

July 12, 2015

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**Re:** Wildlands League comments  
**2015 reposting of 2013 PTTW proposal: DeBeers/Victor Mine**  
EBR# 011-9596, posted on June 12, 2015

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Permit To Take Water Coordinator,

Please note that we have submitted comments on a previous posting of this same proposal, in December 2013.

As the circumstances surrounding this application, including our access to information and intervening years of operation, have in fact substantially changed, please find our further comments on this proposal attached.

Any questions regarding these comments may be directed to:



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Director, Policy and Research  
Wildlands League  
416-707-9841

Att: Wildlands League July 12 2015 comments on EBR #011-9596

cc. Director, Environmental Approvals Branch. (kathleen.hedley@ontario.ca)  
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Environmental Commissioner of Ontario (commissioner@eco.ca)

## CPAWS Wildlands League July 12 2015 comments on EBR #011-9596 2013 Victor Diamond Mine Water-taking proposal re-posting

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CPAWS Wildlands League is a registered conservation charity with a long history of engagement on the Victor DeBeers Diamond Mine Project dating back to 2005 when a federal Comprehensive Study Report was completed under the Canadian Environmental Assessment Agency.

These comments are being submitted as our preliminary commentary with respect to following instrument proposal notice EBR Registry number 011-9596 by DeBeers Canada. A summary is below followed by a more detailed submission.

### **EXECUTIVE SUMMARY:**

- **This subject application is dated.** No explanation has been provided for this re-posting of a dated proposal from 2013 nor what has transpired during the intervening period. The 2011 data relied upon in 2013 is even less adequate in 2015. We are concerned the Ministry would choose to consult on the proposal with dated information (2011) that fails to reflect 2 subsequent years of mercury reporting.
- **Missing from the proposal is a mid-life evaluation of mine dewatering performance.** As described in evidence presented in the Tomagatick vs Crown 2009, the Director indicated to the Environmental Review Tribunal that the original 5 year term of the Permit to Take Water was to allow for the opportunity for interested parties to “re-evaluate the effects of dewatering from the mine”.
- **This evaluation is not possible without data transparency.** It appears the evaluative basis for this opportunity, to the extent it is being fulfilled at all, is being limited by the proponent’s discretion and is not based on transparent, collective and objective access to the data gleaned from the monitoring program as might be expected.
- **The ability for the Director to rely upon Annual Mercury Reports is in question** due to high incidence of deficiencies in reporting, that only selective portions of the monitoring program are being presented and that there are ill supported conclusions. In addition to the above mentioned problems we have also found indications of false representation of monitoring data, which we are even more deeply concerned with.
- **Ministry response to our concerns submitted to date has been troubling.** The Ministry has not responded to any of our communicated concerns from our review of the 2013 Mercury Performance Report to date, nor even responded to the bulk of our correspondence. This is alarming to us, as many of our findings demonstrate failures to meet the reporting requirements attached to the discharge permit, some of which have persisted over multiple years of annual reports.
- **In our review of the 2013 Mercury Reporting to date, our organization has identified 5 key reporting failures (of which 2 have been remedied by the proponent):**
  - (1) Failure to report well production data in 2013 (VM-23, VM-25), required by condition of permit – remedied by proponent;

- (2) Failure to report methylation period monthly samples for several stations on Granny Creeks in 2013 Report, required by a condition of the discharge permit – remedied by proponent. These missing data had the ability to significantly change annual calculated averages: for example average filtered methylmercury (MeHg) at G3 increased by 25%;
  - (3) Failure to report discharge monitoring from the correct location and frequency 2008-2013, required by a condition of the discharge permit – acknowledged by the proponent as an error, with a promise to remedy – unresolved at time of this consultation, ministry unresponsive;
  - (4) Failure to report any data for identified surface water monitoring locations (G2, G8) 2008-2013, required by a condition of the discharge permit – unresolved to date, ministry unresponsive, and we note that this has persisted in the latest 2014 Report as well; and
  - (5) Failure to report unfiltered mercury data for two surface water monitoring locations (G4, G7) – unresolved to date, ministry unresponsive, and we note that this has persisted in the latest 2014 Report as well. We also note that this reporting failure also extends to the reference creek station ST5a, as well as to the total mercury (unfiltered and filtered) reporting obligations for these stations as well.
- **These unresolved failures to meet the conditions of the existing** related discharge permit cast the validity of it, and by association, this water-taking permit at hand in question.
  - **We are concerned that there may be a capacity issue at the Ministry** for being able to adequately oversee the conditions of these subject permits. Follow-up with Ministry staff in the period since this proposal was first posted in 2013 has demonstrated that Ministry reviewers (a) appear to be provided with inadequate time to undertake review of these significant reporting documents, and (b) are missing significant findings such as those identified above<sup>1</sup>.
  - **Concerns remain that DeBeers is discounting trends.** For example, regarding the statement “there are no strong temporal trends to the data, as evidenced by Table 12 of the Mercury Performance Report,” we note several concerns:

- (1) **Focuses on filtered data only** – the reference table reports only “filtered” MeHg, which is not as biologically relevant as unfiltered MeHg to this particular food web. In this particular context, the bio-accumulation vector necessarily includes the particle fraction, as particles are actually consumed at the lower trophic levels. Ignoring this fraction understates the availability of this mercury species to those aquatic species that occupy these creeks.

Unfiltered methylmercury samples observed in these data typically have concentrations that are 1-2 times higher than filtered samples, with ratios up to 10x. Reporting only on filtered portions of the sampling therefore poses a significant detriment to the effectiveness of the monitoring program to appropriately inform readers of the relative methylmercury exposures faced.

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<sup>1</sup> FOI released materials indicate that Ministry review of previous Annual Mercury Performance Reports does not flag persistent issues noted in our review of the 2013 edition.

- (2) **Downplays presence of a concerning trend** – by imparting only a low magnitude of change over time, this response downplays the fact that there IS a trend, and that it is in the concerning direction. From our perspective, this is in fact the relevant observation, as this change is actually an increase in the concentration of a bio-accumulating hazardous pollutant.
- (3) **Misrepresents “downstream” in creeks** – the table referenced here relies only upon sampling points that are actually located only mid-way down the minesite and not actually downstream of the whole site. G4 and G7 are clearly more downstream of the minesite for each of North Granny Creek and South Granny Creek respectively.
- **Facts point to additional monitoring intensity needed for creeks.** These proximate creeks are the most sensitive receivers, a sentinel for potential impacts to the Nayshkootayouw, they are experiencing site loadings that are demonstrably enhancing methylation conditions to levels above bioaccumulation thresholds such as the US EPA limit, and they are seeing levels that are increasing mercury body burdens in local minnows.
  - **An apparently evolving pit design presents a key new variable.** We are concerned that there exists a substantial discrepancy between what is identified in the original Federal Environmental Assessment for the finished pit depth (233m)<sup>2</sup> and other indications that we have received since the last posting of this proposal in 2013 (the latest being 300m).
  - **Effective oversight missing** – It remains a reasonable expectation to us that, if the Ministry deems conditions worth including in an authorization, then it would demonstrate a strong interest in their performance and commit sufficient resources to review submissions and engage interested parties to ensure that concerns around these are effectively and expediently resolved.
  - **Poor Regional Precedent** – If the Ministry is struggling to oversee this one project now, what can the public expect when expansion plans, new proposed diamond mines, the upstream Ring of Fire, and other development interests in this region all begin to require authorizations? The Ministry needs to consider this project carefully from this perspective, and quickly learn any lessons before such additional pressures are brought to bear.
  - **Decisive actions are needed to remedy project and oversight issues** – Our concerns above describe a circumstance of persistent project scale failures, within the systemic context of inadequate Ministry oversight performance. In our opinion, a series of strong remedial effort at both scales is required to address these liabilities to this subject project and the current permitting system that is supposed to be overseeing it. In our opinion this effort should include:
    1. **Immediate remedial provision of monitoring results**
    2. **Updating of Application before further consideration of this proposal**
    3. **Additional monitoring intensity for Granny Creeks**
    4. **Consideration of independent monitoring and reporting**
    5. **Comprehensive availability of Monitoring and reporting to all parties**
    6. **Ministry review of internal capacity for overseeing permits**
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<sup>2</sup> Federal Comprehensive Study Report (CSR), page 2-3.

