
From: Beattie, Alasdair
To: Anslow, Martha EAO:EX
Cc: Smith,Jack [CEAA]
Sent: Tue Nov 04 14:31:37 2008
Subject: DFO comments re: Morrison draft TOR

Martha,
Please find below DFOs comments on the October 16th draft TOR for the Morrison Cu/Au Project of Pacific Booker Minerals Inc.

- 1) the TOR currently proposed does not incorporate previous comments - see e.g. Nov 2007 tracking table.
- 2) the draft project description appears to have almost no relationship to the draft TOR. Where the description has changed, a table of concordance should be provided.
- 3) [for the draft TOR, section 9.2: the conceptual fish habitat compensation plan to include:](#)
 1. For the application of the [no net loss](#) principle, the first preference of the Department will be to maintain without disruption the natural [productive capacity](#) of the habitat(s) in question by avoiding any loss or harmful alteration at the site of the proposed project or activity. This will be especially important where local communities rely on specific fisheries stocks. It may be achieved by encouraging the proponent to redesign the project, to select an alternate site, or to mitigate potential damages using other reliable techniques.
 2. Only after it proves impossible or impractical to maintain the same level of habitat [productive capacity](#) using the approaches outlined above would the Department accede to the exploration of compensatory options. First of all, the possibilities for like-for-like compensation should be assessed; that is replacing natural habitat at or near the site. Should this not be feasible, then secondly it might be possible to consider either moving off-site with the replacement habitat, or increasing the productivity of existing habitat for the affected stock, if reliable techniques are available. Compensation options will not be possible as a means of dealing with chemical pollution and contamination problems; reliable control techniques must be installed and operated to mitigate such problems from the outset.

In other words, the **Hierarchy of Compensation Options** is as follows:[\[A1\]](#)

1. Create or increase the productive capacity of **like-for-like** habitat in the same ecological unit;
 3. Create or increase the productive capacity of **unlike** habitat in the same ecological unit;
 4. Create or increase the productive capacity of habitat in a **different** ecological unit;
 5. As a last resort, use artificial production techniques to maintain a stock of fish, deferred compensation or restoration of chemically contaminated sites.
3. Provide a simple overview of the proposed compensation measures, briefly outlining nature and magnitude of the measures and location in relation to the project needing compensation.
 4. Describe the position of the proposed compensation within DFO's **Hierarchy of Preferences**, and explain what efforts have been made to redesign or relocate the project and why any positions higher on DFO's **Hierarchy of Preferences** cannot be achieved;

5. Describe the position of the proposed compensation within DFO's **Hierarchy of Compensation Options**, and explain why any positions higher on DFO's **Hierarchy of Compensation Options** cannot be achieved.

6. Provide a detailed description of the proposed compensation measures that are biologically sound, reasonable, and based on practical and proven techniques. Support these with conceptual drawings (need NOT be engineering drawings) which reflect circumstances of the actual compensation site(s).

7. Use a habitat balance sheet to demonstrate that No Net Loss of the productive capacity of fish habitat can be achieved at a compensation ratio to be set by the DFO Habitat Officer. The habitat balance sheet should include the following elements:

1. Quantification (usually in square metres) of habitat losses of each type (instream rearing, spawning, riparian, etc.) from the proposed project.

6. Quantification of fish habitat at the compensation site prior to initiating compensation.

7. Quantification of anticipated gains in fish habitat at the compensation site as linked to fish species most likely to benefit.

8. Calculation of compensation ratio as net habitat gains relative to likely habitat losses.

8. Prime and other potential location(s) for proposed compensation sites (georeferenced -UTM's, with photographs).

9. To avoid displacing critical habitat with compensation habitat, describe the fish and fish habitat present prior to initiating proposed habitat compensation measures.

10. Describe site details such as flow volumes, soil type/landscape details, planting/restoration plans, machine access potential, water quality, and etc. If plans include need for a water source, demonstrate that adequate water is available.

11. Describe how and when compensation measures would be constructed, demonstrating that the proposed construction or operation of the measures would not result in or induce a harmful alteration, disruption, or destruction of fish habitat (HADD). Apply [timing windows](#) for scheduling construction as appropriate.

12. Identify all potential limitations that may compromise the success of the measures (e.g. waterfall downstream, etc.) at the prime and alternate compensation sites.

13. Confirm land tenure and legal access to the site and/or that the location can be legally controlled; Include signatures of other affected landowners.

14. Provide disclaimers that demonstrate that liability for the compensation works and its success lies with the proponent. (e.g. The proponent acknowledges that all plans and specifications relating to this project have been duly prepared and reviewed by appropriate professionals working on its behalf. The proponent further acknowledges that it is solely responsible for all design, safety and workmanship aspects of all of the works associated with this project.)

15. Provide an itemized cost of compensation measures (construction, planting and monitoring during and post-construction). This estimate would be used to calculate the value for a bank Letter-of-Credit to cover mitigation and compensation measures for the project.

16. Demonstrate that the local Aboriginal peoples have been consulted on the proposed compensation and that any comments from them have been considered.

17. Compliance and Effectiveness Monitoring. Describe environmental monitoring that will provide construction oversight and ensure that mitigation and/or compensation measures taken to conserve fish habitat values have been implemented and are functioning to the satisfaction of the environmental agencies granting approval for the works. Environmental monitors conducting the monitoring are expected to report to the appropriate regulatory agency(ies) and should act “at arms length” from the proponent’s contractors and have the authority to temporarily suspend works until appropriate mitigation measures are applied.

18. Follow-up Monitoring. Provide a Follow-up Monitoring Plan to demonstrate that compensation measures are functioning as intended. Also include contingency plans based on monitoring results to provide adjustment, repair or replacement of the compensation structures as reasonably needed to meet stated objectives at least across multiple seasons and usually for multiple years (e.g. over the life of the project).

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