



HOPE BAY JOINT VENTURE

Miramar Hope Bay Ltd. – Hope Bay Gold Corporation Inc.

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October 31, 2001

Mr. Philippe Lavallee
Water Resources Officer
Water Resources Division
Department of Indian Affairs and Northern Development
Nunavut District
Box 100
Iqaluit, Nunavut
X0A 0H0

Dear Mr. Lavallee:

**Re: August 11-12, 2001 Industrial Water Use Inspection
Reports-Water Licences NWB1BOS9801/NWB2HOP0002**



This will acknowledge receipt of the above captioned inspection reports dated October 11 and October 15, 2001 respectively and received by the Hope Bay Joint Venture (HB JV) on October 22, 2001.

Following our review of the reports, we have the following comments which follow the format of your report:

Water Licence NWB1BOS9801:

• Sewage disposal:

The statements made by the inspector in the first paragraph shows a misunderstanding by the inspector what the approved sewage disposal practices are at the Boston site. To clarify, the "dried matter" observed by the inspector is normal residuals from such a disposal practice, is organic in nature and poses no risk to the receiving environment.

Furthermore, the suggestion that "the licensee may wish to ensure that the effluent discharged contains as little solids as possible in order to limit the extent of the impacted area along the path of discharge, and its

potential effect on receiving waters." This statement alone, is in effect, misleading to the uninformed reader and as clarification, the discharge from the RBC will contain levels of solids normal to its operation, and cannot be modified as suggested by the inspector. To infer that the receiving waters are being impacted is also misleading, the reality is that the potential for such an impact is remote at best, due mainly to the distance from any water body, the history of the operation and relatively small impacted area close to the discharge point. It is our opinion that this residue, mentioned by the inspector, would over a short period of time, be absorbed by the biomass of the tundra. As well, comments related to SNP stations 1652-4 and 1652-5 are also confusing to the uninformed reader and both these stations are to monitor potential inputs from the Boston site whether it be sewage or other sources of discharge. The sentence in which "correspond to the effluent discharged into the lake, and not to the receiving waters at the point of effluent discharge", is again confusing to the uninformed reader and would be better stated that "both SNP stations 1652-4 & 1652-5 are to monitor potential impacts from the Boston site". The inspector's statement infers that there is effluent from the site being discharged into the lake at station 1652-4 and 1652-5, which is not the case. Clarification by the Inspector is requested.

In the second paragraph, we believe that recommendations to the Nunavut Water Board are inappropriate in an inspection report as the inspection is a measure of the licensee's performance against stated terms and conditions in their licence and to suggest different conditions in this manner is unacceptable. The mechanisms for changes to the SNP program can be done during a licence renewal, upon request of the licensee or when significant impacts have been identified, which would enable the NWB to make such modifications. This is not the case as related to water licence NWB1BOS9801. The inspector should provide rationale for such a suggestion. The inspector goes on to say that the licensee has met the licence thresholds, "but exceed the Canadian Water Quality Guidelines for the Protection of Aquatic Life..". It is the HBJV's position that although interesting, his comments should stick to the compliance / non-compliance issues and mentioning the Canadian Water Quality Guidelines is

irrelevant in this instance. The inspectors confirmation that the Microtox sample was non-toxic reaffirms our position.

- **Solid waste Disposal:**

It appears the inspector has misunderstood our position with respect to solid waste disposal at the Boston site. To clarify, "the unlined sump" is not accurate, the terminology used by the HBJV is the "south settling pond", and as discussed with the inspector during his most recent inspection and previously, the unlined sump has been used as a burning pit for combustible material. Although there appeared to be some non-combustible material in the settling pond, normal practice is to clean out the residue and store for subsequent disposal. As the camp was inactive at the time of the inspection, this had not been done. However, as mentioned to the inspector on August 12, 2001, this "south settling pond", is proposed to be incorporated into the soon to be approved solid waste disposal site at Boston and as such, it is not our intention to clean out the residue at this time. We are confident that approval for the solid waste disposal site will be in place in early 2002 and concerns raised by the inspector will be addressed accordingly.

