

**Summary of the IACT Meeting on the Sable, Pigeon and Beartooth Water
Licence Meeting
February 11, 2008—Yellowknife NT**

Eric Denholm, Charity Clarkin, Dave Abernethy—BHPB
Chris Hanks—Alexco (for BHPB)
Peter Chapman—Golder (for BHPB)
Kevin O’Callaghan—Fasken Matineau (for BHPB)
Gavin More, Erika Nyyssonen—GNWT
Bruce Hanna, Sheena Majewski—DFO
Anne Wilson--Environment Canada
Lionel Marcincoski, Marc Casas, Nathan Richea, Fraser Fairman, Jason
Brennan—DIAND
Sean Kollee, Kevin O'Reilly--IEMA

The meeting was scheduled for the entire afternoon and was held at the request of BHPB to provide an update and more importantly, to discuss proposed wording changes to the existing SPB water licence as part of the renewal process.

Eric gave the update presentation (a shortened version of what the IEMA Board saw in early February). This was followed by a presentation on the SPB water licence by Charity that included a discussion on the detailed changes that BHPB is seeking.

Many of the changes are aimed at providing consistency with the main licence or to reduce monitoring requirements or timelines. The wording of the proposed changes was circulated by BHPB on the Thursday before the Monday meeting but no detailed rationale was provided. I circulated this material to the Agency Directors right away and Tim responded in time to raise points at the meeting which I did where BHPB did not provide some sound rationale.

Rather than review all of the changes, I will attempt to group the more important ones together, provide BHPB’s rationale and an indication of the points I or others raised.

Definitions

A number of changes are proposed by BHPB to adopt definitions from the main licence. Most of these are rather inconsequential and the most significant is the change in the definition of “Receiving Environment” where impacts from discharges on the terrestrial environment are proposed to be dropped. It was suggested that the discharges as redrafted by BHPB, should include ‘water’ rather than just “waste, seepage or minewater from the project”.

Part B General Conditions

BHPB proposes the removal of the summary of work under the Waste Management Plan as part of the Annual Report as it believes this is already covered under Part G (i) where the Waste Rock and Ore Storage Management Plan is supposed to cover this. Now that I look at it again, there is no requirement for annual reporting in Part G, so I am not sure it is a good idea to drop the annual reporting.

A new paragraph would allow BHPB, at its option, to discharge any obligation under this licence by combining reporting, plans and programs under the two licences. This gets us closer to bringing the two licences together and was generally supported. I suggested that the words “or as directed by the Board” might be added to this section.

Part C Security Requirements

BHPB has suggested that a separate security schedule be established for each pit that is triggered by construction or initiation of mining activities. There was some discussion of this point as BHPB has already posted security for the two pits (Pigeon and Sable) where no mining has actually taken place. There was some sympathy with BHPB’s suggestion but people wanted a proposed schedule spelled out and I suggested that the security might be posted a reasonable period of time (90 days?) before the actual development starts given the past difficulties in posting proper security instruments. There is also provision for BHPB to apply to the Board to reduce security based on progressive reclamation or changes in the mine plan.

Part E Dewatering

BHPB has suggested deleting a clause that establishes maximum dewatering rates to allow for operational considerations (quick dewatering). No one could recall the rationale for the figures in the current licence. I suggested this is precisely why detailed Reasons for Decision are so important and that we might all urge the WLWB to do this, so that new personnel would understand the rationale for provisions in water licences.

Part F Construction

BHPB wants to shorten the period for submission of plans for engineered water structures for Board approval, from 60 to 30 days. Several other changes are proposed to shorten the Board review period from 90 to 30 days (see F 12, G1, G 2(a), G 3(a), J 1). I suggested that such a change may not be helpful or even in BHPB’s interest as there may be a need for technical review of some of these submissions, either by the WLWB and/or others, and that there are occasional logistical difficulties in having Board meetings (e.g. Minister fails to make Board

appointments in timely manner meaning lack of quorum, weather may force meeting postponements or others). BHPB resisted these suggestions and will likely stick to shorter proposed review periods, shorter in some cases than in the other licence (e.g. 90 days in the main licence for submission of plans for engineered water structures, rather than 60 in the current SPB licence).

BHPB proposes replacing section 2(b) that requires specific threshold limits for management actions related to construction impacts from the Pigeon diversion channel to a requirement to ensure that water entering the receiving environment does not exceed the discharge limits set in the licence. There was some discussion as to why BHPB wanted to drop an adaptive management approach and there was no good rationale provided. I am of the view that unless there can be some rationale provided, the Agency should not support this suggested change.

