for the use of water for activities associated with diamond mining and milling in specific watersheds. The Board recognizes that the Misery and Sable haul roads and associated water intake structures cross areas between these watersheds, however, the road watering activities were assessed in the 1995 Environmental Impact Statement for the main licence<sup>4</sup> and the 2001 Environmental Assessment Report for the expansion licence<sup>5</sup>.

### 3.2 Type A water licence conditions

**Sable Haul Road:** Road watering is a recognized use of water under part D, item 1 of Water Licence MV2001L2-0008 which states that BHPB "...shall obtain water for road watering and associated uses from Two Rock Lake Sedimentation Pond...or as otherwise approved by the Board." This implies that the Board has the flexibility to evaluate other sources of water for the watering of the Sable Haul Road.

**Misery Haul Road:** Part C, item 1 of Water Licence MV2003L2-0013 states that BHPB "...shall obtain water for domestic purposes, processing and associated uses from Grizzly Lake, Little Lake,...or as otherwise approved by the Board." This implies that the Board has the flexibility to evaluate other sources of water for the watering of the Misery Haul Road.

### 3.3 Protection of affected waters

If this regulatory approach is adopted, the road watering activities would be subject to all conditions of the Type A licences and would have to be carried out in accordance with the approved drawdown plans.

#### Scope of Water Licence MV2001L2-0008

*This Licence entitles BHP Billiton Diamonds Inc. to use water, dewater Sable, Pigeon, and Beartooth Lakes for the purpose of mining, to drawdown Two Rock Lake, divert Pigeon Stream around the Pigeon Pit, pipe water from Bearclaw Lake outflow around Beartooth Pit, use water from Ursula and Upper Exeter Lake, deposit processed kimberlite into the Beartooth Pit for the purpose of creating a pit lake, and dispose of waste for industrial undertakings in diamond mining and milling production and associated uses in the Koala, Pigeon and Sable Watersheds, Northwest Territories as shown on Figure 6, 8 & 10 of the Class A Water Licence and Land Use Permits supporting document, submitted August 21, 2001... [emphasis added]*

#### Scope of Water Licence MV2003L2-0013

*This Licence entitles BHP Billiton Diamonds Inc. (the Licensee) to divert water from Upper Panda Lake to Kodiak Lake, and to use water and dispose of Waste for the purpose of mining the Panda, Koala, Koala North, Misery and Fox kimberlite pipes and for operating the processing facilities and infrastructure associated with diamond mining within the Koala, Misery, King-Cujo and Desperation-Carrie Watersheds of the Lac de Gras basin, Northwest Territories. [emphasis added]*

*The activities listed above are to be conducted as described in the 1994 NWT Diamonds Project Description which was assessed in the 1995 Environmental Impact Statement, as subsequently amended through approvals by the Board during the term of Water Licence N7L2-1616, and as described in the Water Licence Renewal Application.*

<sup>3</sup> Volume 3, Section 6.4 in the 1995 Environmental Impact Statement.

<sup>5</sup> Section 4.5.3 in the 2001 Environmental Assessment Report.

#### 4.0 Request for consent

Before proceeding with this matter, the Board requests that BHPB confirm that the company has no objections. No further consideration to the potential cancellation of the Type B water licences will be given without the written agreement of BHPB. Should BHPB not agree to this proposal, the Type B water licences will remain active and the Board will accept applications to renew the licences as necessary. If the Board proceeds with the cancellation of the Type B water licences, all activities currently allowed under the Type B licences will be encompassed under the Type A licences.

If you have any questions regarding this letter, please contact me at (867) 766-7457 or Lynn Carter at (867) 766-7471.

Yours sincerely,



Sarah Baines  
Technical Coordinator

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