From: trevor hesselink trevor.hesselink@me.com

Subject: Re: Victor Mine 2013 Mercury Performance Report - missing mercury reporting...

- Date: January 21, 2015 at 12:05 PM
  - To: Lefebvre, Larry (MOECC) Larry.Lefebvre@ontario.ca
  - Cc: Leith, Carroll (MOECC) Carroll.Leith@ontario.ca, Kondrat, Todd (MOECC) Todd.Kondrat@ontario.ca, Hamilton, Don (MOECC) Don.Hamilton@ontario.ca

Thank-you Larry, and greetings Todd!

I do have a growing pile of review notes and concerns with respect to the materials that I recently received through the last FOI process for this file. As most of them are of a technical nature, I will direct these to Todd from this point. I assume that other things of a policy or permit decision nature will be of broader interest to this current circulation.

I will of course look forward to a ministry response to my original query, from whomever you deem appropriate.

Regards

~T

Trevor Hesselink, MCIP, RPP Director, Policy and Research Wildlands League 416-707-9841 (mobile) 416-971-9453 ext. 33 www.wildlandsleague.org

On Jan 20, 2015, at 1:18 PM, Lefebvre, Larry (MOECC) < Larry.Lefebvre@ontario.ca > wrote:

Hi Trevor,

Thank you for your comments on the review of the report.

Please be informed that I have sent them on to our Technical Support Section for their consideration.

Should you have any additional comments, and/or questions please send them on to Mr. Todd Kondrat, Surface Water Specialist, Northern Region Technical Support Section, with the Ministry of Environment and Climate Change. He can be reached at todd.kondrat@ontario.ca.

Should you have questions, please do not hesitate to contact me.

Yours truly

<image001.png> Ministry of the Environment and Climate Change Ministère de l'Environnement et de l'Action en matière de changement climatique Larry Lefebvre Senior Environmental Officer\Agent Principal de L'Environnement Timmins District Office\Bureau du district de Timmins Ontario Government Complex\ Complèxe du gouvernement de l'Ontario 5520 Highway 101 E, P.O. Bag 3080\5520 Route 101 Est, CP/Service de sacs 3080 South Porcupine, Ontario, P0N 1H0 ( (705) 235-1511 | 7 (705) 235-1520 email: larry.lefebvre@ontario.ca TΗ

From: trevor hesselink [mailto:trevor.hesselink@me.com]
Sent: January 19, 2015 11:18 AM
To: Lefebvre, Larry (MOECC)
Subject: Victor Mine 2013 Mercury Performance Report - missing mercury reporting...

Good morning Larry,

I trust that you had a pleasant weekend.

I apologize here for all of the questions, but I am really struggling with the quality of this reporting (and perhaps the monitoring design). I spent part of my weekend trying to understand the Granny Creek mercury situation for the summer months and was disappointed by the extent of data reported:

## (1) Monitoring stations unreported

Despite the monitoring scheme described, with 8 monitoring stations (G1-G8) on the Granny system (per the map provided in the document - Fig 3), Mercury data is only reported for 4 stations reported together (G1-G3, and G5-G6, in Table 11, and 12 respectively), with 2 more to be found separately on Tables 30a/b (G4, G7). G2 and G8 are not presented anywhere that I could locate.

## (2) Unfiltered data not reported for all stations

The apparent priority placed on <u>filtered</u> data is troubling to us. While we recognize that the filtered fraction is conventional to general metals analysis, we are concerned that this approach fails to recognize the nature of the type of food-web at hand in this particular context, with this specific bio-accumulating metal. In any case, failing to provide the unfiltered alongside the filtered also precludes comparison by a reviewer and only tells part of the story. That specific reference standards for mercury often set unfiltered limits is also highly relevant. <u>Only filtered</u> Total and Methyl mercury for G4 and G7 are reported on Tables 30a/b.

## (3) Sampling frequency differs between NGC stations

The sampling frequency differs, both between NGC and SGC (including DS of confluence - G8), and between the individual stations on NGC (e.g. between G1/G3 and G4. This makes informed trend analysis difficult with any confidence. As creek sediment sampling is unfortunately not provided, consistent monthly water quality sampling for all stations with this proximity to the site would not at all be unreasonable to expect.

## (4) Critical months unreported

Jul and Oct are historical months of apparently particular methylation interest, yet substantial and unexplained data gaps are present for US stations on both creeks (esp. NGC). We find these gaps concerning when (a) NEF sulphate contributions have been flagged as an operational contribution of concern in previous years, and (b) that filtered data <u>is</u> reported for both of those particular months for above-confluence points for both creeks (G4 and G7).

To summarize, I was expecting to find comprehensive provision of all mercury data, (1) for all stations, (2) for both unfiltered and filtered analysis, (3) at the same frequency, and (4) in an accountable fashion that undertakes replacement samples were necessary and provides clear notation for discrepancies in the sampling/analytic chain of custody. For the reasons above, I did not find that the material provided met these expectations. The picture available from the provided data is highly fragmented and incomplete for the purposes at hand.

My questions:

[A] Have your reviewers flagged these issues as well?

[B] Has DeBeers separately provided more comprehensive data to your reviewers, or are they also only working from these Reports?

As always, I very much appreciate your help in clarifying these queries.

Regards

~T

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