## DETAILED COMMENTS

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[A] THESE COMMENTS

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These comments are being submitted by CPAWS Wildlands League (WL) as our preliminary commentary on this subject proposal at this time.

**(A-1) Lack of Ministry response to request for extension** – These comments are being submitted by WL as our preliminary comment on this subject proposal at this time, in the absence of a Ministry response to our request for an extension or postponement of this consultation, and the additional specific context of the significant limitations of this consultation detailed below.

**(A-2) Follow-up request for additional consultation / reasonable review** – It is our intention to provide additional review to this subject proposal, as these limitations of this consultation are clarified/remedied, and we continue to request latitude from the Director for (a) a reasonable amount of time to undertake such informed review, and (b) for the consideration of any additional comments that this subsequent review may contribute to the decision at hand.

**(A-3) Timing of this consultation, vs available annual reporting** – As there seems to be a common understanding of:

**(a) integrated permits** – The interconnectivity between the activities of this Permit to Take Water (PTTW) and the related dewatering works permit is beyond dispute. This subject application discusses this interplay extensively, as well as contemplates the potential for mixing of the flow augmentation water (a separate surface water-taking) with pit effluent discharge to manage chloride release for example. The fact that the proponent chose to append their responses to our comments from the 2013 PTTW proposal consultation to their 2013 Annual

Mercury Performance Report further illustrates how relevant these annual reports are to the subject proposal<sup>3</sup>; and

**(b) the importance of mercury chemodynamics** – Mercury Chemodynamics are recognized as a “primary concern” for this application<sup>4</sup> by the proponent, to which we are in complete agreement. This theme has consistently been an important part of the dialogue around the permitting for this site since 2008;

We are therefore very concerned that the Ministry would choose to consult on the proposal complete with dated information (2011) that fails to reflect 2 subsequent years of mercury reporting, and post it a short 2 weeks (June 12, 2015) before the most current annual Mercury Performance Report (an additional 3<sup>rd</sup> year of reporting), is due to be reported to the Ministry (June 30, 2015).

It is imperative that these permits are considered together as a functional whole, relative to understood potential impacts such as mercury, and in a manner that respects the related nature and timing of the integral monitoring required by the pit discharge permit.

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[B] THIS SUBJECT APPLICATION / ITS EBR POSTING

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**(B-1) Dated Application - 2011 Data relied upon in 2013, even less adequate in 2015 – this** continued reliance on 2011 data in this re-posted 2013 application, without any apparent effort to update, is unacceptable to us in 2015.

**(B-2) Incomplete and outdated Application** – Similarly, the subject Application does not reflect the benefits of the earlier consultation, including ours and others 2013 comments, the proponent’s responses to those comments, nor any other additional information available since the time of that initial consultation.

**(B-3) The registry fails to adequately chronicle the 2013 posting of this same proposal** – The proposal appears to be identical to that which was posted in 2013, which we commented on at that time. No indication is provided that comments were previously received on this proposal for example, as they were for the original 2008 consultation. No explanation has been provided for this re-posting of a dated proposal, nor what has transpired during this intervening period – a conspicuous gap in the relayed history of the proposal that we find disturbing. In particular, the intervening “extension” posted for the original permit indicated that the extension was specifically provided in order that additional opportunity for “evaluation” and “consultation” on comments received regarding the taking could be undertaken<sup>5</sup>, presumably with interested parties that expressed the comments received from the proposal in its first posting. No details are provided for what additional evaluation and consultation has been undertaken from then until this point nor, if anything has been learned through this period, it has not been reflected in this reposting of the same dated materials.

**(B-4) Inaccurate Registry description** – The Registry description indicates that “*The stringent monitoring and reporting requirements from PTTW No. 5521-8CZSNK and the total dewatering rate of*

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<sup>3</sup> 2013 Annual Mercury Performance Report, Appendix A-3. June 2014.

<sup>4</sup> This subject PTTW application, February 2013. Pg 3

<sup>5</sup> EBR posting, Director rationale for PTTW extension, Aug 2014

up to 150,000 m<sup>3</sup>/day from the open pit area are proposed to remain unchanged.”<sup>6</sup> It is hard for us to understand why the Ministry would indicate this, as the proposal actually explicitly proposes reducing the frequency of several discreet components of the monitoring and reporting program – which, if accepted, would actually constitute a change to these requirements.

**(B-5) Missing mid-life Evaluation of mine dewatering performance** – There is a series of indications that the original 5 year horizon for this permit was provided by design, as an alternative to an open-ended mine-life period. These indications all point to an opportunity for public consultation, review, and evaluation at the mine mid-life as the primary rationale for this. Examples of these include:

**(a) Current Permit Rationale** – the rationale for the interim extension for this Permit now being enjoyed was that it was provided in order that additional opportunity for “evaluation” and “consultation” on comments received regarding the taking could be undertaken<sup>7</sup>, presumably with interested parties that expressed the comments received from the proposal in its first posting;

*“This permit is being extended to allow further time for evaluation and consultation on comments received (Environmental Registry Number: 011-9596). ... to allow adequate opportunity for public comment and First Nation engagement on the permit renewal application (Environmental Registry Number: 011-9596).”*

**(b) Director’s Affidavit** – in the Director’s evidence presented in Tomagatick vs Crown 2009, where the Director indicated to the Environmental Review Tribunal<sup>8</sup> that the original 5 year term was to allow for the opportunity for interested parties to “re-evaluate the effects of dewatering from the mine”; and

**(c) This Subject Application** – in the opening pages of this subject application, the proponent also flags that “*To show diligence in its actions, the Ministry of the Environment (MOE) elected to issue the PTTW for a five year period, such that monitoring data could be evaluated prior to extending the PTTW for a longer period*”.<sup>9</sup>

**(B-6) Evaluation not possible without data transparency** – The concept of evaluation of monitoring data before a mine-life permit decision is central to all these expressions above. The proponent further suggests there that the monitoring data would be available for the purposes of this evaluation. Yet (as also described elsewhere), comprehensive and transparent availability of the monitoring data has not been our experience to date (even upon specific request), and the proponent has also confirmed to us that the Ministry has received only the selected monitoring data provided in the Mercury Monitoring Reports.<sup>10</sup> So it appears that the evaluative basis for this opportunity, to the extent that it is being fulfilled at all, is being limited by the proponent’s discretion and not on a transparent, collective, and objective access to the data gleaned from the monitoring program as might be expected from the assurances provided above.

**(B-7) Little evidence of Ministry activity since original posting** – Conversely, it is not apparent what form of consultation or evaluation that the Ministry has undertaken in the substantial amount of time that has elapsed since the original posting of this proposal in 2013. We would note that, as an acknowledged interested party who has submitted a series of concerns, WL has not been contacted to

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<sup>6</sup> June 12, 2015 EBR posting for this subject consultation

<sup>7</sup> EBR posting, Director rationale for PTTW extension, Aug 2014

<sup>8</sup> Director’s submissions, Tomagatick vs Crown, December 9, 2008, pg 15 at number 75.

<sup>9</sup> DeBeers PTTW Application, 2013, page 1.

<sup>10</sup> DeBeers response to WL concerns, April 2, 2015.

discuss its noted concerns by the Ministry or the proponent in the interval since the submission of its last set of comments on this proposal, on December 16, 2013. Additionally, we understand (a) from the proponent that the Ministry has no additional reporting information than the Annual Reports, and (b) from the Ministry that as of May 25, a mere two weeks before this consultation, staff that had previously reviewed the 2012 Report had yet to review the 2013 edition.

**(B-8) Interested party initiative required** – Instead, WL has approached the Ministry on its own on numerous occasions during this time, raising a series of additional key concerns associated with the proponent’s Mercury Performance Monitoring Reports, including the 2013 edition that the Ministry had not managed to review.

