

From: trevor hesselink trevor.hesselink@me.com
Subject: Victor Mine 2013 Mercury Performance Report - missing mercury reporting...
Date: January 19, 2015 at 11:17 AM
To: Lefebvre, Larry (MOECC) larry.lefebvre@ontario.ca



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 filtered 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. Only filtered 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 is 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

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