BHPB has suggested that requirements for keeping construction records for engineered structures be dropped because “as built” drawings will be submitted. No good rationale was provided. The inspector may have the authority to request and review such records if a problem arises, but one would think that BHPB would want to retain such records for their own internal record keeping. There was no substantive discussion of this point at the meeting.

BHPB proposes changes to F9 where containment and runoff control structures would be required to prevent any discharges except as allowed in the licence. This may not adequately cover groundwater (as suggested by Anne Wilson) and BHPB undertook to study this point.

Part G Waste Disposal

BHPB wants to eliminate the need for weekly internal inspections of the Two Rock Lake Sedimentation Pond facilities at the discretion of the inspector, and only when the facility is “operating”. There was some discussion about the frequency of inspections and how to define “operating” to avoid confusion. BHPB seems to think that weekly inspections are an onerous undertaking and there may be some support for reduced frequency in winter, but summer inspections are needed to avoid storm event damage. This was not resolved at the meeting.

There was substantive discussion of the proposed changes to the effluent quality discharge limits. BHPB went to great lengths to reiterate that this license will really only regulate discharges from the Sable operation as Pigeon and Beartooth development discharges all report to the ‘black box’ of the LLCF. BHPB also wants to have the same discharge limits as in the current main licence, not an unreasonable approach if the Adaptive Management Plan outcomes apply to the SPB licence. There was no one at the meeting who could recall why the list of regulated parameters in the current licence include some contaminants not covered in the main water licences (e.g. cadmium, lead, zinc,

turbidity and phosphorous) providing further support for detailed Reasons for Decision. Anne Wilson thought it might be that the discharge limits from the then recently approved Diavik water licence may have flowed through to the SPB licence and undertook to check her files to throw some light on this point.

BHPB commissioned Peter Chapman to conduct a review of the toxicity of ammonia and how that might be dealt with in the new licence. Peter was at the meeting and made a short presentation (I hope to be able to pass this along when Eric provide it). Suffice it to say that the most important modifying factor related to the toxicity of ammonia that will likely be encountered at Ekati, is pH and BHPB has proposed a higher concentration of ammonia as a regulated parameter, as pH decreases. Peter has prepared a report on this and it will form part of the licence application. No matter what level BHPB may propose for ammonia discharge, it must also pass an acute toxicity bioassay test for the end of pipe effluent so this may provide some greater protection.

Perhaps the most significant point about the proposed discharge criteria is where the point of compliance should be. At one point, BHPB suggested that end of pipe would be used but than changed this to state that the issue of the initial dilution zone would be dealt with as part of the Board process to determine a chloride effluent discharge criterion. I inquired as to whether chloride and ammonia have different chemical or physical characteristics that might affect dilution and was told that ammonia would likely disperse and dilute more easily than chloride so that the determination on that parameter would be more protective.

Part K Aquatic Effects Monitoring Program

BHPB would like to reduce the sampling that it has done in the Sable area until one year before production begins. This is not an unreasonable request and BHPB undertook to review the baseline data it has collected for the watershed to support this request.

BHPB proposes to amend section 4(h) that requires “an evaluation of the Ekati Mine related cumulative effects [*sic*, as Bill Ross would say] on the aquatic environment of Lac de Gras Region”. BHPB would like it to read “an evaluation of the project-related effects on the aquatic environment” a rather meaningless requirement. This was not resolved at the meeting and I suspect that the Agency would still want BHPB to study its contributions to cumulative effects in both the Koala-Lac de Gras and Exeter Lake drainage systems.

BHPB has suggested that the review period for the AEMP for the SPB licence be reduced from annually to every three years. I suggested that for greater clarity, the review timing should be set the same as in the main licence.

Surveillance Network Program

BHPB proposes several changes to the SNP including dropping the pit sump monitoring sites and coordinating sampling regimes and frequency along watersheds. On the first point of dropping pit sump stations, there were concerns raised by both Anne Wilson and me. We said that proper characterization and early warning of potential water problems was a very important part of an adaptive management approach. BHPB seems to prefer the 'black box' approach of regulation at the point of discharge only. Some of this may be based on what it perceives as an unreasonable requirement for daily monitoring of the Beartooth pit sump in the current licence during dewatering (essentially covering mining operations). It was suggested that a reduced frequency might be agreeable but that characterization and early warning remain important.

BHPB would also like to drop the requirement for an Air Quality Monitoring program to cover the SPB area as it believes the WLWB does not have any jurisdiction in this field.

Conclusion

Everyone agreed that it was a helpful meeting. BHPB indicated that it would be happy to receive any written comments from parties within two weeks, prior to filing of the actual application with the WLWB. I indicated that this early consultation was a good idea and that it may have been more productive if some written rationale had been provided for each of the proposed changes. BHPB indicated that this would certainly be done in its application.

Prepared by Kevin O'Reilly
February 14, 2008