

REASONS FOR DECISION

WATER USE APPLICATION QZ06-074 ELSA RECLAMATION AND DEVELOPMENT COMPANY KENO HILL MINES PROPERTY

The Yukon Water Board (“the board”) has concluded deliberations pertaining to Water Use Licence Application QZ06-074 for a Type B Licence for a quartz mining undertaking.

The purpose of the application is to obtain authorization for use of water for the continued treatment of watering draining from existing adits and the Valley Tailings Area facility, to deposit waste in the form of treated adit water, untreated adit water and sludge disposal all of which originate from the Keno Hill Mines Property. The property has been identified as a type II mine site that has been under Government care. The mine is currently inactive.

Notice of this application was provided in accordance with the requirements of the *Waters Act*. In response, the board received interventions from the following parties:

Government of Yukon-Environment and Energy, Mines and Resources (“GY”),
Environment Canada (“EC”),
Yukon Conservation Society, and
First Nation of Nacho Nyak Dun (“NND”).

The board received a request for a public hearing from NND. The applicant responded to the interventions from GY, Environment Canada and NND.

In making licensing decisions pertaining to this application, the board also took into account the *Waters Act* (“the Act”), *Waters Regulation* (“the Regulation”), the application, recommendations from the interveners, the board's standard licence requirements, Mining Maps 105M/13 and 105M/14, YESAA Decision Document (“Decision Document”), Chapter 14 of the Umbrella Final Agreement (“UFA”) and board policies.

Environmental Assessment

This application required an environmental assessment under the *Yukon Environmental and Socio-economic Assessment Act* (“YESAA”).

Prior to making licensing decisions, the board reviewed the YESAA Decision Document that is included in the water use register. As per section 86 of YESAA, the board is satisfied that the issuance of licence QZ06-074 is not contrary to the terms and conditions included in the YESAA Decision Document; however, the board noted that the Decision Document restricted the board’s ability to make licensing decisions under the Act, which will be detailed in the sections below.

Determination of Type of Licence

The Licensee submitted an application to the board requesting a type B licence. GY argued that the application should have been for a type A licence. The board determined that it does not have the authority to advise applicants of the type of licence that they should request, but the board also determined that a type B licence could not be issued if the works proposed do not meet the criteria established for a type B in Schedule 7 of the Regulation.

The board reviewed Schedule 7 of the Regulation and noted that the Licensee did not propose to construct a dam, but noted that the dams in the Valley Tailings Area do exist and the amount of water retained behind those dams does exceed the type B threshold for construction. The board concluded that since construction is not the issue, the key determination, in this instance is whether or not a hazard is posed.

The board considered the nature of the tailings that are impounded by the dam, and noted that there would be a hazard if the dam failed and tailings were released to the downstream environment. On the other hand, the board noted that the purpose of the dam is to mitigate that hazard. The application included documentation outlining that repairs have been made to the dams and inspections are ongoing, as well as a letter from a Professional Engineer stating that the dams are stable and do not pose a hazard.

The board determined that it would accept the statement of the Professional Engineer that the dams do not pose a hazard. Therefore, the application does not fail to meet the criteria for a type B licence.

Rules of Procedure

The procedures for processing water use applications are set out in the board's Rules of Procedure, which are publicly available at the board office or electronically on the board website. The Yukon Water Board is an adjudicative board and operates under the Rules of Natural Justice and provides procedural fairness during all licence proceedings.

In regards to the NND request for the design of a process that would allow NND to fully participate in the regulatory process, the board's Rules of Procedure provides an open and transparent process including participation of the public, which is a vital component of the process.

Public Notice and Notice to a First Nation

The board is required by the Act to give notice of an application and where notice to a First Nation is also required in Chapter 14 of the UFA, the board will provide that notice as well. At the request of several parties, the deadline for submission of comments to the board was extended. In regards to the concern that NND was not properly consulted, the board is satisfied that it has fulfilled its responsibilities to provide reasonable public notice, as well as, notice to the First Nation. The board was also satisfied with the consultation that GY and the Licensee have conducted with NND, which was provided to the board by the parties.

Although NND requested additional time to provide comments to the board, NND did not provide a proposed timeframe, as requested, advising when the comments would be submitted to the board. The Licensee responded to this request, asking that the board decline the NND request and furthermore, requesting that the board proceed in making a decision on the application. Since NND did not provide the timeframe as requested by way of letter from staff, the board concluded its deliberation of water use application QZ06-074.

