



***Independent Environmental Monitoring Agency***

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May 20, 2014

Brett Wheler  
Executive Director  
Wek'eezhii Land and Water Board  
#1-4905 48th Street  
Yellowknife NT X1A 3S3

Dear Brett

**Re: Agency Comments on the Ekati Aquatic Response Framework**

The Independent Environmental Monitoring Agency has reviewed the Ekati Aquatic Response Framework. We have submitted our main concerns in the comment table posted to the on-line review system and highlight some additional concerns for the consideration of the Wek'eezhii Land and Water Board (WLWB) and Dominion Diamond Ekati Corp. (DDEC) below.

DDEC adopts the 'use-protection' approach as the focus of its Response Framework (pg. 1-2). The Agency was disappointed to see the emphasis on use-protection in the Response Framework and trusts that DDEC will make every effort to include waste minimization practices in reducing impacts on the environment at Ekati

Lead times in the Action Levels are not explicitly identified. Lead times are implicitly considered when contaminants of concern are identified and selected based on the water quality modelling. Suppose one determines that a suitable response to a water quality variable exceeding a pre-defined Action Level is to put in place a water treatment plant in order to prevent the change from exceeding a higher unacceptable Significance Threshold. If the time required to install the water treatment plant is 8 months and the level rises to the unacceptable level in six weeks, the Response Framework has failed. One needs to set the Action Levels such that an adequate lead time can be provided. In this example, one needs a lower action threshold in order to allow enough time to correctly respond to the Action Level, in this case, install the water treatment plant.

No medium or high Action Levels are identified in the Response Framework. While this seems acceptable for annually sampled water quality variables, some biological and abiotic sampling only occurs every three or six years. For example, sediment is only sampled every three years (although not now included in the Response Framework) and fish every three or six years. It may be more appropriate to set medium Action Levels for those metrics that less frequently sampled such as sediment and fish. If contaminants spiked for some reason in the intervening years, one could envision scenarios where Significance Thresholds are reached or passed between sampling periods.

The list of actions for the Response Plans is so general as to be of little value. The Agency had expected to see more specific actions, especially related to known issues such as nutrient enrichment and exposure of fish to hydrocarbons.

The Agency notes that Response Frameworks have been approved for the two other diamond mines in the NWT and perhaps others. It might be useful to have a workshop to consider how to best compare and coordinate Response Frameworks for aquatic monitoring.

#### Minor Comments

--page 2-1, the EIS was not approved by federal cabinet, but the recommendations from the EARP Panel were responded to by the federal cabinet. Further down the page, "The focus was shifted to improve regulatory satisfaction with the EIR." while an odd sentence at best, the focus of the EIR was shifted from predicted vs. actual impacts to long-term trends and adaptive management to ensure that the most significant matters are identified and managed.

--page 3-17, no mention is made to the possibility of EROD activity in response to dioxins and furans in Kodiak Lake sediments.

--The low action levels for abiotic and biotic variables are confusing at best and spread out over several tables (3.1-5, 3.2-2, 3.2-3) with descriptive explanations, restrictions and limitations found in the text (pages 3-7 to 3-11, and 3-11 to 3-19). This material should be consolidated into one final table for the ease of regulators and interested parties.

--page 3-19, s. 3.4.1 Overview of AEMP should be moved up front in the report as part of the first or second section.

--pages 4-1 and 4-2, Response Plans, DDEC does not make an explicit commitment that public reporting is part of all Response Plans

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,

A handwritten signature in black ink, appearing to read "W. Ross". The signature is fluid and cursive, with the first letter of the first name being a large, stylized 'W'.

Bill Ross  
Chairperson

cc. Society Members

Veronique, D'Amour-Gauthier, Fisheries and Oceans  
Sarah-Lacey MacMillan, Environment Canada