The Ministry has forwarded some of these concerns to the proponent (who has provided their opinions – see elsewhere here our reactions to these) but the Ministry has failed to provide its own response to date, as requested by WL on January 21, 2015, as well as any response to some additional technical questions raised on January 22, 2015 (with follow-up on May 20, 2015).

**(B-9) Unresolved failures to meet conditions of the related discharge Permit** – This unmediated dialogue between WL comments and proponent partial response did not include a Ministry position on any of the concerns and the subject matter of the comments included failures to meet conditions of the dewatering discharge Approval, and thereby this subject water-taking. In our opinion, these failures remain largely unresolved:

**(a) Mercury reporting** – On December 2, 2014, WL identified a substantial reporting error in the 2013 Mercury Performance Report (and previous years). This reporting error was a failure to report samples at the frequency (and location) identified in the dewatering discharge Approval, for the years 2008-2013, per Condition 6 (3).

This oversight was apparently missed by all parties to that date, and WL promptly reported it to Larry Lefebvre, Senior Environmental Officer, MOECC, Timmins who raised it with the proponent. Later, it was acknowledged by the proponent, and an explanation was provided by Mr Terry Ternes (via email, December 15, 2014), promising complete replacement data as “soon as possible”. This data was still unsupplied to our knowledge in time for this consultation, 6 months later.

It was only after WL specifically requested the document from both the proponent and the Ministry, at the time of the reporting due date, that the proponent forwarded a copy by email, one week prior to the end of this consultation period. In quickly reviewing this, WL discovered that a decision to just wait and insert it into the 2014 Annual Mercury Performance Report must have been made, despite the fact that this submission was not scheduled to get to the Ministry until the end of June, mid-way through this consultation period.

We are concerned that (a) this decision was not communicated to us, the party that identified the issue, even with repeated requests to the MOECC for an update on these data (emails from WL to MOECC Timmins and Thunder Bay offices), (b) this current comment was initiated without interested parties (nor perhaps the Ministry) being provided with these updated data, and (c) we have not had the benefit of studying these data in the short time the report has been available to us.

**(b) Missing downstream data** – A similar circumstance exists for our concerns directed at the Ministry around the missing mercury data for the G2 and G8 monitoring stations, and also the missing unfiltered MeHg data for G4 and G6. These missing reporting requirements have not been remedied at the time of this consultation. To date, the proponent’s sole third-hand response



to these concerns is unsatisfactory to us. See also our specific comments on this important subject included in our further comments on DeBeers responses below.

**(B-10) No apparent Ministry action on these identified failures** – Ministry has not provided replies to our communications highlighting the failures presented here, despite the facts that these concerns were directed at them and WL has provided several unanswered follow-up requests for a reply.

As no water taking is permitted w/o a permitted discharge, and the permitted discharge is conditional on these several monitoring and reporting requirements that we have identified as being unmet, these questions cast the validity of the authorizations at hand into question. We have been diligent in our attempts to bring the Ministry's attention to these matters in the most expedient manner possible, but they remained unresolved and unanswered by the Ministry, at the time of this consultation.

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## [C] RELIABILITY OF ANNUAL MERCURY REPORTS

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**(C-1) Overall a high incidence of deficiencies in reporting** – From our review of the annual Mercury Performance Reports to date, we have unfortunately been able to generate a fairly long list of what we consider deficiencies (more discussion on these elsewhere in these comments also).

We note here more generally that overall these reports are ill-presented and inconsistent year-year, with only selective portions of the program presented, and with particularly poor metadata available to interpret what is presented. Statistical analysis is not always being performed using the appropriate tests, and not all results useful to this context are being observed. Perhaps even more concerning is that conclusions being made, do not seem objectively presented and are often not well-supported. Lastly, and most concerning, we have also encountered circumstances that strongly suggest the duplication of data between years.

Our casual look at the latest, 2014 Annual Report also identified another primary example of this persistent misreporting of the monitoring program: tables in the same document that should be showing the same data demonstrating significant differences, including impacted calculations. Further, deficiencies that we have previously identified have been replicated in another reporting year.

**(C-2) Ill-presented / inconsistent / poor metadata** – We have an extremely long list of frustrated notations from our review of the 2008-2014 Annual Reports to draw on for these examples, but some illustrative examples include:

- Variable and misleading labeling of “downstream” water monitoring stations for Granny Creek reporting (e.g. see our comments below on 2014 Report),
- Catch Per Unit of Effort (CPUE) charts included for the fish monitoring are inconsistently represented and formatted year-year, including differing units of effort, variable inclusion of sampling dates and locations, and aggregations of various samples, making comparison and utility for understanding what intensity of fish sampling, when, and where it occurred on Granny Creek (for example) practically impossible, and
- Reasonable metadata for tables and charts, such as rationale for data gaps, detection limit changes, and identification of such things as bar and whisker diagram representations go un-

noted more often than not, significantly impairing their utility to the reader, and the credibility of what is being presented.

**(C-3) Ill-supported conclusions** – There are also many conclusions made in the reports that go beyond the reporting results provided. One that is made extensively, and only occasionally with any rationale suggested, is the claim that methylmercury increases noted in Granny Creek is not related to wellfield dewatering of the pit. We would like to see a more comprehensive discussion of this subject, clearly referencing supporting data, before conclusions are made so categorically.

**(C-4) The statistical analysis in these Mercury Performance Reports is often questionable to us** – Examples of this include:

(a) use of Analysis of Variance (ANOVA) – The authors compared fish mercury body burden between locations and between years by performing separate one way ANOVAs that are not justified. More appropriate data treatment would be done with factorial ANOVA or Analysis of Covariance (ANCOVA).

(b) For comparisons between concentrations of Hg and MeHg in surface waters of control versus treatment fens, authors could have performed non parametric tests since equivariance and normality assumptions for using parametric tests are not met in this case (the data are largely skewed due to spikes in concentrations).

(b) missing non-parametric analysis – it would have been appropriate to statistically test the evolution of water chemistry with time using a non-parametric trend analysis (e.g. Man Kendall test). Non-parametric testing would be suitable as the mercury concentrations showed seasonal spikes and consequently the distribution of data would depart from normality.

**(C-5) Only selective portions of the required monitoring program results presented** – Nowhere is this selective reporting more evident than the most proximate creek receiving waters and their paired reference creek. These failures to report results extend to:

(a) completely missing reporting on results from G2 and G8 surface water monitoring stations;

(b) missing unfiltered methylmercury results from G4, G7, the NGC and SGC downstream surface water monitoring stations respectively, as well as from ST5a, the established reference creek, and

(c) completely missing total mercury, both filtered and unfiltered, from G4, G7, and ST5a

all required by explicit conditions contained in the discharge permit.

We flagged concerns regarding this missing reporting with the Ministry earlier this year, back in our review of the 2013 Mercury Performance Report. This is also further detailed elsewhere in these comments.

**(C-6) Indications of falsification of monitoring data** – In addition to these collectively misleading and confounding ingredients, it is the indications of false representation of monitoring data that we have encountered, which we are even more deeply concerned with. For example, we found that the Catch Per Unit of Effort (CPUE) information for minnow-catch in each of 2011 and 2012 compared unnaturally closely (see excerpts below).