The board also noted that although Yukon Conservation Society had also requested an extension to the deadline for comments, the Society did not provide further comment on the application.

Request for Funding

NND indicated in its intervention that financial support was required to participate in the regulatory process and requested that a process be designed to allow full participation of NND. It was unclear to the board as to whom the NND was directing this request; however, for the sake of clarity, the board advises all parties that it does not have the authority under the Act to allocate funds to a party to enable participation in a licence proceeding.

Request for Public Hearing

In their intervention, NND requested a public hearing. NND did not offer arguments as to why a public hearing would be helpful, but did express concerns about consultation and funding. The NND also asked that, if a hearing was held, it should be postponed until those matters could be resolved.

In response, the Licensee provided a chronology of their discussions with NND about the project and noted that NND did not provide any rationale as to how a hearing could be in the public interest.

The board determined that there was no compelling reason to hold a public hearing, and noted that much of the intervention from the NND appears to be directed to the Territorial and Federal Government and not the board. The board concluded that a public hearing will not be held.

Term of Licence

The Licensee originally proposed a 10 year term for the water use licence but subsequently submitted a request for the board to consider a term of 5 years. Both GY and EC recommended that the term of licence should be 5 years. In review of the YESAA Decision Document, the board noted that section 8 of the Decision Document requires the term of licence to be 5 years.

The term of the licence is a regulatory decision, provided to the board under the Act. The Act provides that the board may issue a water use licence for a term not exceeding 25 years. The inclusion of a term of licence in a Decision Document restricts the board's ability to make licensing decisions and prevents the board from considering extending the term of licence should the board decide that a longer term is necessary.

With the restriction imposed by the Decision Document, the board determined that the licence will expire on November 30, 2012.

Discharge of Untreated Wastewater

The Licensee proposed to continue to discharge untreated wastewater from existing adits which either discharge to ground or to a drainage that discharges to ground. The board noted that water quality from the 10 sites will be monitored as part of the Environmental Monitoring Program, which also forms part of the Adaptive Management Plan. The board included condition 21 in the licence to provide authorization for the discharge of untreated wastewater from the 10 adit locations and notes for clarity that the condition includes the locations, identified by the monitoring station. The description for each monitoring station is included in Schedule A, Part I of the licence. As required by licence condition 22, the Licensee is required to report any activities carried out under the Adaptive Management Plan and that would include any monitoring, data collection or activities carried out, etc. related to the discharge from the existing 10 adit locations. The board further notes that the locations included in the licence are the same as proposed by the applicant which are listed in section 1.3.1.3 of the Environmental Monitoring Program that was provided as part of Exhibit 6.2 of the register which was the most recent update of the program prior to authorizing the issuance of the licence.

Effluent Quality Standards and Point of Compliance

GY recommended that the licence include the same effluent quality standards that were included in licence QZ96-001. EC recommended a stricter standard for Cadmium than what was required under licence QZ96-001. The Licensee requested that the board not include Cadmium in the list of parameters for the licence because the Licensee intends to do further studies to determine a site specific concentration that is achievable for Cadmium. The board reviewed the Decision Document and noted that it had no option but to include a Cadmium standard, since the Decision Document requires the standards of the previous licence as minimum standards and restricts the board from determining otherwise. The board did not accept EC's recommendation for a stricter standard for Cadmium since this is not an operating mine.

In determining the point of compliance, the board considered the recommendation of GY, which proposed that the point of compliance be the last point of control except for discharges from the Galkeno 300 adit location. GY recommended that the compliance point for that site should be at the end of pipe prior to discharge to a ditch on Calumet Drive. The board also reviewed the Decision Document which suggested that the point of compliance be either the end of pipe or the last point of control.

The Licensee responded to the GY intervention and suggested the board consider the point of compliance for the discharge from the Galkeno 300 adit location to be the last point of control before discharge to the environment. The Licensee argued that the suggested change in wording will allow the Licensee to undertake possible water treatment pilot test programs at the treatment locations.

The board typically requires that the point of compliance be at the final point of control of effluent prior to discharge to the environment, and accepted the Licensee's argument. It is the board's intention that if effluent does not meet the standards set out in the licence, the discharge of effluent can be controlled to prevent further release to the environment and undergo further treatment.

