

YUKON WATER BOARD

REASONS FOR DECISION

WATER USE APPLICATION QZ09-085
Emergency Amendment Application to QZ96-006
Minto Exploration Ltd.
Minto Creek

On June 22, 2009 the Yukon Water Board (“the Board”) received an application for an emergency amendment to water use licence QZ96-006.

The Yukon Water Board (“the Board”) has concluded deliberations pertaining to Water Use Application QZ09-085, an application for an emergency amendment of type ‘A’ licence QZ96-006.

In making licensing decisions pertaining to this application, the Board took into account the *Waters Act*, *Waters Regulation*, Chapter 14 of the Umbrella Final Agreement, the Yukon Environment and Socio-economic Assessment Act, the information and position of the application, the information and position of the interveners, and the *Yukon Water Board Guidelines for Processing an Application for Emergency Amendment*.

Background

Licence QZ96-006 authorizes the Licensee to discharge water from the Reclamation Pond at levels that are more restrictive than the Metal Mining Effluent Regulations (“MMER”). In the application for an emergency amendment QZ09-085, Minto Explorations Ltd. (“the Licensee”) requested to discharge 2,000,000m³ of water at levels less restrictive than their existing licence from the Water Storage Pond and Pit over a period of time that extends to freshet 2010.

Consultation

Under section 21(4) of the *Waters Act* (“the Act”), the Yukon Water Board may grant an emergency amendment to a water use licence without a public hearing or providing a notice of public hearing.

The Yukon Water Board distributed the application and invited input from the following parties:

- Selkirk First Nation;
- Yukon Government;
- Environment Canada; and
- The Department of Fisheries and Oceans.

Under the *Yukon Water Board Guidelines for Processing an Application for Emergency Amendment*, the Board invited the Licensee and intervening parties to be present during the

meeting to provide additional information and/or clarification to assist the Board in its determination. The Licensee was the only party that appeared before the Board.

Additional information was presented verbally by the Licensee during the meeting. The Board requested that the new information be submitted in writing. The additional information was circulated to the intervening parties for comment.

Determination of an Emergency

The *Waters Act* does not set out the criteria for the determination of an emergency. The *Yukon Water Board Guidelines for Processing an Application for Emergency Amendment* state that in the past the Board has not considered an economic hardship, on its own, an emergency. The Board has, by practice, accepted the principle that an emergency is a sudden or unforeseen condition, which, if not rectified, would endanger human life or the natural environment. These guiding principals were reaffirmed and agreed upon by the Board when determining if the licence was an emergency.

The Board received interventions from the following parties:

- Selkirk First Nation;
- Department of Fisheries and Oceans;
- Government of Yukon; and
- Environment Canada.

The Board acknowledges that this application for an emergency amendment is similar in nature to the application for emergency amendment that was received for the same site in summer 2008.

The Board determined that an emergency did exist, but came to a different conclusion as to the extent of the emergency than as proposed by the Licensee in the application.

Water Quantity

The Licensee requested authority to discharge the water currently contained the pit and water storage pond, as well as authority to discharge additional water anticipated in the fall of 2009 and spring freshet in 2010. The Board determined that freshet 2010 did not meet the Board's definition of an emergency, as it does not require immediate attention to avoid imminent impacts to human health or the environment.

Although the stated capacity of the pit is 4.6 million cubic meters, the perceived critical level of rock/overburden interface had been reached. The Licensee stated that seepage through the overburden and destabilization of permafrost could occur thereby potentially increase the risk to human health and safety. Furthermore, the water quality in the pit

could be subject to further degradation cause by interaction with the overburden.

The Board acknowledged that based on the information provided, the Licensee was near capacity for water storage with only 50,000m³ remaining in the Water Storage Pond. It was determined that an additional precipitation event similar to that experienced in summer 2008 could result in an uncontrolled discharge, and an uncontrolled discharge could cause an adverse effect on the environment.