TABLE 19  
SPECIES-SPECIFIC CPUE IN MINNOW TRAPS  
BY LOCATION DURING 2011

Waterbody	North Granny Cr.	South Granny Cr.	Tributary 5A	Catch (n)
Sample Area	NGC*	SGC*	ST-5A	
Date (mm/dd/yy)	9/1/2011**	31-Aug-11	01-Sep-11	
Total Trap Hours (# traps*hours)	1080	731	287	
Pearl Dace	0.251	0.007	0.912	538
Finescale Dace	0.060	0.000	0.254	138
Northern Redbelly Dace	0.015	0.000	0.031	25
White Sucker	0.004	0.001	0.132	43
Longnose Sucker	0.001	0.000	0.000	1
Johnny Darter	0.006	0.000	0.000	7
BrookStickleback	0.000	0.000	0.014	4
<b>CPUE Total</b>	<b>0.337</b>	<b>0.008</b>	<b>1.343</b>	<b>756</b>

**Note**

\* - Comprised of multiple capture events

\*\* - Also included samples collected from July 15 to 17, 2011

TABLE 19  
SPECIES-SPECIFIC CPUE IN MINNOW TRAPS  
BY LOCATION DURING 2012

Waterbody	North Granny Cr.	South Granny Cr.	Tributary 5A	Catch (n)
Sample Area	NGC*	SGC*	ST-5A	
Date (mm/dd/yy)	30/06/2012**	02/09/2012**	02/09/12	
Total Trap Hours (# traps*hours)	1080	731	287	
Pearl Dace	0.25	0.01	0.91	538
Finescale Dace	0.06	0.00	0.25	138
Northern Redbelly Dace	0.01	0.00	0.03	25
White Sucker	0.00	0.00	0.13	43
Longnose Sucker	0.00	0.00	0.00	1
Johnny Darter	0.01	0.00	0.00	7
BrookStickleback	0.00	0.00	0.01	4
<b>CPUE Total</b>	<b>0.34</b>	<b>0.01</b>	<b>1.34</b>	<b>756</b>

**Note**

\* - Comprised of multiple capture events

\*\* - Comprised of multiple capture dates

*Minnow trap CPUE results reported to the Ministry from two consecutive Annual Reports.*

We observe that these stark similarities are extremely unlikely to belong to coincidental replication of fish distribution. Note identical data reported (except for rounding). Note also identical effort, species distribution, and total catches, while title and notation is consciously altered. One decimal of additional rounding to CPUE per species was also administered between years, slightly changing appearance (and contributing another example of inconsistency in format for presented level of accuracy) and causing the values provided to fail column addition.

These challenges to the credibility of the monitoring program unfortunately continue to persist in this latest 2014 Mercury Performance Report just released mid-consultation. On quick examination, we note significant differences between filtered MeHg values reported in Table 36, 12, and 11 (See also section G below), that include different values reported between tables for the same sampling months and location.

**(C-7) Thus, the Director's decisions may be relying upon misleading information** – Together, the deficiencies outlined above significantly challenge the Director's ability to rely upon this key required

reporting in making permitting decisions such as the one at hand. They raise a dangerous concern that this reporting that the Director relies upon<sup>11</sup> may well be misleading to that purpose.

These deficiencies also threaten the Ministry confidence placed in the reporting regime established with respect to past decisions and assertions, for examples: such as in the use of the phrase “the stringent monitoring and reporting” employed in this subject EBR posting, and when previously relied upon as evidence of accountability going forward in support of the Director’s decision in Tomagatick vs Crown 2009.

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#### [D] MINISTRY TRANSPARENCY, OVERSIGHT, AND QUALITY SERVICE

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**(D-1) Key Annual Report not made available at the outset this consultation** – The Ministry must have been fully aware of the fact that the normal reporting period for this key monitoring report is at the end of June each year. This predictably makes the scheduling of this particular comment period extremely challenging to an interested party attempting to participate, and exercise its rights under Ontario environmental law to engage in environmental decision-making in an informed manner. The Ministry could have (a) waited a short two weeks, or (b) obtained and made this report available for this consultation, to mitigate this timing and transparency problem at the outset of this comment period.

**(D-2) The Ministry FOI default** – Attempts to obtain annual reporting from the Ministry by request, such as the annual Mercury Performance Reports have been consistently refused, despite Director discretion to release them, and the clear intent of both the Privacy Commissioner and this Government to institute ready release of routine information in a transparent manner befitting an “Open Government”. Previous years of these annual reporting documents have been released un-redacted after we engaged in two separate FOI requests, therefore this material deemed fully available in the public domain. Yet the Ministry continues to insist that these reports require a Freedom of Information process to obtain, which can take six months in our experience (for example, our last was requested Jun 17, rec’d Dec 8, 2014).

**(D-3) Creation of an informed-consultation dilemma** – This is highly problematic for circumstances such as this consultation as, absent the proponents response to our mid-consultation request, it was entirely likely that we would not have had the benefit of being able to fully participate in an informed manner until 2016, working within the default conditions of the Ministry’s posting of this consultation. As it is, we have still not had sufficient access to adequately consider this report. That the Ministry created this dilemma is not acceptable to us. In our opinion, it unnecessarily infringes on the rights of the interested Ontarians to be involved in an informed manner in environmental decision-making.

The fact that the proponent chose to append their responses to our comments from the 2013 consultation to their 2013 Annual Report further illustrates how central these annual reports are to the subject proposal.

**(D-4) Reliance on proponent discretion to provide materials** – While occasionally more efficient than a formal Freedom of Information request of the Ministry, proponent follow-up to requests for materials is highly variable in our experience. That other of our requests for similar mandatory reporting have been refused by this proponent for example, remains a concern to us on the same grounds.

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<sup>11</sup> as demonstrated by assigning staff time to their review for example, a 2013 review of the 2012 Mercury Performance Report, obtained by WL through FOI.

The current approach makes access to reporting highly discretionary in the absence of an effective government policy, demonstrably impacting transparency, credibility, and efficient consultation.

**(D-5) Our position: required reporting belongs to public domain** – It is our position that reporting information and data that are responsive to the conditions of an established Ministry authorization belongs transparently in the public domain. This is most particularly true when the public is being asked to consider an ongoing evolution of a permit, such as this subject proposal.

**(D-6) Ministry response to our concerns submitted to date has been troubling** – The Ministry has not responded to any of our communicated concerns from our review of the 2013 Mercury Performance Report to date, nor even responded to the bulk of our correspondence. This is alarming to us, as many of our findings demonstrate failures to meet the reporting requirements attached to the discharge permit, some of which have persisted over multiple years of annual reports. For example, in our review to date, our organization has identified:

- (1) Failure to report well production data in 2013 (VM-23, VM-25), required by condition of permit – remedied by proponent;
- (2) Failure to report monthly mercury samples for several stations on Granny Creeks (during the key methylation period) in 2013 Report, required by a condition of the discharge permit – remedied by proponent. These missing data had the ability to significantly change annual calculated averages: for example average filtered methylmercury (MeHg) at G3 increased by 25%;
- (3) Failure to report discharge monitoring from the correct location and frequency 2008-2013, required by a condition of the discharge permit – acknowledged by the proponent as an error, with a promise to remedy – unresolved at time of this consultation, ministry unresponsive;
- (4) Failure to report any data for identified surface water monitoring locations (G2, G8) 2008-2013, required by a condition of the discharge permit – unresolved to date, ministry unresponsive, and we note that this has persisted in the latest 2014 Report as well; and
- (5) Failure to report unfiltered mercury data for two surface water monitoring locations (G4, G7) – unresolved to date, ministry unresponsive, and we note that this has persisted in the latest 2014 Report as well. We also note that this gap also extends to the reference creek station ST5a, as well as to the total mercury (unfiltered and filtered) results for these stations as well.

**(D-7) Ministry Capacity to adequately oversee Permits seems questionable** – Follow-up with Ministry staff in the period since this proposal was first posted in 2013 has demonstrated that Ministry reviewers (a) appear to be provided with inadequate time to undertake review of these significant reporting documents, and (b) are missing significant findings such as those identified above<sup>12</sup>.

We are concerned that there may be a capacity issue at the Ministry for being able to adequately oversee the conditions of these subject permits. The failures that we have identified through a fairly cursory external review have been numerous, and have included failures that threaten the integrity of the permit arrangement. We note that a failure to meet a condition of the discharge permit intrinsically invalidates the subject water-taking permit.

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<sup>12</sup> FOI released materials indicate that Ministry review of previous Annual Mercury Performance Reports does not flag persistent issues noted in our review of the 2013 edition.

**(D-8) Quality Service and support for the EBR** – Additionally, we would suggest that quality service relating to the responsiveness to, and engagement of interested parties is deficient, in our opinion (see throughout these comments for numerous examples of Ministry failures to respond). This may also be associated with Ministry capacity to adequately administer and oversee these subject permits.