The inspectors comments on the drill cuttings area require clarification. Firstly, this site was selected and approved by KIA lands and as such submission of plans and approval from the NWB, as suggested by the inspector are irrelevant. The site was selected to use historically existing structures (waste rock pad), and it was not the intention that the waste rock pads would act as retention structures, but rather somewhat of a filter. It should be recognized that the inspector visited the site following recent heavy rains and the water in the area is due to runoff from these heavy rains. The area was selected because it was a low lying area that would have minimal drainage from it. The distance to any water body is considerable, most likely greater than 500 meters thus negating the statement by the inspector that "a concrete potential for the deposit of waste into waters arises from this particular facility". On the inspectors comments on the elevated levels of calcium, chloride and conductivity is not surprising as this material is

drilling fluids, which contain such parameters. The inspector confirms that the water quality meets licence thresholds and is nontoxic from the Microtox tests, but refers again to the Canadian Water Quality Guidelines for the Protection of Aquatic Life, this we reemphasize is inappropriate and misleading to the uninformed reader. To reiterate, the site has been approved by KIA lands and as such, approval as suggested by the inspector is unnecessary.

- **Ore and waste rock stockpiles:**

The HBJV recognizes the comments related to the samples collected downslope of the ore storage pad, however with respect to the sample collected in the vicinity of the "south settling pond" ("unlined sump" as referred to by the inspector), although showing elevated levels of certain parameters should not be considered a breach of waste discharge effluent quality standards by the proponent as inferred by the inspectors statement. The suggestion that this ponded water would reach Aimoaktak Lake, is considered unlikely due to the significant distance from the lake, estimated at greater than 200 meters. It is expected that any ponded water would either evaporate or be completely absorbed into the biomass of the surrounding tundra. As mentioned earlier, suggestions to the NWB for additional measures or SNP stations is inappropriate in such a report.

- **Spills:**

The HBJV appreciates the efforts the inspector has taken in his inspection report to address some historic spills and facilitate the closure of the various files. In future, the HBJV intends to better identify spill locations using GPS coordinates, which will, as the inspector has mentioned, be of assistance during future inspections. As mentioned, we appreciate that some of the files have been recommended for closure and look forward to receiving confirmation shortly, however; we have some comments on the report as presented. With respect to spill 98-115, we have located some relevant data collected by the previous owner, (identified as site 6 east and center at the old fuel cache and sampled on July 15, 1999) which are attached for your information and should suffice to enable this historical file to be closed. On spill 01-054, we feel the lack of a recommendation for closure

is unfortunate because the HBJV views this spill (2L) as minor and could be assessed in a similar manner that spill 00-118 was by stating that closure is recommended as contamination is reasonable for an area in the vicinity of a generator. We request that the inspector reconsider the closure of spill 01-054 in this context.

Although the HBJV has been diligent in reporting spills, our position continues to be as stated in previous correspondence, that closure of spill files for incidents that would be considered minor at best (say for minor spills of less than 25 litres) is a burden on the 24 hour report line and confirms that the closure of some spills may or may not materialize, depending on the opinion of the inspector at the time. This we feel needs to be discussed and an acceptable reportable limit established, not only for the HBJV, but universally throughout Nunavut.

- **Non-Compliance of Act or Licence:**

We disagree with the Inspectors recommendation that "drainage prevention and leachate collection measures be undertaken at the site" until such time as sufficient information is available that substantiates such a suggestion. The HBJV's position is that with the acknowledgement that there is a potential of metal leaching occurring and that some isolated sample results indicate that there are elevated levels of certain parameters in the standing water below the rock pads, the potential for this to reach Aimoaktak Lake is unlikely and as such not considered to be a risk at this time. Although not specific, the uninformed reader might feel that these elevated levels are a result of actions and discharges undertaken by the proponent, which is not the case. Clarification from the Inspector is solicited. As mentioned earlier, the Inspectors inference that solid waste is being deposited into the unlined sump may be misunderstood by some readers, clarification is requested and our position as previously stated still stands.

Water Licence NWB2HOP0002:

- **Water Supply:**

Comments are noted, however; as the Inspector is aware, camp personnel monitor water quality for camp use on a regular basis and take appropriate action.

- **Sewage Disposal:**

Comments are noted. The licensee is aware of the requirements to notify the NWB on issues such as sludge disposal, however; as mentioned to the Inspector, disposal of sewage sludges on impacted areas is seen as a viable and environmentally acceptable practice and the HBJV will continue to pursue this objective with the NWB. Support from DIAND and other agencies would assist in us reaching this objective.

- **Solid Waste Disposal:**

Comments are noted. As mentioned to the Inspector, and mentioned in comments on the Boston water licence inspection above, and it is further emphasized that the HBJV will not continue to remove similar materials off the belt as has been done in 2000 and 2001, it is the intent of the HBJV to continue pursuing the option of disposing of solid waste at an approved site at Boston. Material that was mentioned by the Inspector as being stockpiled for future disposal, would be deposited into such a facility. The NWB would be involved in any such approval process.