The board included the effluent quality standards and the condition detailing the point of compliance for the Bellekeno 600 adit, Silver King 100 adit, Galkeno 300 adit, Galkeno 900 adit and the Valley Tailings Area in Part F of the licence.

Settling Ponds

To prevent seepage from the adit settling ponds, GY recommended that all settling ponds be lined with an impermeable membrane. The Decision Document also required all settling ponds to be lined. The Licensee agreed to install liners in the ponds at the Silver King 100, Galkeno 300, Galkeno 900 and Bellekeno 600 adit locations. The liners can be installed in the year 2007 with the exception of the settling pond at the Silver King 100 adit location. This pond could not be lined until mid July 2008 until funding could be secured. The board was satisfied with the timeframes provided by the Licensee and the commitment that all ponds will be lined. The board included condition 37 in the licence to require the ponds to be lined as described in the application.

GY also recommended that the available freeboard in the settling ponds be maintained at 0.4 metres. The Licensee agreed with this recommendation and the board included condition 38 in the licence to ensure that the minimum freeboard of 0.4 metres is maintained.

Valley Tailings Area

GY recommended that the licence should require the submission and implementation of a plan for the inspection and monitoring of the Valley Tailings Area. The Licensee included a plan, as part of the application, for the physical inspection of the tailings dams. The board included the plan proposed by the Licensee in Schedule A, Part III of the licence.

As previously stated, the board is satisfied with the Professional Engineer's report, which was included as part of the application and stated that the dams in the current state do not pose a hazard to the downstream environment. To ensure that the dams remain stable, the board included condition 32 in the licence which requires an annual inspection of the Valley Tailings Area dams to be conducted by a Professional Engineer licenced to practice in Yukon and in accordance with the Dam Safety Guidelines. The licence also requires the submission of a report on the inspection, prepared by the Professional Engineer, as part of the Annual Report.

Condition 33 of the licence requires the Licensee to provide details of any maintenance, inspections and/or surveillance activities undertaken in relation to dam safety to be provided as part of the Annual Report as well.

The board agreed that the monitoring requirements of the Dam Safety Guidelines are generally accepted as minimal requirements for structures of this nature. The board acknowledged that it is the intent of the Licensee to maintain the structure and that the physical monitoring required by the licence would ensure that the dams remain stable.

Adaptive Management Plan

All parties agreed that an updated Adaptive Management Plan should be submitted, but there were no recommendations as to timing for the submission. The board considered that the update may require more time, particularly with time lost during the upcoming Christmas period. The board determined that licence condition 22 will require the submission of an updated Adaptive Management Plan, to the board, within 120 days of the effective date of the licence. The board noted that the Licensee agreed to the revised thresholds proposed by GY and EC that will trigger the implementation of the plan and is satisfied that the Licensee will make the accepted revisions to the plan and submit the plan to the board.

Sludge Management

GY recommended that a Sludge Management and Disposal Plan be submitted to the board, 90 days prior to implementation of the plan. The Licensee responded and agreed to the recommendation. The board determined that this recommendation will be included in condition 23 of the licence.

Decommissioning

GY recommended that a Final Closure Plan be submitted within 2 years of the effective date of the licence. The Licensee responded to argue that the contract between the Licensee, GY and Canada requires the preparation of the plan within 2 to 3 years and is dependant on funding and YESAA assessment. The Licensee indicated that it intends to submit the plan for YESAA assessment at the end of 2008; however, requested the licence require submission of the plan in 3.5 years.

The purpose of the applicant's proposal to wait until the YESAA process is complete before providing the plan to the board was not apparent. The board determined that condition 43 of the licence will include the requirement for the submission of a Decommissioning and Reclamation Plan by December 31, 2008, which is the same date as the Licensee plans to submit the plan for environmental assessment. The board determined that the licence will not include a requirement for board approval of the plan. The purpose of submitting a plan to the board is to make the plan publicly available. Should the Decommissioning Plan require revision as a result of the YESAA assessment and resulting Decision Document, the Licensee can submit an updated plan to the board.

