



Independent Environmental Monitoring Agency

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December 19, 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 Version 1.1

The Independent Environmental Monitoring Agency has reviewed the Ekati Aquatic Response Framework Version 1.1. 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. Some of these issues were raised in our May 20, 2014 covering letter, including some of the factual errors noted below, and we were disappointed to see that the company has not changed the document in this regard.

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 Version 1.1 and trusts that DDEC will make every effort to include waste minimization practices in reducing impacts on the environment at Ekati, which is consistent with the 2011 Mackenzie Valley Land and Water Board's Water and Effluent Quality Management Policy. Similarly, the company in several places in the document defers taking actions until there is scientific certainty (e.g., pg. 3-23 in discussing a low action level for community biological variables, and pg. 4-2 where high action level definitions are deferred). This is clearly not consistent with the Precautionary Principle.

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 (X) 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 may be 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.

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 (3.1-4, 3.2-2, 3.2-3) with descriptive explanations, restrictions and limitations found in the text (pages 3-11 to 3-13, and 3-17 to 3-24). This material should be consolidated into one final table for the ease of regulators and interested parties.

--page 3-26, s. 3.4.1 Overview of AEMP should be moved up front in the report as part of the first or second section.

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.A. Ross". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Bill Ross
Chairperson

cc. Society Members

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