

December 01, 1999

Gordon Lennie, Chair Mackenzie Valley Environmental Impact Review Board Box 983 Yellowknife, NT X1A 2N7

Comments
Draft Terms of Reference
BHP Diamonds Inc.
Proposed Development of Sable, Pigeon and Beartooth Kimberlite Pipes

The Government of the Northwest Territories has reviewed the Draft Terms of Reference prepared by the Board, dated November 8, 1999.

1. General

It is the GNWT's understanding the project was referred to an Environmental Assessment (EA) based on public concern and cumulative effects. The main focus of this EA should be cumulative effects of the proposed expansion in relation to the existing BHP development and other known proposed developments. The proponent should be required to look at the 1995 Environmental Impact Statement (EIS) and make predictions in relation to it. The guidelines should be written to allow the proponent to prepare the assessment as a logical extension of the EIS prepared for the Ekati Mine development.

Missing from this draft is a section on mitigation. The proponent must be required to identify measures to mitigate the potential adverse effects of the project and any uncertainty regarding these mitigation measures and the predictions upon which they are based. If, with monitoring, it is identified that the mitigation measures are not effective, the proponent should identify how alternative mitigative measures would be identified and implemented.

2. Section 1.2 Public Consultation

The list of requirements identified in the draft Terms of Reference overlap. Perhaps the Board could consider the following:

BHP Diamonds Inc. should identify their public consultation program, including the following:



- consultation methods, including methods used to identify, inform and solicit input from potentially interested parties;
- a list of parties providing written comment;
- a list of key concerns identified;
- how the concerns identified and information received during the consultation sessions were used to help predict impacts and determine mitigation, including changes to design, of the proposed development;
- issues tracking and management methods; and
- agreements or commitments to agreements resulting from consultation.

The Kitikmeot Inuit Association should be included in the consultation.

3. Section 2 Scope of the Development

It is recommended it be made explicit that all aspects of this section are related to the development of the Beartooth, Pigeon and Sable Pits. The proponent should not be asked to provide information and conduct an assessment on the entire minesite again or reassess what has previously been assessed and approved. It is reasonable to scope the assessment to include all the new aspects related to this proposal, and identify the existing infrastructure to be used to support the development. Any changes to or impacts on existing infrastructure should be identified.

As an example of how to provide clarity to the scope, Section 2.2 Mined Rock, could read:

- 1. Waste rock storage related to the Beartooth, Pigeon and Sable pits.
- 2. Waste rock storage related to Beartooth, Pigeon and Sable pits.
- 3. Overburden storage related to Beartooth, Pigeon and Sable pits.
- 4. Ore storage stockpiles related to the Beartooth, Pigeon and Sable pits.
- 5. Borrow pits and quarry site related to the Beartooth, Pigeon and Sable pits.
- 6. Tailings related to the Beartooth, Pigeon and Sable pits.

4. Section 2.4 Transport

Roads to borrow or quarry sites should be included.

5. Section 3.1.2 Description of the Existing Environment

There is a significant amount of information in the original EIA that pertains to most subjects in this section. The elements in this section should be described in relation to the proposed development and not the portion of the minesite already assessed.

6. Section 3.1.3 Spatial Boundaries

The first sentence of this paragraph is unclear. It appears the expectation is that spatial boundaries will be dependent upon the VEC under consideration. Perhaps the following wording would help to clarify the requirements:

A justification and rational for all spatial boundaries chosen must be provided.

7. Section 3.2.1 Air Quality and Climate

Air quality and climate were assessed in the original assessment. The proponent should be required to concentrate on the assessment of any cumulative effects of air quality and climate resulting from this proposal.

8. Section 3.2.2 Terrain

The wording of some elements of this section make it unclear as to what the proponent is required to do. In most cases, the points the proponent is asked to consider do not follow from the main thought of the preamble. For instance, the proponent is asked to document "...impacts resulting from, or on, the ...impact of remedial actions at the mine site (waste dumps, tailings)."

In addition, many of the points (i.e., points I, II, VI, XV, XXIV) do not relate to terrain, surficial geology, bedrock and/or soils as identified in the title and preamble. There are issues related to water quality/quantity, resource use and infrastructure that would be better taken from this section and placed in an appropriate section dealing with the specific issue.

There is significant duplication in this section with respect to permafrost. It would provide greater clarity to simply request the proponent address permafrost and ground ice related to the project rather than attempting to specify all the areas that could be included. Thermal milieu should be defined.

