



**Wek'èezhì**  
Land and Water Board

### STAFF REPORT

<b>Company:</b> BHP Billiton Diamonds Inc. (BHPB)	
<b>Location:</b> Ekati Diamond Mine	<b>Water Licenses:</b> MV2001L2-0004 and MV2002L2-0002
<b>Date Prepared:</b> April 29, 2007	<b>Meeting Date:</b> May 14, 2007
<b>Subject:</b> Reasons for Decision for the cancellation of the Type "B" water licenses for road watering	

#### Purpose

The purpose of this staff report is to present to the Board for its review and approval the draft Reasons for Decision for the cancellation of BHPB's Type "B" water licenses. The Board passed this motion on March 30, 2007 as it felt that the use of water for dust control on the Misery and Sable Haul Roads was more efficiently regulated under BHPB's Type "A" water licenses.

Respectfully submitted,

**Sarah Baines**  
Technical Coordinator



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## WEK'ÈEZHÌ LAND AND WATER BOARD

### REASONS FOR DECISION

In the matter of: Cancellation of Type "B" water licenses  
Water Licenses: MV2001L2-0004 and MV2002L2-0002  
Licensee: BHP Billiton Diamonds Inc.

Issued pursuant to section 26 of the *Northwest Territories Waters Act*<sup>1</sup> (NWTWA)

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### BACKGROUND AND REGULATORY HISTORY

BHP Billiton Diamonds Inc. (the Company) holds two Type "B" water licenses that allow fresh water to be withdrawn and applied to roads for dust control: Water Licence MV2001L2-0004 and Water Licence MV2002L2-0002. The scopes of these water licenses are presented below:

#### Water Licence MV2001L2-0004 – Sable Haul Road Watering

*This Licence entitles [the Company] 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 – Misery Haul Road Watering

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

With the goal of more effectively regulating water use and waste disposal at the Ekati Mine, the Board proposed to the Company, by way of a letter dated October 17, 2006, an alternative approach to regulating the withdrawal of fresh water for road watering. The proposal was to regulate road watering activities under the provisions of the Company's two Type "A" water licences:

- The Sable Haul Road watering activities allowed under Water Licence MV2001L2-0004 would be regulated through a drawdown plan in accordance with part E, item 2 of Water Licence MV2001L2-0008 (the SPB Licence).

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<sup>1</sup> S.C. 1992, c.39

- The Misery Haul Road watering activities allowed under Water Licence MV2002L2-0002 would be regulated through a drawdown plan in accordance with part D, item 1 of Water Licence MV2003L2-0013 (the Main Licence).

In the same letter, the Board informed the Company that implementing this approach would require the cancellation of the two Type "B" licenses under the provisions of section 18(1)(c)(iii) of the NWTWA, followed by the Company'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.

In response to this proposal, the Company wrote to the Board on November 15, 2006 indicating that it had no objections to the Board continuing considering this alternative regulatory approach. The Board was of the opinion that in order to proceed with this approach, it must be satisfied that:

- (1) the use of water for road watering is within the scopes of the Type "A" water licenses.
- (2) the conditions of the Type "A" water licenses allow for the use of water for road watering.
- (3) the conditions of the Type "A" water licenses ensure the protection of affected waters to an equal or greater extent than the Type "B" licenses.

To assist in making these determinations, the Board solicited input from the parties on the Ekati Distribution List<sup>2</sup> on the proposed regulatory approach in general and on the three criteria listed above. The deadline for these comments was initially set for December 8, 2006 but was extended to December 15, 2006. Overall, the parties that submitted comments indicated their support for the proposed regulatory approach as indicated in the following comment summary table:

REVIEWING AGENCY	COMMENTS
Environment Canada - email, Dec. 13, 2006	<i>This will confirm that Environment Canada has no concerns with consolidating the road watering activities from the two Type B licenses into the existing Type A licenses.</i>
Water Resources Division, INAC - email, Dec. 15, 2006	<i>The Water Resources Division of INAC does not have any technical concerns with respect to allowing the activities currently conducted under the Type B water licenses to continue under the Type A water</i>

<sup>2</sup> Members of the Ekati Distribution List include: Lands Protection Department, Tłı̨ch̨o Government; Kitikmeot Inuit Association; Environment Canada; Department of Fisheries and Oceans; Indian and Northern Affairs Canada (INAC); Government of the Northwest Territories; Independent Environmental Monitoring Agency; BHP Billiton Diamonds Inc. (the Company); Wek'èezhii Renewable Resource Board; Behchoko Community Government; Wekweètł Community Government; Whatł Community Government; Gamètł Community Government; Lutsel K'e Dene First Nation; North Slave Metis Alliance; Yellowknives Dene First Nation; Akaitcho IMA Implementation Office; and Behchokō Metis Local #64.