**(D-9) Expectation of effective oversight** – It remains a reasonable expectation to us that, if the Ministry deems conditions worth including in an authorization, then it would demonstrate a strong interest in their performance and commit sufficient resources to review and engage interested parties to ensure that concerns around these are effectively and expediently resolved.

**(D-10) Poor regional precedent** – If the Ministry is struggling to oversee this one project, what can the public expect if expansion plans, Ring of Fire, and other development interests in this region all begin to require authorizations? The Ministry needs to consider this project carefully from this perspective, and quickly learn any lessons before such additional pressures are brought to bear.

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[E] FURTHER COMMENTS ON DEBEERS RESPONSES TO OUR CONCERNS:

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**(E-1) DeBeers responses (Apr 2, 2015) to select WL comments to Ministry**

We have raised a number of concerns to the Ministry in the interval since this proposal was last posted for public consultation. These concerns were centered around the 2013 Mercury Performance Report and its predecessors. The only unsolicited response that we have received, was a table from the proponent that answered a selection of these concerns. No Ministry response, or rationale for this approach was provided to us.

**(E-1.1) Ministry unresponsive** – As it appears that we will not have the benefit of the requested Ministry responses to the various concerns that we have raised with the Ministry in the period since the last consultation on this proposal, and the Ministry may therefore be relying upon the proponent's as the last word on the concerns raised, it appears necessary to note our reactions to these proponent opinions here.

**(E-1.2) No dialogue provided** – We note that neither the Ministry nor the proponent have provided any further discussion or follow-up to our concerns other than the proponent's response table<sup>13</sup> at the time of this consultation. As our original comments were not directed at the proponent, this table would seem to be providing them with an unmediated venue to respond only to date.

**(E-1.3) Incomplete response** – We also note that this table does not reflect the full content of the issues that we have raised with the Ministry during this period. In addition to being only a third-party response, it is also therefore incomplete.

**(E-1.4) Our additional comments on these DeBeers partial responses** – So, in reconsidering these proponent responses at this time for the purposes of this renewed consultation, we would add the following additional comments (numbering reflects the numbering in the table):

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<sup>13</sup> Apr 2, 2015. DeBeers Response to WL concerns

**1.1 Failure to report individual wells** – missing 2013 well production data required by Condition 6 (4). We are pleased to note that the proponent recognized and remedied this concern.

**1.2 Missing river mercury data** – missing 1 month of 2009 surface water data. We are pleased to note that the proponent recognized and remedied these concerns.

**2.1 Failure to report on required monitoring stations [unresolved]** – for surface water mercury monitoring at (G2) and (G8) for 2008-2013. We noted that the (G8) station in particular, is a key station, as it is the ultimate downstream station in the Granny Creek system. The proponent provided no specific response to this, instead merely claiming to be generally in accordance with the requirements of the dewatering discharge Approval<sup>14</sup>.

*“The Annual Mercury Performance Monitoring Report is submitted to address Conditions 7(5) and 7(6) of Certificate of Approval (C. of A.) #3960-7Q4K2G, and summarizes monitoring data relating to peat pore water, surface water systems, groundwater (well field) discharge and fish for the regulated locations in accordance with the approval.”*

We do not see how this assertion can be made, given the specificity and level of detail provided in the Approval with respect to describing the monitoring program, and the reporting required. It is our understanding that:

- (1) DeBeers is obligated by condition of its Approval to monitor and report on a set of established water stations. These conditions include condition 6(8), detailing a mercury monitoring program that includes a set of 8 monitoring stations on Granny Creek, and condition 7(5) requiring the annual reporting of that monitoring program to the Ministry;
- (2) This set clearly includes 8 separate water monitoring stations identified on the Granny Creek system and listed on Table 3 of the Approval. These locations correspond to the proponent’s G1 through G8 labeling identified in the Annual Reports. These listed stations specifically include water monitoring stations G2 and G8 (with G8 being the ultimate downstream station from the mine, after the creeks combine – arguably the most important monitoring locations of the set);
- (3) Condition 7(5) requires the proponent to report the results of the monitoring program to the Director and AFN.
- (4) None of the required annual Mercury Performance Monitoring reports from 2008-2013 report any performance data from either of these two water quality stations. Their only presence appeared to be their spatial illustration (E.g. Figure 3, 2013 Report) as being part of the monitoring scheme, reinforcing the expected array of stations to be reported, and their identification labels.

The monitoring program clearly includes these two missing stations, and it is the results of the program, that specifically includes these stations, that is to be reported. These facts seem quite at variance with the assertion made by the proponent that their Reporting is “in accordance with the Approval”. At this point, given that DeBeers has said that the Ministry has no additional data than that reported in these Reports, there is no way for the Ministry to even know after 6 years of reporting, whether or not these stations are even being sampled according to the described program on the basis of the reporting provided.

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<sup>14</sup> *Industrial Sewage Works Certificate of Approval (C. of A.) #3960-7Q4K2G, as re-issued Mar 13, 2009*

When trying to understand this creek system in better context, given this notable gap, DeBeers has also separately refused to provide more comprehensive surface water data to WL upon written request.

**2.2 Unfiltered data not reported for all stations [unresolved]** – the proponent listing where both filtered/unfiltered are reported in the document does not respond to the specific comment: that unfiltered is not always reported alongside filtered, with the specific examples cited (Table 30a and Table 30b). Specifically, the failure to report unfiltered results for both the downstream sites of the Granny Creeks (G4, G7, G8), and also for the reference creek, Tributary 5a.

**2.4 Critical months of Granny Creek mercury data missing** – the proponent has acknowledged and remedied this “inadvertent error”.

We do however find the proponent’s notation “*Table 3 of the C. of A. requires quarterly sampling of methyl mercury in Granny Creek*” very interesting, as it demonstrates again here the unfortunate selective nature of which of the required stations from Table 3 are reported on. No rationale has been provided anywhere that we are aware of for this practice, and (as detailed above) we do not see how the proponent could interpret such discretion.

We also note that these missing 2013 data had the ability to significantly change the annual calculated averages: for example average filtered MeHg at G3 increased by 25%;

**4.0 Refusal to share reporting information required by condition of permit** – this response evidences the dilemma referenced elsewhere in these comments: that an interested party such as ourselves is at the mercy of (a) the discretion of the proponent, or (b) a resource and time-consuming Freedom of Information request. For matters that are conditions of an approval that is being posed as the subject of public consultation, this circumstance proves a barrier to informed participation.

## **(E-2) DeBeers response (Jun, 2014) to WL 2013 PTTW consultation comments**

**(E-2.1) Similar lack of Ministry mediation of consultation / dialogue** – Similarly, as no dialogue, or Ministry mediation of our concerns raised in the previous consultation around this subject proposal occurred in the intervening period, and the Ministry may therefore be relying upon the proponent’s as the last word on the concerns raised, it appears necessary to note our reactions to these proponent opinions here as well.

**(E-2.2) Our additional comments on DeBeers responses to our earlier PTTW comments** In reconsidering these responses at this time for the purposes of this renewed consultation, we would add the following additional comments (numbering reflects that used in the table<sup>15</sup>):

**(1) Missing Ministry position** – While hearing DeBeers experience with MOE practice might be interesting, this comment was not directed at the proponent. We have not been provided with any clear Ministry position to date.

**(2.1) Sulphate-loading a problem** – We agree with the conclusion that the sulphate-loading vector associated with site drainage is a serious mercury methylation vector, though in what

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<sup>15</sup> “*DeBeers Canada response to Wildlands League Comments on PTTW Renewal and Amendment.*” appendix A-3, 2013 Mercury Performance Report, June 2014.



combination with other possible sources has not been adequately established. We are also very concerned that this vector was not anticipated or studied in the Environmental Assessment for this project.

