



October 26, 2007

The Honourable Chuck Strahl
Minister of Indian Affairs and Northern Development
House of Commons
Ottawa, Ontario K1A 0A6

Dear Minister Strahl:

Re: Northwest Territories Water Licenses

On the 9th of October 2007, we received confirmation that our Type "A" Water Licence had been approved by yourself. This approval provides a licence to operate (in regard of water use and waste disposal) for eight years.

This is the second water license granted to Diavik Diamond Mines Inc. (the first was granted in August 2000 and expired in October 2007).

The process of water licence renewal in the Northwest Territories appears to be unique in Canada and indeed many parts of the world, in that there are no water quality and effluent standards laid down in the relevant regulations and acts.

We believe this is a matter of public policy which requires your consideration. We believe that addressing three key issues would assist all stakeholders and provide greater regulatory certainty, consistency and efficiency with respect to the granting of water licences in the Northwest Territories.

The three issues are:

1. The establishment, by your Ministry, of water quality standards and effluent standards, applicable in the NWT, as contemplated by paragraphs 33(1)(h) and (i) respectively, and paragraph 14(c) of the *Northwest Territories Waters Act* (the "*NWT Waters Act*");
2. The establishment, by your Ministry, of regulations under s. 33 of the *NWT Waters Act*, for environmental effects monitoring; and

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3. Policy directions under s. 83 of the *Mackenzie Valley Resource Management Act* ("MVRMA") respecting the term of water licences for major projects.

Each of these public policy issues is addressed separately below.

1. Establishing water quality standards and effluent standards

The *NWT Waters Act* provides as follows with respect to water quality guidelines and effluent standards:

"33. (1) The Governor in Council may make regulations

(h) prescribing water quality standards for any waters;

(i) prescribing effluent standards in relation to any waters."

"14. (4) Where an application for a licence is made, the Board shall not issue a licence unless the applicant satisfies the Board that

(c) any waste that would be produced by the appurtenant undertaking will be treated and disposed of in a manner that is appropriate for the maintenance of

(i) water quality standards prescribed by regulation made under paragraph 33(1)(h) or, in the absence of such regulations, such water quality standards as the Board considers acceptable, and

(ii) effluent standards prescribed by regulations made under paragraph 33(1)(i) or, in the absence of such regulations, such effluent standards as the Board considers acceptable."

Since, the federal government has not yet prescribed water quality standards or effluent standards applicable under the *NWT Waters Act*, there is no consistency between water licenses, adding to uncertainty.

The Canadian Council of Resource and Environment Ministers has adopted the Canadian Water Quality Guidelines for the Protection of Aquatic Life, described as follows:

"Canadian Water Quality Guidelines for the Protection of Aquatic Life help to protect all plants and animals that live in our lakes, rivers, and oceans by establishing acceptable levels for substances or conditions that affect water quality such as toxic chemicals, temperature and acidity. As long as conditions are within the levels established by the guidelines, one would not expect to see negative effects in the environment. The guidelines are based on toxicity data for the most sensitive species of plants and animals found in Canadian waters and act as science-based

benchmarks for the protection of 100% of the aquatic life species in Canada, 100% of the time."

These Guidelines (referred to here as the "Canadian WQGs") have been generally applied in determining effluent quality criteria (EQCs) in water licences under the *NWT Waters Act*. However, since the Canadian WQGs are not expressly adopted under the *NWT Waters Act*, some parties raise questions with respect to the applicability of the Guidelines to the North – and this results in regulatory uncertainty, unpredictability, and inefficiency.

By way of example, the establishment of an EQC for ammonia with respect to the Diavik mine took four years (June 2003 to June 2007) – and the EQC adopted was not based on the Canadian WQGs. The following is a summary of the ammonia EQC determination:

- In previous hearings before the NWT Water Board for the De Beers Snap Lake Mine, INAC presented a detailed analysis confirming that an EQC of 20 mg/L maximum was protective of the environment, based on the Canadian WQGs. The NWT Water Board accepted this approach and set an effluent standard of 20 mg/L maximum for ammonia in the Snap Lake Water Licence.
- DDMI presented expert evidence to the WLWB with respect to the Diavik mine, establishing that the effluent quality standard for ammonia, derived from the Canadian WQGs is 20 mg/L maximum.¹
- INAC and Environment Canada in their submissions to the WLWB, agreed that the effluent quality standard derived from the application of the Canadian WQGs, and therefore protective of the environment, is 20 mg/L maximum.
- The WLWB determined an EQC for ammonia of 12 mg/L maximum for the Diavik Water Licence.² This effluent standard was not based on a recognized process used previously in the NWT or elsewhere in Canada. The EQC was determined by an expert panel, appointed by the Board, to predict the "lowest practical level" of ammonia achievable by good management measures at the site.
- The expert panel confirmed that it did not base its determination on any consideration of environmental effects. Evidence presented at the hearings did not determine that it was necessary to maintain ammonia at less than 20 mg/L maximum to protect the environment.
- The Tlcho Government, INAC, and other intervenors supported the adoption of the 12 mg/L maximum EQC on the premise that "lower is better", but presented no scientific evidence that a limit of 12 mg/L was necessary to protect the environment.
- The WLWB, in its Reasons for Decision, determined the ammonia EQC based on the "lowest practical" approach and not based on the Canadian WQGs.