<p>Department of Fisheries and Oceans - email, Dec. 15, 2006</p>	<p><i>licenses.</i></p> <p><i>DFO does not oppose the Type B WL amalgamation.</i></p> <p><i>DFO supports the amalgamation based on page 2 of the Board's letter where it is stated that drawdown plans would have to be submitted. The drawdown plans would be subject to stakeholder review and would require approval by the Board before activities commence. The review of these drawdown plans would enable DFO to ensure that water withdrawal protocols are adhered to.</i></p>
<p>Independent Environmental Monitoring Agency (IEMA) - letter, Dec. 15, 2006</p>	<p><i>The Agency is generally supportive of efforts to coordinate regulatory requirements and reporting, and agrees with the concept of consolidating the regulation of road watering activities at Ekati. Accordingly, we support the move by the Board to consolidate road watering requirements.</i></p> <p><i>We note that there are some specific measures spelled out in the current Class B licenses such as daily and annual limits for water withdrawals, annual reporting requirements for water used and unauthorized discharges, and updating of contingency and closure plans. We also note that the use of chemical dust suppressants on the Misery Road requires approval of the Board under the Class B licence covering this activity.</i></p> <p><i>We note that the Class A water licenses would require submission of a plan ahead of time for dewatering related to road work, and that there are general requirements for the reporting of water use. There does not appear to be an explicit requirement for updating contingency and closure plans, or for Board approval of dust suppressants under the Class A licenses for activities related to road watering. We are of the view that it would be desirable that these requirements be retained as part of the dewatering plans under the Class A licenses for road watering.</i></p>

The Company indicated in an email on December 11, 2006 that since the parties generally agree with the proposed regulatory approach, the Company would provide a response to the review comments during the next review phase.

On December 19, 2006, the Board considered the parties' comments and made the following rulings on the three criteria that in the opinion of the Board must be satisfied in order for the Board to proceed with regulating the use of water for road watering:

**Ruling 1: Scopes of the Type A water licences**

The scopes of the two Type A water licences<sup>3</sup> allow for the use of water for activities associated with diamond mining and milling in specific watersheds. As the Board

<sup>3</sup> 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*

was of the view that road watering is an activity associated with mining at Ekati, the Board ruled that the road watering activities are within the scopes of the Type "A" licences.

The Board does recognize that the Misery and Sable haul roads and associated water intake structures cross between the watersheds identified in the scopes. 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 SPB Licence<sup>5</sup>.

#### Ruling 2: Type A water licence conditions

The Board ruled that the conditions of the Type A licences allow for fresh water to be used for road watering as the licences do not cap the total volume of water used for from all sources, only from specific sources. The Type A licences also provide the Board with mechanisms for evaluating new fresh water sources as indicated below:

- Watering the Sable Haul Road is a recognized use of water under part D, item 1 of the SPB Licence which states that the Company "...shall obtain water for road watering and associated uses from Two Rock Lake Sedimentation Pond...or as otherwise approved by the Board."
- Using water for watering the Misery Haul Road is provided for under part C, item 1 of the Main Licence which states that the Company "...shall obtain water for domestic purposes, processing and associated uses from Grizzly Lake, Little Lake,...or as otherwise approved by the Board."

#### Ruling 3: Protection of affected waters

The Board ruled that the affected waters will be protected to an equal or greater extent by regulating them through drawdown plans under the Type "A" licenses rather than the Type "B" licenses. As demonstrated in the table below, all conditions in the Type "B" licenses are also conditions of the Type "A" licenses with the exception of part C, item 5 in Water Licence MV2002L2-0002 that prohibits the use

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*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>4</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

of chemical dust suppressants on the Misery Road (see section titled *Board Decision* for further discussion on this clause). Furthermore, the road watering activities must be carried in accordance with the drawdown plans approved by the Board.

Conditions of WL MV2001L2-0004	Corresponding Conditions in the SPB Licence
Part B, item 1	Part D, item 4
Part B, item 2	Part B, item 1(x)
Part B, item 3	Part B, item 5
Part B, item 4	Part B, item 8
Part C, items 1, 2 and 3	The drawdown plan required under part E, item 2 will include these limits and conditions.
Part D – No conditions in this section.	—
Part E, item 1	Part H
Part F, items 1, 2, 3 and 4	Part J
Part G, item 1	Part L, item 1
Part G, item 2	Part L, item 1
Part G, item 3	Part L, item 5
Part G, item 4	Part L, item 6
Part G, item 5	This is a requirement of the approved terms of reference for the January 2007 Interim Closure and Reclamation Plan.
Part G, item 6	Part L, item 2 and part B, item 1(u)
Part G, item 7	Part L, item 8
Part H – No conditions in this section.	—