- **Spills:**

We refer you to comments made on the Boston report and for the most part they are applicable here as well. The Inspector should be aware that any spills that inadvertently occur on the ice are immediately cleaned up and contaminated snow is held in empty drums for further action. We appreciate that some of the files have been recommended for closure and look forward to receiving confirmation shortly, however; we have some comments on the report as presented. With

respect to spill 99-102, this is an historic spill and as such, difficult for the proponent to precisely locate the spill area, however; it was expected that because there was no identified impacted area seen during the inspection, one could assume that the spill area in question was properly cleaned up and file closure could be completed. Would the Inspector reconsider closing this file with the others identified for closure? With respect to spills 00-082 (4L);01-036 (5L), reiterates our concerns with respect to spill file closure for minute quantities of material. As mentioned earlier, our position continues to be as stated in previous correspondence, that closure of spill files for incidents that would be considered minor at best (say for minor spills of less than 25 litres) is a burden on the 24 hour report line and confirms that the closure of some spills may or may not materialize, depending on the opinion of the inspector at the time. This we feel needs to be discussed and an acceptable reportable limit established, not only for the HBJV, but universally throughout Nunavut.

- **Fuel Storage:**

We understand the Inspectors comments, but may be confusing to the uniformed reader. To clarify, the HBJV has developed a modified fuel barrel holder complete with substantial spill capacity, which is far superior to the previous method and as such has minimized the potential for spillages during and operation of the tent camp fuel supply. As mentioned to the Inspector, should spillages occur or precipitation accumulates in the modified drip trays, enviromat is used to absorb any residual fuel and then is disposed of in the incinerator. This is an important fact missed by the Inspector.

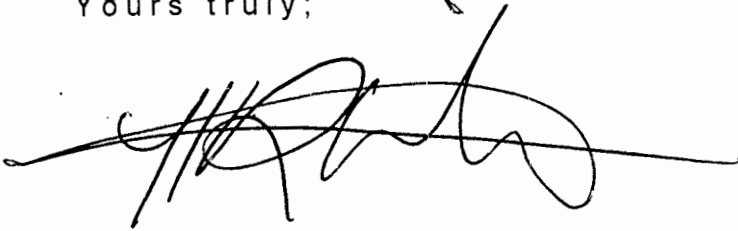
- **Violation of Act or Licence:**

We appreciate the recognition that our actions have reduced the chances of non-compliance, however; clarification is required with respect to fuel storage linked to camp facilities. The Inspector is well aware of the restrictions the camp tents have with respect to location. To minimize potential impacts of spilled fuel, we have, as mentioned above, initiated and installed the modified fuel barrel holders which include significant spill capacity, should a spill occur. The fuel supply barrels at each tent, is located the

furthest distance possible from possible impacts to adjacent water bodies. As mentioned to the Inspector, it is not our intention to relocate any tent, or other infrastructure at this time, but rather, put in place initiatives such as the modified barrel holders to minimize potential impacts.

We hope the above clarifies our position we look forward to discussing any issue with the Inspector in due course. Should you require clarification on the forgoing, please contact me at the numbers above, on cell number 780-975-2550 or by e-mail to hwilson@miramarmining.com; hugh_r_Wilson@hotmail.com and terrbear@powersurfr.com.

Yours truly;

A handwritten signature in black ink, appearing to be 'H. Wilson', with a long horizontal line extending to the right.

Hugh R. Wilson
Manager, Environmental Affairs.

Cc: Adrian Fleming HBJV Project Manager.
Nunavut Water Board-Gjoa Haven(P.DiPizzo)
KIA lands-Kugluktuk(Jack Kaniak)
DFO-Iqaluit (J. DeGroot)
Environment Canada-Yellowknife (Anne Wilson)

Attach: Analysis data for samples re:spill 98-115:



RESULTS OF ANALYSIS - Sediment/Soil

File No. K7755

Sample ID	Site 6 Centre	 Site 6 East
Sample Date	99 07 15	99 07 15

Non-halogenated Volatiles

Benzene	<0.04	<0.04
Ethylbenzene	<0.05	<0.05
Styrene	<0.05	<0.05
Toluene	<0.05	<0.05
meta- & para-Xylene	<0.05	<0.05
ortho-Xylene	<0.05	<0.05
Volatile Hydrocarbons (VH) C6-10	<100	<100
VPH C6-10 (calculated)	<100	<100

Extractables

EPH (C10-18)	219	<200
EPH (C19-31)	<200	<200

Remarks regarding the analyses appear at the beginning of this report.
Results are expressed as milligrams per dry kilogram except where noted.
< = Less than the detection limit indicated.
VPH = Volatile Petroleum Hydrocarbons.
EPH = Extractable Petroleum Hydrocarbons.