Implementation of Plans

The board included conditions 24 and 44 in the licence to require that all plans submitted as required by the licence be implemented, subject to any required assessments, authorizations or approvals. The board cannot pre-authorize potential works that may be proposed in the Adaptive Management Plan, the Sludge Management Plan or the Decommissioning and Reclamation Plan that may otherwise require an amendment to the licence. The Licensee has agreed to consult with parties prior to submission of plans and can be advised by Government whether an environmental assessment or amendment to the licence is required for any work proposed under those plans.

Environmental Monitoring Program

GY and EC recommended that the Environmental Monitoring Program should be accepted by the board and implemented by the Licensee, with some minor revisions. The Licensee agreed with the recommendations and provided an updated Environmental Monitoring Program with the response to interventions which is included in Exhibit 6.2 of the register.

The board included Part F in the licence which requires the Licensee to comply with the monitoring and surveillance network program that is contained in Schedule A of the licence. The board noted that the Monitoring Schedule included in Schedule A of the licence directly reflects the monitoring proposed by the Licensee in Table 1, where analysis would be conducted by an external lab.

The board also noted that the Licensee proposed to conduct sediment sampling and benthic invertebrate sampling as part of the application. The board included condition 31 in the licence to require the sampling to be conducted and for the results to be provided to the board as part of the Annual Report.

Silver Trail Glaciation

GY recommended that the Galkeno 300 discharge should be re-routed to prevent glaciation of the Silver Trail. The board noted that the applicant identified the glaciation concerns as part of the application and proposed to re-route the Galkeno 300 discharge to mitigate this situation. The applicant has committed to monitoring the groundwater seeps above Silver Trail from Galkeno 300 as part of the Environmental Monitoring Program. The board notes that the proposed monitoring to be conducted at station location KV-29, which is described as the Silver Trail Culvert #4, has been included in Schedule A, Part III of the licence.

The Decision Document requires the Licensee to manage the glaciation with GY Highways and to pay compensation for additional expenses beyond normal costs and to identify long term solutions to permanently correct the hazard. The board determined that the Licensee's proposal to re-route the discharge from the Galkeno 300 adit location and commitment to continue monitoring for potential glaciation is satisfactory and no condition is necessary for the licence in this regard.

Groundwater Quality

GY recommended that a Groundwater Monitoring Plan should be developed and implemented during the term of the licence. EC recommended the board include a requirement for seepage and groundwater monitoring of the Onek Adit drainage to Christal Creek. The Licensee responded to the interventions by agreeing that the monitoring program be conducted and confirmed that the monitoring has been underway since 2006.

The Licensee provided an argument to the GY recommendation that the groundwater monitoring should be considered as part of the closure planning process and that professionals have already been engaged to assist with the development of a groundwater monitoring program for the valley tailings area.

The board accepted the argument provided by the Licensee and noted the Licensee was in agreement to undertake the appropriate groundwater monitoring for the Keno Hill Mines Property. Since the Licensee argued that the groundwater monitoring should be part of the closure planning process, the board determined that a specific condition has not been included in the licence. The Licensee should be aware that the board anticipates that the details for groundwater monitoring will be provided as part of the Decommissioning and Reclamation Plan which is required by condition 43 of the licence. That plan is required to be submitted to the board by December 31, 2008 and an update on the plan is to be provided as part of the Annual Report.

UFA-Chapter 14

Maps 105M/13 and Map 105M/14 are included in the First Nation of Nacho Nyak Dun Final Agreement. The mining maps were reviewed for settlement land. Settlement land parcel R-20 B is located adjacent to the McQuesten River is approximately 11 Km downstream from the abandoned townsite of Elsa.

In regards to Chapter 14 of the UFA, as to quantity, quality and rate of flow of water flowing on, through or adjacent to settlement land, including seasonal rate of flow the board made the following determination:

In regards to quantity and quality of water, the applicant is proposing to use a maximum combined quantity of 90 cubic metres of water per day from several sources for the purpose of treating water prior to discharge to the environment. The settling ponds will be lined with an HDPE liner resulting in minimal to no water loss during treatment. The effluent from the wastewater treatment systems will be required to meet discharge standards which are included in the licence. The board concluded that the undertaking will not substantially alter the quantity, quality or rate of flow of water flowing on, through or adjacent to settlement land, including seasonal rate of flow.

Conclusion

The board has approved the issuance of Water Use Licence QZ06-074.

Chairperson
Yukon Water Board

Date