¹ INAC also calculated an average EQC of 10 mg/L based on the Canadian WQGs.

² The WLWB has also determined an average EQC of 6 mg/L also based on the "lowest practical" approach.

The Board, in its reasons of July 23, 2007 notes specifically that:

"there are no regulations establishing the water quality standards referred to in paragraph 14(4)(c) of the Northwest Territories Waters Act to assist the Board in setting of EQC . . ." (page 7); and

"Further, in the absence of such standards, the Board has the discretion to choose effluent quality standards."

The exercise of discretion by regulatory boards should be applied within reasonable guidelines such as the Canadian WQGs.

The establishment of water quality guidelines, by your Ministry, applicable to Water Boards under the *NWT Waters Act* (particularly given the responsibilities of numerous regional boards) would provide for regulatory certainty, consistency, and efficiency.

The *Report of the Auditor General of Canada to the House of Commons, April 2005, specific to Indian and Northern Affairs Canada, Development of Non-Renewable Resources in the Northwest Territories*, addressed this issue as follows:

"Main Points

6.1 Non-renewable resources offer enormous potential for economic development in the Northwest Territories (NWT). Yet the investment climate for this development is uncertain, in part because Indian and Northern Affairs Canada has not adequately managed its role in the process that considers development projects.

6.2 This includes not providing guidance on some of the ambiguous terms in the governing legislation or on establishing water standards permitted by legislation. It also includes not requiring boards to be accountable for managing their role in the process without impinging on the decisions they take as quasi-judicial bodies."

"Regulations for water should be established

6.48 When the land and water boards issue water licences under the authority of the *Northwest Territories Waters Act* and the MVRMA, they require the licensees to meet certain conditions such as measures to mitigate the environmental impacts of the use of water or the deposit of waste. Applicants for licences or permits should be able to know before they submit their proposals the standards for water use and waste disposal that they must meet. In that way, they would be able to demonstrate in their project plans how they will meet those standards.

6.49 In fact, the *Northwest Territories Waters Act* provides for the Minister for Indian and Northern Affairs, working with the boards, to make regulations governing the quality of water. Similarly, the MVRMA gives the Minister the authority to provide written policy directions regarding land and water regulations.

6.50 However, the Department has chosen not to exercise these authorities. Consequently, when completing an application for a water licence, applicants do not know whether they are to meet an international standard of water quality, a national or territorial standard, a standard specific to the development site's environment, or the highest standard established by science.

6.51 This absence of direction on standards for water can raise the risk of confusion and uncertainty over the stringency of the requirements that applicants are to meet in order to have their applications approved.

6.52 **Recommendation.** Indian and Northern Affairs Canada, in consultation with the boards under the *Mackenzie Valley Resource Management Act*, should develop standards for water and the Minister should direct the boards to use the standards.

Department's Response. In consultation with the boards and water users, the Department will ascertain the information needs (with respect to water standards used by the boards to set licence terms and conditions) of water users and the best form to provide proponents with certainty. A report on information needs will be completed by the end of 2006.

In consultation with the boards, the Department will develop water standards and set them out in codes, guidelines, policy, or regulations, as best fits the need. A completion date will be determined as part of the consultation.

The Department will improve the system for notification to the boards of various standards. This will be an ongoing process."

We are not aware of any substantial progress made by INAC in the development of water standards or policy directions under the *NWT Waters Act* or the MVRMA.

2. Guidelines for environmental effects monitoring

There are no regulations or guidelines under the *NWT Waters Act* for environmental effects monitoring.

By comparison, detailed specifications for environmental effects monitoring (known as "EEM") have been established under the federal *Fisheries Act* and adopted through the *Metal Mining Effluent Regulations* ("MMER") (see Section 7 and Schedule 5), which replaced the previous *Metal Mining Liquid Effluent Regulations* ("MMLER").