**(2.2) Missing root-cause investigation** – No comprehensive root-cause “investigation” triggered by the monitoring has been shared with us at the time of this consultation. To the extent that the investigation is reported in the 2013 Mercury Performance Report, conclusions are fairly vague, and focused on the one NE Fen. We continue to be concerned that a more appropriate subwatershed scale investigation (given the numerous sources for sulphates identified) has not been completed by now. This concern for comprehensive and clearly supported inquiry is reinforced by the “it is believed” language in this comment: where is the evidence supporting this conclusion? How extensive has this investigation been? Why has it taken so long since the sulphate issues were originally identified? Why is a report-back of this investigation more comprehensively included in the documentation around this consultation?

Attention seems to have also only been focused on the NEF, despite the elevated monitoring results across the creek system – why has it not been wider in scope, given the identification of various site-wide contributions? To what extent the NEF results, or the whole creek system is attributable to the (a) sulphate-loading and site drainage as described, relative to other potential sources such as (b) Muskeg stockpiles, (c) upstream FPK facility drainage, and (d) potential muskeg dewatering contributions? This kind of assessment has not been presented in any definitive manner to date that we are aware of.

In our opinion, circumstances that stimulate these questions are not ones that are conducive to a sound decision-making environment.

**(2.3) Sulphate controls** – It is unclear from this response what drainages to NEF are in fact ceasing, as indicated here, as it goes on to list many key exceptions. So it is not that reassuring when, for example, site stockpiles continue to grow, including the minerock stockpile that occupies what used to be the entire upstream half of the NEF, presumably along with their respective loadings. It is hard to imagine that the methylation conditions in the downstream half of the fen will somehow dramatically improve with these sources of sulphate concurrently increasing in volume and extent over time.

**(2.4) Subject Application is missing a sulphate mitigation/monitoring plan** – In any case, we would expect a more coordinated plan to control and monitor these loadings as an integral part of this subject application at this time, given the slowly unfolding narrative provided in the annual mercury reporting. We are not aware of such provisions in the current application.

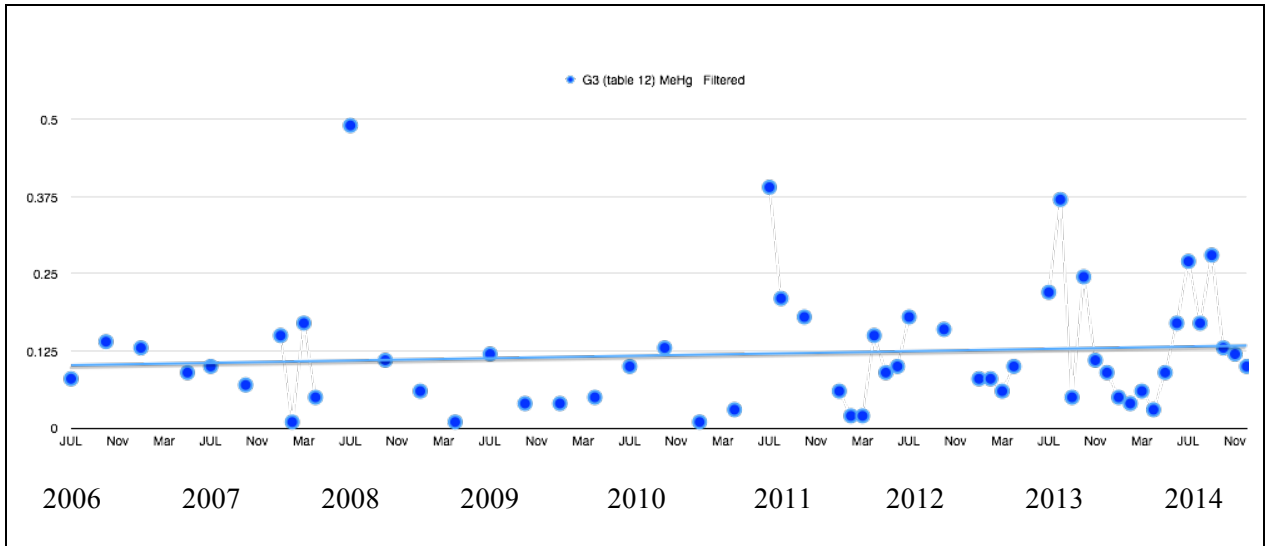
**(2.5) Concerns with downplaying MeHg trends** – Regarding the statement “there are no strong temporal trends to the data, as evidenced by Table 12 of the Mercury Performance Report,” we note several concerns:

1. **Focuses on filtered data only** – the reference table reports only “filtered” MeHg, which is not as biologically relevant as unfiltered MeHg to this particular food web. In this particular context, the bio-accumulation vector necessarily includes the particle fraction, as particles are actually consumed at the lower trophic levels. Ignoring this fraction understates the availability of this mercury species to those aquatic species that occupy these creeks.

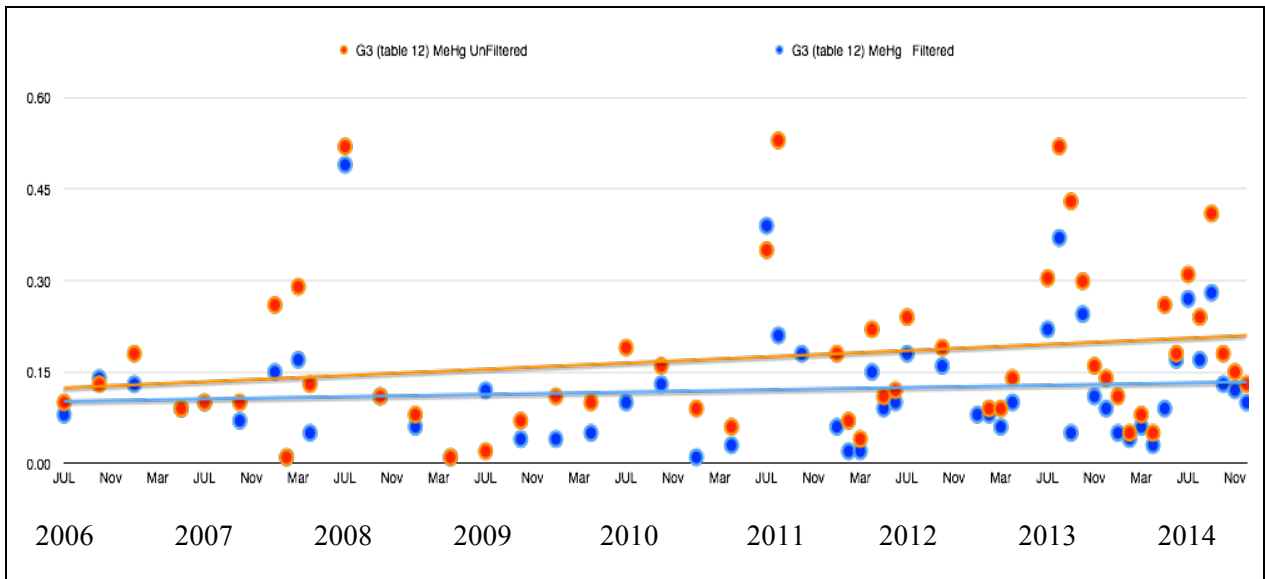
Unfiltered methylmercury samples observed in these data typically have concentrations that are 1-2 times higher than filtered samples, with ratios up to

10x. Reporting only on filtered portions of the sampling therefore poses a significant detriment to the effectiveness of the monitoring program to appropriately inform readers of the relative methylmercury exposures faced. See sample graphical comparison for station G3 below.

2. **Downplays presence of a trend** – by imparting only a low magnitude of change over time, this response downplays the fact that there IS a trend, and that it is in the concerning direction. From our perspective, this is in fact the relevant observation, as this change is actually an increase in the concentration of a bio-accumulating hazardous substance.