Conditions of WL MV2002L2-0002	Corresponding Conditions in the Main Licence
Part B, item 1	Part B, item 2
Part B, item 2	Part B, item 9(y)
Part B, item 3	Part B, item 12
Part B, item 4	Part B, item 12
Part C, items 1, 2, 3 and 4	The drawdown plan required under part D, item 1 will include these limits and conditions.
Part C, item 5	Condition of the cancellation of the Type "B" licence.
Part D, item 1	Covered by the <i>Fisheries Act</i> and part F of the Type "A" licence.
Part E, item 1	Part G
Part F, items 1, 2, 3, and 4	Part H
Part G, items 1 and 2	Part J

The Board notified the Company and parties on December 19, 2006 of its rulings on the three criteria and requested that the Company inform the Board as to whether or not the Company wanted to proceed with the cancellation of the Type "B" water licenses. The Company indicated in a letter dated January 23, 2007 that, "...[b]ased on the Board's ruling that the scope and conditions of the Type A water licenses allow for the use and deposit of water for road watering activities, [the Company] has no objections to the

*Board proceeding with the water license amalgamation process, beginning with the cancellation of the two Type B water licenses."*

Consequently, the Board placed an advertisement in *News/North* and *The Yellowknifer* (February 5, 2007) for a public hearing into the matter in accordance with section 18(1)(c)(iii) of the NWTWA. Interventions were due by March 12, 2007 but none were received by the deadline. However, Indian and Northern Affairs Canada stated in a letter to the Board dated March 13, 2007 that it *"...has no technical concerns with respect to transferring the present activities currently conducted under the present Type B water Licenses to continue under the Type A water licenses."*

The Company was notified that no interventions were received by the deadline and invited to make any final comments on the proposed regulatory approach for the road watering activities. On March 22, 2007, the Company informed the Board in writing that as they expect *"...that no operational changes will be incurred as a result...[the Company] has no further comment at this time and requests that the Board proceed with the next step in the cancellation of the two Type B water licenses."*

Once the Company agreed with the cancellation of the Type "B" licenses, the Board met on March 30, 2007 to deliberate on the cancellation of Water Licenses MV2001L2-0004 and MV2002L2-002.

### **BOARD DECISION**

The public record indicates that Environment Canada, the Water Resources Division of INAC, the Department of Fisheries and Oceans, the Independent Environmental Monitoring Agency, and the Company support the regulation of the use of water for dust control on the haul roads through drawdown plans under the Type "A" licenses. The record also shows that no concerns with this approach were raised.

Based on this evidence, the Board is satisfied that the proposed alternative regulatory approach is in the public interest. It is more efficient than the current situation where four licenses are used to regulate activity that can in the Board's opinion be regulated by the two Type "A" licenses already in place. The cancellations will not result in any reduction in the protection of the water resources affected by the Ekati Diamond Mine. The Board has therefore decided to cancel WL MV2001L2-0004 and WL MV2002L2-0002 in accordance with section 21(2)(d) of the NWTWA.

As a result of the cancellation of the Type "B" water licenses, the Company must now submit revised drawdown plans in accordance with the Type "A" licence conditions identified below prior to withdrawing water from the Falcon and Lac de Gras water supply facilities:

<b>WATER SUPPLY FACILITY</b>	<b>FRESH WATER WITHDRAWAL LIMIT</b>	<b>TYPE A WL CONDITION</b>
Falcon (Sable Road)	100,000 m <sup>3</sup> annually	WL MV2001L2-0008 – part E, item 2
Lac de Gras (Misery Road)	1400 m <sup>3</sup> daily 100,000 m <sup>3</sup> annually	WL MV2003L2-0013 – part D, item 1

Once the drawdown plans have been approved by the Board, further approvals are only necessary if the Company wants to change the plans.

In addition to the submission of drawdown plans, the Company must continue the following activities as they are conditions of the Type "A" licenses:

1. paying water use fees annually in advance of water use
2. reporting the monthly and annual quantities of freshwater obtained at the water supply facilities in the annual reports
3. reporting any unauthorized discharges in the annual reports
4. addressing reclamation of the water supply facilities and associated infrastructure in the ICRP
5. applying the General and Spill Contingency Plan required under part J, item 1 of WL MV2001L2-0008 and part H, item 3 of WL MV2003L2-0013 to activities associated with the road watering
6. equipping intake hoses with screens sufficient to prevent the entrainment of fish

As part of its deliberations, the Board also discussed the condition in Water Licence MV2002L2-002 that prohibits the use of chemical dust suppressants on the Misery Road. The Board is of the opinion that use of such chemicals requires approval. Prior to the use of any dust suppressant on the Misery Road, the Company must submit a written request to the Board describing the preferred suppressant, the measures to be undertaken to prevent its entrance into surface waters, the frequency of use, and any other relevant details.

**Signed the 14<sup>th</sup> day of May 2007 on behalf of the Wek'èezhii Land and Water Board**

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**Witness**

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**Chair**