The extensive and thorough process for establishing guidelines for EEM was described in the Regulatory Impact Analysis Statement issued with respect to the MMER:

"The proposed new MMER is the result of an extensive consultation process spanning approximately six years.

In June 1993, the Assessment of the Aquatic Effects of Mining in Canada (AQUAMIN) process was initiated in response to Environment Canada's commitment to update and strengthen the MMLER. This multi-stakeholder process involved representatives from federal departments, provincial ministries, industry, environmental non-governmental organizations, and First Nations groups. The final AQUAMIN report of April 1996 advanced more than 50 recommendations in three key areas, those being: specific amendments to the MMLER; the design of a national EEM program; and information gaps and research needs.

In response to the recommendations of the AQUAMIN report, a multi-stakeholder advisory group and several expert working groups were established to provide ongoing advice on the development of the proposed new MMER and the associated EEM program. This phase of the consultation process took place from mid-1997 to mid-1999 and, similar to AQUAMIN, involved representatives from federal departments, provincial ministries, industry, environmental non-governmental organizations, and First Nations groups."

However, the MMER do not apply in diamond mines (which are not metal mines), and no regulations on environmental effects monitoring have been adopted under the *NWT Waters Act*.

The absence of environmental effects monitoring regulations under the *NWT Waters Act* leads to regulatory uncertainty, inconsistency, and inefficiency.

The Aquatic Effects Monitoring Plan for the Diavik mine, referred to at pages 15 and 16 of the WLWB's reasons of July 27, 2007, is the product of extensive regulatory uncertainty from 2000 to 2006 – and was only approved in June 2007 after an extensive process involving the retention, by the Board, of an expert consultant to recommend special terms of reference. Over 3000 hours of expert professional time were expended by DDMI contractors, and many of these hours were used to provide rationale for the selected monitoring approach. Under the Federal MMER, much of this rationale would have already been provided reducing uncertainty and providing considerable efficiencies for all parties.

Adoption, by regulation, under the *NWT Waters Act*, of guidelines on environmental effects monitoring, similar to the guidelines under the MMER would provide for regulatory certainty, consistency, and efficiency.

3. Term of Licence

Section 14(1) of the *NWT Waters Act*, provides for water licence terms "not exceeding 25 years". Section 18(1)(a) allows for a renewal "not exceeding 25 years".

The Diavik mine has a projected mine life of 16-22 years from its commencement of operations in 2003.

However, the initial Water Licence was issued for only seven years (August 2000 to August 2007). Diavik applied for a renewal of the Licence under the *NWT Waters Act* for a term of 15 years to coincide with the projected remaining life of the mine. In its reasons for decision, the Board determined that an eight year term was "appropriate".

We note that in other jurisdictions in Canada, mining projects are given licences and permits which are applicable to the life of the mine. This provides for regulatory certainty – particularly for major investments.

The short terms for water licences granted under the *NWT Waters Act* appear to be based on historic precedence. The effect is that significant investments must be made (e.g. \$1.3 billion to construct the Diavik mine) without having the security of a licence applicable for the life of the investment (as is granted in other jurisdictions). The result is that licenses must be renewed several times during mine life, creating significant uncertainty and additional costs. The Diavik license renewal has been a two year process of regulatory review, as was that of BHP Billiton with their Ekati mine license.

Policy direction from your Ministry directed at what would be required to apply for and receive life-of-mine terms for permits would provide for regulatory certainty, consistency, and efficiency.

It should be noted that the water licences and the *NWT Waters Act* contain numerous provisions for the revision or amendment or review of licence provisions where necessary. For example, the Diavik water licence requires regular review and allows for revision of environmental monitoring plans, closure and reclamation plans, etc. The issuance of licences for the life-of-mine would still allow for review and modification of licence provisions where necessary.

DDMI is available to discuss the contents of this letter with you or your staff. We would also like to extend an invitation to you to come and see the Diavik mine site. We are very proud of our site and our environmental performance and would appreciate the opportunity to demonstrate this on a site tour.

We ask that you give careful consideration to these issues in the interests of improving the regulatory framework in the NWT in the interests of all parties.

Yours truly,



Kim Truter
President and Chief Operating Officer

- c: Ms. Violet Camsell-Blondin (WLWB)
Mr. Williard Hagen, Chair, Mackenzie Valley Land & Water Board
Mr. Lou Covello, President, NWT & Nunavut Chamber of Mines
Mr. Gordon Peeling, President, Mining Association of Canada
Mr. Doug Paget, A/Director, Mining & Infrastructure Directorate, Indian Affairs and Northern Development