The proponent is requested to report impacts resulting from or on seismicity. A definition of seismicity is the relative frequency and distribution of earthquakes. Perhaps this is an item that has little or no relevance for this project.

In summary, it is recommended the Board significantly re-evaluate this section to provide greater clarity to the proponent.

9. Section 3.2.3 Vegetation and Plant Communities

The reference to "vascular, non-vascular and wetland" plant communities makes no sense. It is recommended the proponent be required to consider the plant communities classified as vegetation cover types in the existing monitoring program.

Part IV refers to long term habitat loss or alteration. It should be clear that habitat loss must include both direct and indirect habitat loss. The habitat suitability modeling, as performed in the original Ekati Mine assessment, would be useful in predicting habitat loss for wildlife identified as VECs.

10. Section 3.2.6 Wildlife and Wildlife Habitat

It should be made clear that the proponent is required to assess wildlife and wildlife habitat for the proposed expansion, not reassess what was done for the existing

development. The monitoring program, which is in place now, uses impact predications and hypotheses testing as its basis. The proponent should be asked to identify if the cumulative residual impacts as predicted will change as a result of this proposal and by how much.

The biophysical environment in the expansion area is different from that of the existing minesite. It is recommended the Terms of Reference direct the proponent to use the existing baseline information to link to other developments in the region. The differences between the different development areas and how wildlife use the areas would be important. For different wildlife species, a risk assessment approach is recommended.

Impacts to birds should include migratory birds.

As a general but important comment, it is recommended the assessment of potential impacts build upon the existing assessment. Where models were used in the original assessment, these should be used to revise the impact predictions to include the new development.

11. Section 3.3.1 Human Health

Health has been previously assessed by BHP. The proponent should be required to assess health as related to the proposed expansion. As with wildlife predictions, the proponent should be asked to identify if the cumulative residual impacts as predicted in the original assessment will change, and by how much.

12. Section 3.3.2 Economy

The proponent should be required to assess the economy in relation to the proposed development, not the existing mine. Any changes, in context of the original EIA, should be noted and the effects of these changes assessed. It is also recommended the proponent be required to identify the spatial and demographic distribution of economic benefits.

In addition, the Board should clarify what is meant by "opportunities to diversify a northern economic base" and "economic diversification" in parts IV and XII. It is recommended that secondary industry be explicitly referred to in these two parts.

13. Sections 3.3.3 Land and Resource Use and 3.3.4 Renewable Resources

There is overlap between these two sections. In 3.3.3, the proponent is asked to assess impacts of the development on changes in the use of land and renewable resources, including traditional land use. In 3.3.4, the proponent is asked to assess the impact on renewable resource activities, including wildlife harvesting, fishing and so forth. It is suggested these two sections be rewritten and collapsed into one section. The last sentence of section 3.3.4 "The developer shall report impact identification, prediction or evaluation conflicts" should be clarified.

14. Section 3.3.7 Infrastructure

The proponent is asked to assess the impacts of the proposed development on public infrastructure, which is appropriate. They are also requested to assess public satisfaction with infrastructure. Public satisfaction is an issue that is and should remain the responsibility of government, not industry. Using transportation as an example, the proponent should be responsible for identifying the volumes, type and timing of traffic. It is recommended public satisfaction items be removed from the Terms of Reference.

15. Section 3.3.9 Government

This section assumes there will only be costs or losses to governments as a result of this development. The proponent should also have the option of identifying the benefits that might accrue to the governments as a result of the proposed development.

16. Section 3.3.9 Cultural Resources

There is no legislation related to paleontological resources in the NWT and it is therefore recommended to remove "... and sites of paleontological significance".

17. Section 3.4 Impacts of the Environment on the Proposed Development

The proponent should be required to assess only the facilities and sites that are being constructed or modified as a result of this proposal.

18. Cumulative Impacts

The draft Terms of Reference state the proponent should consider the cumulative effects of this expansion and other *existing* developments. In other terms of reference, the Board has required proponents to assess the effects from existing developments and proposed developments, and proposed developments have been defined as those that have entered the regulatory stream. The Board should be clear and consistent as to which developments it would expect to be part of the cumulative effects assessment. It is recommended the proponent be required to consider cumulative effects of this expansion with other existing and proposed developments, with proposed developments defined as those that have entered the regulatory stream.

As a general closing comment, the draft Terms of Reference should be carefully proof read for readability. The GNWT has not provided comments related to this.

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