



INDEPENDENT ENVIRONMENTAL MONITORING AGENCY

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Kathy Racher
Technical Director
Wek'eezhii Land and Water Board
#1-4905 48th Street
Yellowknife NT X1A 3S3

Dear Kathy

Re: Response Framework for Aquatic Effects Monitoring

The Agency thanks the Wek'eezhii Land and Water Board and its staff for the work that has gone into the draft guidelines for a Response Framework for Aquatic Effects Monitoring. The Agency supports the concepts and processes outlined in the draft document and is anxious to have this work applied to the Ekati Mine in light of the aquatic changes noted downstream by the company's aquatic effects monitoring program.

The Agency does have concerns with some of the terminology used in the document. Creating two new, and very similar terms 'Monitoring Response Plan (MRP)' and 'Response Framework' makes the document very challenging to follow. The former (MRP) seems to make sense, but the Agency would suggest sticking to 'Adaptive Management Framework' to describe the overall process. In the long run, it strikes us that having two clearly distinguishable terms would be preferable. Three other terms/definitions would also benefit from being revisited: action level; benchmark; and significant threshold. Suggestions for sharpening and clarifying these terms are included (as tracked changes) in the attached document. The definitions for all these terms need to stand on their own and not be dependent on the text for interpretation.

A number of other suggested changes are also included in the attached document. However, five areas seem to require a bit more elaboration:

1. Appendix 1 and the definition of adaptive environmental management do not reflect anticipating and preventing problems instead of reacting to them. For Ekati, this is particularly important because it was the principle on which the company applied and was given approval for the mine. It was meant to be learning by doing, but also purposefully collecting and using monitoring data on key components to assess effects and make appropriate management responses.
2. In discussing components of the Response Framework, baseline data is mentioned. Environmental Assessments and subsequent monitoring programs usually have only



- two or three years of baseline data with which to work. We think it would be a progressive step to include a requirement for proponents to give some evaluation of the adequacy of the baseline data. Specifically, to what degree do their baseline studies help to explain how the ecosystem functions and to what degree do they adequately capture the full range of natural variability? This is of particular interest for biological matrices as benthic & plankton communities can have very wide variation in biomass and taxonomic diversity between seasons and between years.
3. Using “range of natural variation” of an undisturbed ecosystem may be a useful description of natural variability. If range of natural variation is to be relied on, it may require a different approach to baseline collection and the setting of threshold indicators.
 4. The document should be clear what is an actual suggestion for triggers or benchmarks to be used and what is simply an example. In the current text, this is not always clear.
 5. The role of risk assessment needs to be clarified (see page 4 of the draft). Risk assessment can certainly play a role in adaptive management. At an early stage, it can be helpful to carry out a risk assessment in order to determine some appropriate thresholds. At an early stage, there is not a great risk of suffering serious harm. However, when high(er) thresholds have been passed, pausing to do a risk assessment (in order to reset the threshold) runs a risk of the system suffering harm while doing the research. That is not the time to do a risk assessment.

We understand that meetings are being planned with diamond mine representatives and others. A workshop might be helpful, especially to discuss concepts and definitions.

We thank you for the opportunity to submit comments and we would be happy to discuss them with you and others at your convenience.

Sincerely,



Bill Ross
Chairperson

cc. Society Members

Bruce Hanna, Fisheries and Oceans

Anne Wilson, Environment Canada

John McCullum, Environmental Monitoring Advisory Board

Dave White, Snap Lake Environmental Monitoring Agency