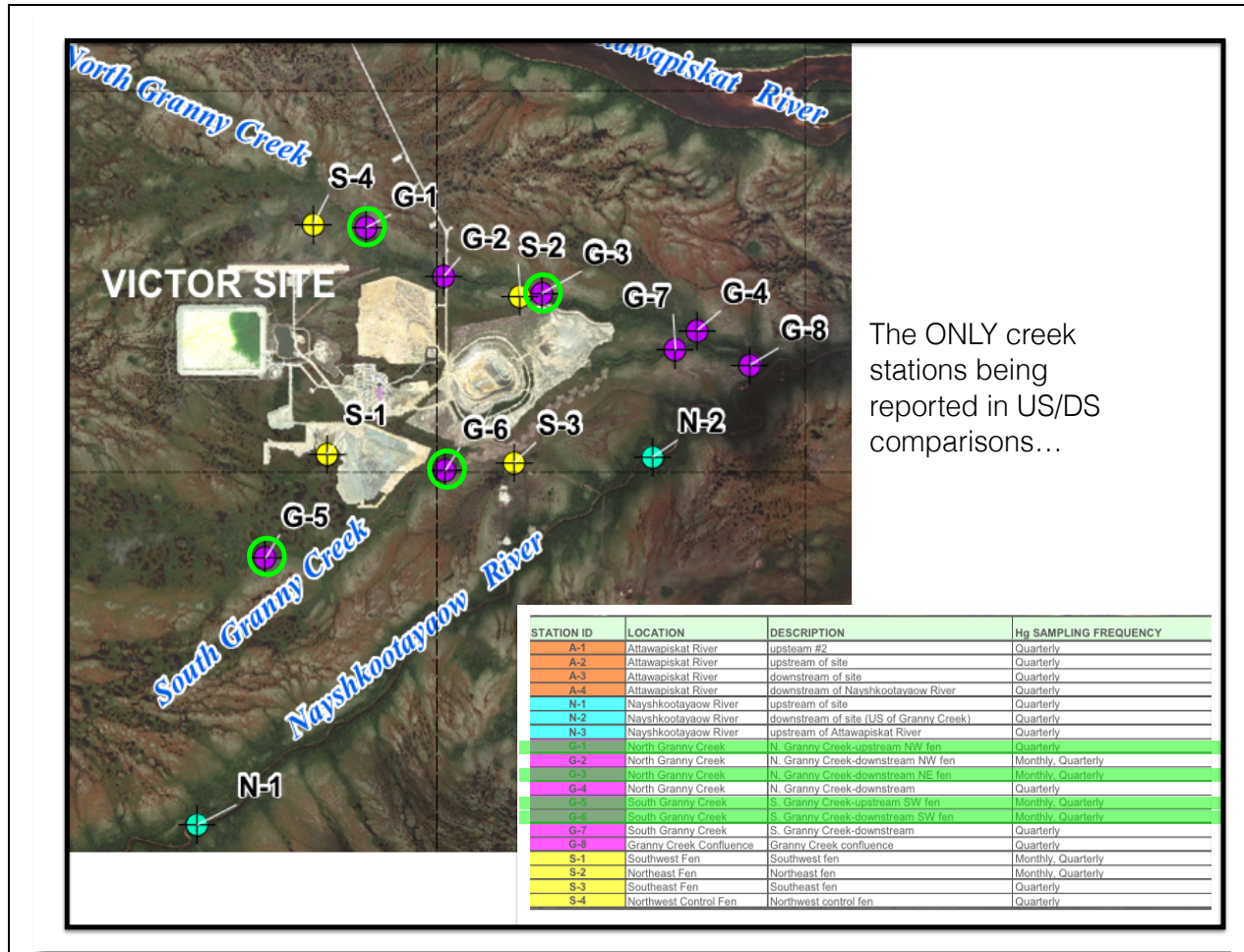


*MeHg (filtered) results from Water quality station G3 – suggestion of increase over time (from Table 12, updated using 2014 Mercury Performance Report – signal essentially the same as 2013).*



*MeHg (**unfiltered**) results from Water quality station G3 over same period (red/orange) added – the suggestion of increase over time at this station is stronger using these more biologically appropriate unfiltered values.*

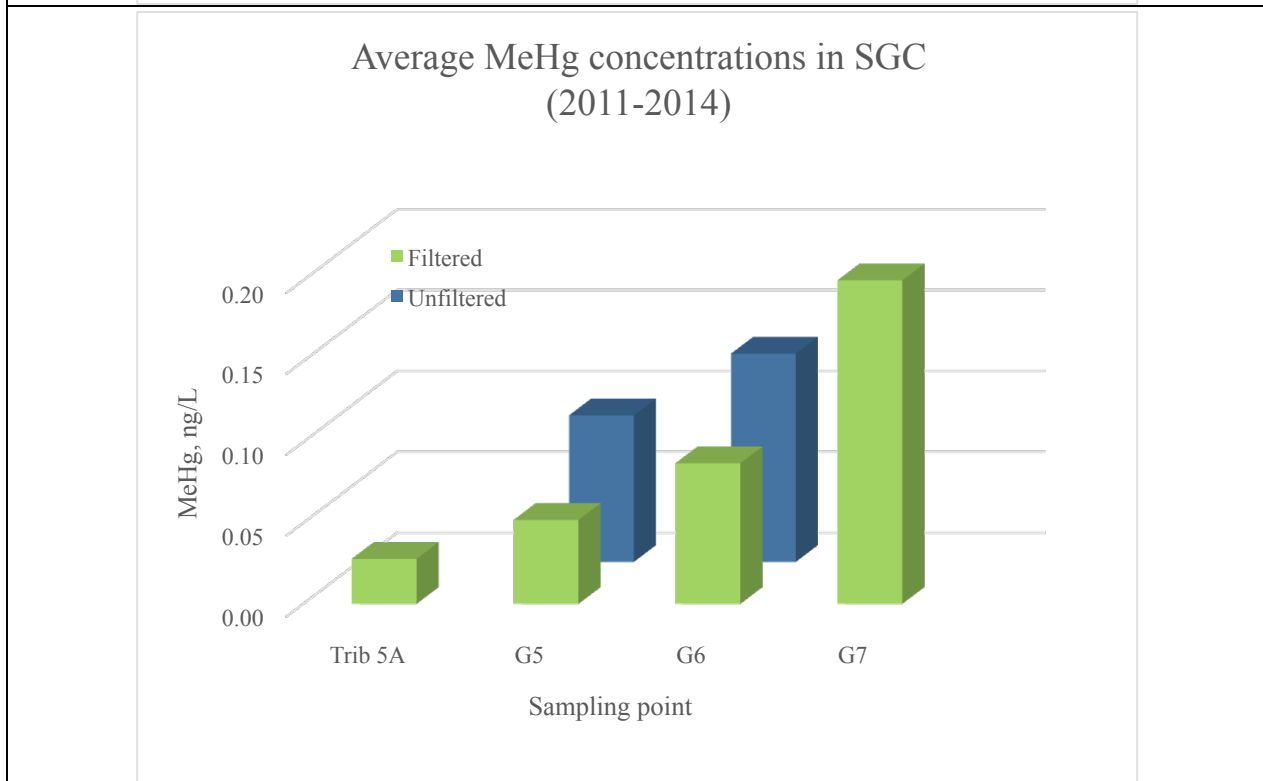
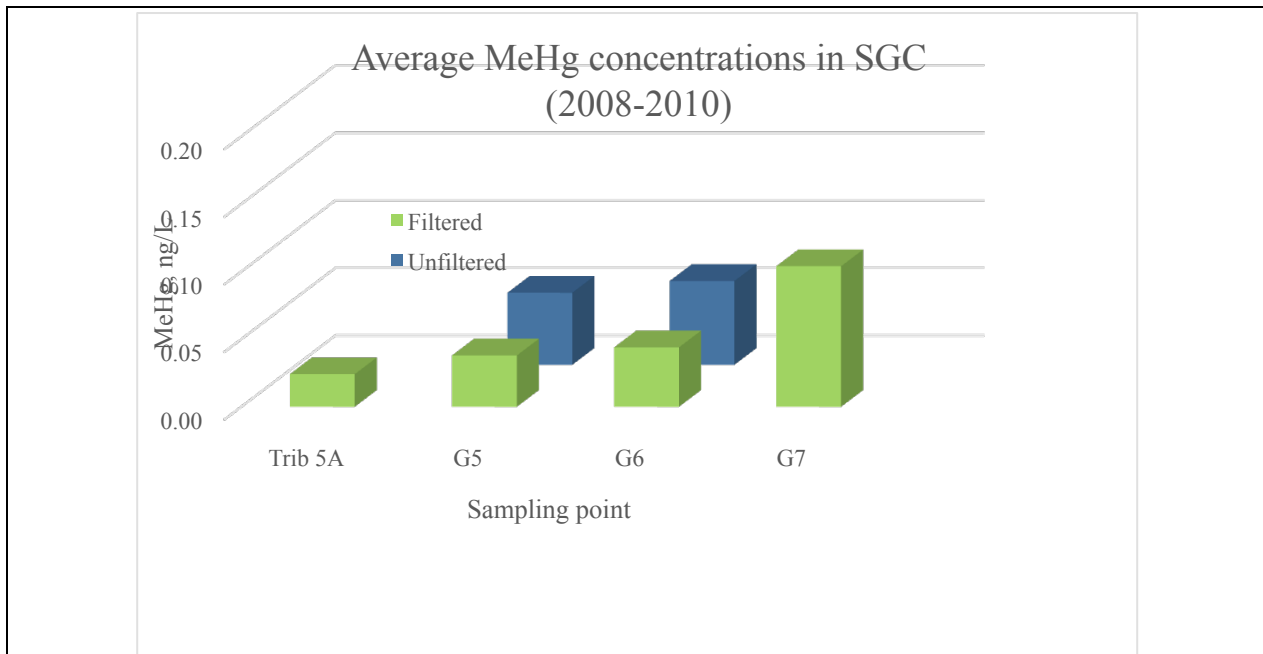
3. **Misrepresents “downstream” in creeks** – we have a substantial concern with the way that the proponent has been framing the limits for upstream and downstream on the Granny Creek system. The table referenced here relies only upon sampling points that are actually located only mid-way down the minesite and not actually downstream of the whole site.