The Licensee stated that the Minto Mine received approximately 300,000m³ of water in summer 2008. The Board determined that the authorized discharge release of 300,000m³, combined with the existing 50,000m³ currently available in the Water Storage Pond should be adequate to address the immediate concern and provide storage for summer precipitation events, thereby alleviating the emergency and preventing environmental impact and risk to human life

Discharge Rate and Visual Inspections

In their intervention, the Department of Fisheries and Oceans stated that a discharge rate of 10,000m³/day is unlikely to fish habitat, however were unable to comment on the impacts associated with a discharge rate of 20,000m³/day. The Board determined a maximum discharge rate of 10,000m³/day would be protective and incorporated the Government of Yukon's recommendation to conduct visual inspections of the downstream environment prior to, during and after discharge events to ensure that potential scouring, erosion or stranding of fish would be mitigated.

Term of Amendment

The Board determined that the duration of the discharge events shall not exceed 45 days. Although only 30 days is required for the discharge at 10,000 m³/day, the Board has allowed for 45 days to allow for any unforeseen events that could lead to a delay in the completion of this discharge. Upon completion of the discharge events, this amendment will cease to exist and the conditions of the current Licence QZ96-006 will apply.

Effluent Quality Standards

The Licensee proposed that the effluent quality standards reflect those in the *Mine Metal Effluent Regulations* (MMER). The amendment includes the full suite of parameters taken from Schedule 4 of the MMER, as well as included the requirements for pH and acute toxicity testing requirements from section 4.0 of the MMER.

In their intervention, the Selkirk First Nation were opposed to the issuance of amendment allowing for discharge with effluent standards based of the MMER and proposed that the "target" discharge criteria proposed by the Applicant should become the effluent quality

standards. The Board acknowledges that the target criteria are desirable; however the Licensee would not be able to meet discharge criteria that are more restrictive than MMER. Given that the duration and quantity of discharge is significantly reduced from those requested in the application, it was felt that the MMER would be a sufficient effluent quality standard for this amendment.

Discharge Events

Schedule B of the application states that the top 3 metres (or 150,000m³) of the Water Storage Pond is acceptable for direct discharge to the environment. Given flow control and discharge strategy presented in the application, the Board allowed for discharge to commence immediately. Prior to subsequent discharge, the Licensee must ensure that the information requested in clause 93 is provided to the Board as recommended by Environment Canada.

Monitoring

The monitoring requirements during discharge listed in clause 95 are adopted based on the application and recommendations from the interveners. The Board incorporated the Government of Yukon's recommendation to increase the frequency of *in situ* profile monitoring to 4 times per day.

Although chronic toxicity testing is not a requirement under MMER, the Licensee committed to include it in their monitoring program. The frequency of acute toxicity monitoring was adjusted from monthly, as requested in the application, to bi-weekly given the limited 45 day duration of the authorized discharge.

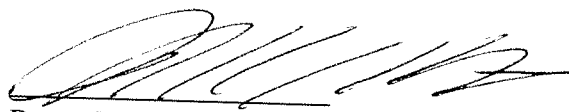
Confirmatory sampling is required for the water storage pond and/or pit prior to discharge as required by clause 93. Clause 96 was a recommendation of Environment Canada to conduct sediment monitoring at W2. Sediment monitoring is a requirement of the existing licence; however its incorporation into this amendment will ensure it is performed on a timely basis.

Long Term Water Management

To avoid another emergency amendment for the discharge of water, the Board included clause 98 to supply to the Board an updated water balance for the site and an updated Water Management Plan for the on-site management of water (including the spring freshet of 2010) by July 31, 2009.

Conclusion:

The Board determined that an emergency did exist and approved the issuance of an emergency amendment to mitigate potential impacts to the environment and humans. However it is essential that the applicant proceed with an amendment for a Water Management Plan with proposals for water discharge as soon as possible. To keep applying for emergency applications defeats the intent of the Waters Act that ensures a public hearing for type A matters.



Bruce Willis, Chairperson
YUKON WATER BOARD

July 2 2009
(Date)