

Independent Environmental Monitoring Agency

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May 21, 2015

Georgina Williston A/Senior Fisheries Protection Biologist Fisheries Protection Program Fisheries and Oceans Canada Suite 301, 5204-50th Ave. Yellowknife NT X1A 1E2

Dear Ms. Williston

Re: Fisheries Act Review of Proposed Lynx Project

The Independent Environmental Monitoring Agency (Agency) has reviewed the proposal from Dominion Diamond Ekati Corporation (DDEC) for a *Fisheries Act* authorization for the Lynx Project as sent to us on April 10, 2015.

The Agency has provided advice on the environmental management and regulation of the Ekati Diamond Mine for 18 years. The Agency was established in 1997 through a legally-binding Environmental Agreement covering the Ekati Diamond Mine. The Agency serves as a public environmental watchdog of the regulatory process and the implementation of the Agreement by reviewing the design and results of environmental monitoring programs and management plans.

We are a non-profit society under territorial legislation with our own funding through the Environmental Agreement. We report to our society members (the Tlicho Government, Akaitcho Treaty 8 [Yellowknives Dene First Nation and Lutsel K'e Dene First Nation], North Slave Metis Alliance, Kitikmeot Inuit Association, GNWT, Canada and Dominion Diamond Ekati Corp.) and although our Directors are appointed by these members, once appointed we operate independently. Our Directors are experts in various fields such as wildlife, fisheries, water, environmental assessment and related fields. We have extensive experience with and knowledge of environmental management at the Ekati Diamond Mine. We have a mandate to participate as an intervenor in regulatory and other legal processes respecting environmental matters.

We offer the comments below on the material submitted by the company.

Completeness of Application

The Agency notes the March 31, 2015 letter from Dale Nicholson (Regional Director, Ecosystems Management, DFO) to the company that notes 19 deficiencies with the application and the conclusion that it is incomplete. The information requested by DFO appears reasonable to the

Agency, will result in a more informed decision by DFO and provide a firmer basis for setting any terms and conditions. The Agency shares many of those issues and concerns as noted below.

The Agency understands that DDEC submitted the additional information requested. We have received a copy and it has been accounted for in our comments. It is unclear if reviewers have been asked to review an incomplete application. We understand that the timeline for the Lynx Lake fishout is getting very tight and would encourage both DDEC and DFO to ensure all interested parties have the required information, and that timely and informed decisions are made.

Section 5. Off-Setting Plan

It is not clear to the Agency why DDEC chose the unnamed creek near Lutsel K'e as its preferred off-setting project of the all the possibilities noted during the community engagement (see pages 2-3 and 2-4). No evaluative criteria or rationale is provided by DDEC for the selected project. It may be preferable to spread out the off-setting efforts across two or more projects in case the proposed project does not work out. DDEC should provide a clear rationale as to why the unnamed creek was chosen and how.

The Agency is of the view that DDEC has likely underestimated the productivity and biomass of Lynx Lake as burbot were not included in the harvestable fish shown in Table 4-3 (pg. 4-6). Including burbot should result in DDEC having to replace a larger total biomass and biomass production as part of the off-setting plan. In addressing this concern, DDEC explains that not including burbot in the fish production lost in Lynx is balanced by not including longnose sucker in Unnamed Creek as a species that will likely use the improved habitat there. It may be argued that this is a false equivalency. Has DDEC done a fish use survey of local communities including Lutsel Ké, to see if burbot and/or longnose sucker are consumed? It may be that burbot would contribute a legitimate part of an Aboriginal fishery whereas longnose sucker would not. Also, no mention is made of fish production of these two species is expected, so DFO cannot evaluate whether excluding the burbot in the Lynx Lake loss estimation truly equates to excluding longnose sucker potential gains in Unnamed Creek.

The Agency is also concerned that the off-setting plan calls for fish of high value to Aboriginal communities and perhaps others (trout and whitefish) to be replaced elsewhere with fish of less value (northern pike). The Agency encourages DFO and DDEC to seek the views of Aboriginal communities with regard to the appropriateness of this off-setting.

Further to this issue, the Agency notes that DDEC had originally requested the banking (for later use as offsets for other projects) of any off-setting gains from possible increased biomass from the unnamed creek project versus the losses as a result of the fish-out at Lynx Lake (pg. 5-13). As noted above, the Agency questions whether the fish biomass has been underestimated for Lynx Lake and the appropriateness of a one-for-one trade-off of high value fish for fish of lower value. We also question DDEC's proposal to bank credit for production of low value fish for future developments such as the Jay Project. We are pleased to note that DFO has rejected the latter and DDEC has agreed.

Section 6. Complementary Measures

Fisheries and Oceans Canada's Fisheries Productivity Investment Policy allows for up to 10% of off-setting accounting to be considered as "Complementary Measures". DDEC is proposing that the level of fish data collection effort for the Lynx Lake fish-out is "in excess of what would otherwise normally be required in support of a fish-out program" (pg.6-1) and the work conducted in conjunction with the offsetting plan be considered "Complementary Measures".

The Agency does not object to the above work being considered as "Complementary Measures" but it should be made clear that it adds and builds to a regional baseline or has broader application throughout the NWT. The Agency is not aware of much guidance or protocols for hydroacoustics as a non-invasive method of fish surveying which the company proposes for Lynx Lake prior to fish-out. We believe this work can make an important contribution to future fish surveys of sub-arctic lakes and that any reporting should emphasize lessons learned including recommendations and guidance for further research and/or application.

Section 7.2 Fish-Out Data Collection

DDEC should include endoparasite analysis (taxa and worm count per fish) in the biological data collected in fish that don't survive the proposed fish-out of Lynx Lake. While such data are not a standard part of fish-out protocols for NWT (Tyson 2011), the Agency is of the view that as much scientific data as possible should be collected from harvested fish. Parasite information from reference lakes in the vicinity of the Ekati Diamond Mine are important to build a robust baseline to compare with mine-impacted lakes.

A few years ago BHP Billiton (the former owner of the Ekati Mine) released its AEMP results for tapeworm infestations in slimy sculpin. Infestation rates were found to be higher in lakes downstream of mine effluent discharge points in two watersheds (Long Lake Containment Facility to Lac de Gras and King Pond Settling Facility to Lac du Sauvage) than in reference lakes.

The Agency would be pleased to meet with DFO and/or DDEC and other interested parties to discuss these concerns. Should you require any further information, please contact Kevin O'Reilly, the Agency Executive Director at ker@theedge.ca or 669-2901.

Sincerely,

Bill Ross Chairperson

cc. Aboriginal Society Members

M.a. Rose

Kate Witherly, Environment and Natural Resources Jennifer O'Neill, Aboriginal Affairs and Northern Development Canada Claudine Lee, Dominion Diamond Ekati Corporation