The G4 and G7 water quality monitoring stations are clearly more downstream of the minesite than G3 and G6, for each of NGC and SGC respectively.

If the consultant had more appropriately included the G4 and G7 downstream sampling points from the Report (even with their limited utility as filtered-only data, as reported), it would demonstrate an even more substantial US/DS for both creeks, and with a stronger upward temporal trend. Including an assessment of unfiltered MeHg across the whole site would more appropriately demonstrate the exposure of this particular food web to bioaccumulation risks from these activities.

For example, the South Granny Creek downstream location G7 reported significantly higher ( $p=0.05$ ) filtered methylmercury concentrations than G6 (mid-way along the creek), and this difference may be increasing with time<sup>16</sup> (compare attached graphs for 2008-2010 and 2011-2014).



<sup>16</sup> The significance of the difference between concentrations in G7 and G6 was determined using a Wilcoxon rank-sum approach (a nonparametric statistical test) averaging data collected from 2008-2010 at both locations, and again with data averaged over 2011-2014.

Using a similar approach, downstream location G4 on North Granny Creek had higher filtered methylmercury concentrations than upstream location G1 in both 2008 and 2014. By comparison, the control creek, Tributary 5A, has had consistently low filtered methylmercury concentrations from 2008 onwards, often below the detection limit of 0.02 ng/L and not exceeding the US EPA's 0.05 ng/L threshold to protect against bioaccumulative effects at all during this period.

We would flag again here also the obvious gap of not reporting the G8 combined downstream station at all in the annual reports – a critical oversight to a discussion of this creek system as it is the aggregate downstream site below the confluence of NGC and SGC;

**(4) no further dialogue on responses by proponent** – that this proponent conclusion may be the last word on the subject going into this consultation is concerning, given that the 2013 Report has been available for a year, and the 2014 Report will be in the Ministry's hands by the end of this consultation period. We know that the 2013 data reported only reinforces the overall trends towards increasing US/DS mercury contamination over time in these creeks;

**(5) G8 reporting gap is a missing early warning to Naysh. R** – Simply reporting no adverse impacts to the Nayshkootayouw River, highlights the gap of not providing the key supporting evidence from the Granny Creek downstream G8 monitoring station to-date, where changes at that station over time would clearly be the early-indications of pressures exerted on this receiving river.

**(3) Failure to respond to comments cited** – We note that the proponent did not respond here to our comments that (a) a deeper pit would involve generating higher concentrations of Chloride in the pit effluent, nor (b) re-purposing a water-taking approved for fish habitat to pre-dilute the pit effluent water before it reaches the point of discharge is a dubious practice.

This last comment was directly responsive to the proposal at hand back in 2013, and remains a key concern to us again now in reviewing the same proposal again in 2015.

**(4.1) Potential wellfield discharge impacts not effectively ruled out** – We note that this response from the proponent was based on interpreting the incorrect data – from another location in the works, at the incorrect frequency. It took the WL review of the 2013 Mercury Performance Report to identify this reporting failure, as discussed elsewhere. As we have only just now been provided with the replacement data, contained in the 2014 Mercury Performance Report received 1 week ago, we will defer additional comment on wellfield discharge trends.

**(4.2) No assessment of Sulphate loading risks to Attawapiskat** – Given the sulphate-loading experiences encountered from these mining activities to-date<sup>17</sup>, we are surprised that we have not seen any proactive assessment of these, significant loadings, in GW discharges are being undertaken for downstream methylation risks along the Attawapiskat River.

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<sup>17</sup> documented in narrative form in various places throughout Annual Reports

### **(5.1) Victor depth statement conflicts with other indications**

*“The design depth of the Victor pit has not changed since what was assessed in the comprehensive environmental assessment (CSEA 2005). The mine is simply progressing according to plan.”* Please note our concerns raised elsewhere in these comments concerning indications of a proponent interest in exceeding the original design depth and its implications. That three separate indications from the proponent can be highlighted in the time since we first flagged this concerning rumour back in 2013 serve only to underline our original concern, despite this response.

**(5.2) Change in discharge Hg over time is actually apparent** – The proponent responded to our concerns with: *“Mercury concentrations in the well field discharge water are not expected to change as the open pit continues to deepen, as evidenced by year to year summary data at the bottom of attached Table 3. All values in the table are very low, and there are no temporal trends to the data.”*

This last statement is suspect, as the total unfiltered Mercury in the 2013 wellfield discharge is actually significantly greater than it was in 2008 (even using very conservative statistical inquiry – i.e. removing data points with Hg > 10 ng/L (obvious outliers) and used a probability of error of 0.001). Testing this against the more recent 2014 wellfield discharge data<sup>18</sup> also demonstrates that this data-year too is significantly higher than in 2008.

The implications of these increases might warrant some consideration, as the dewatering of the lower long-resident aquifers would presumably produce very similar levels over time. Interception of surface water is expected, as is at least bioherm-bypass drainage from the surrounding peatlands, or other preferential pathways connecting surface water to these aquifers. We note that relative contributions that are made from each of these compartments would seem to be an outstanding question.

**(6.1) Acknowledgement of EPA guideline** – We appreciate this acknowledgement of the appropriateness of a bio-accumulation threshold such as the US EPA referenced. We also appreciate the Hg calculations provided for the Nayshkootayouw and Attawapiskat Rivers. We note that a broader discussion of the application of such a reference to the interpretation of the reporting relative to the CCME standard so often referenced in comparison to the data in the Annual Reports is missing. The point was that bio-accumulation in this ecosystem is a very real vector for mercury that requires management. Using the appropriate thresholds to compare the monitoring results against is clearly an important part of this.

Highlighting that the two receiving rivers consistently remain below this guideline is a start. We would like to see this referenced more overtly in this reporting, as the more limiting management concern than primary aquatic toxicity.

**(6.2) Missing Creeks comparison** – However, highlighting these rivers alone against the EPA 0.05 ng/L threshold, makes the question of how the more proximate receiving waters of the Granny Creek system are faring a conspicuous gap. The gap can be filled by simply comparing the Granny Creek reported filtered MeHg numbers to the threshold. While the control creek Trib 5a only occasionally meets this reference, all downstream North and South Granny creek stations reported regularly exceed it by a significant amount. Further, as MeHg generally increases from upstream of the minesite to below it for both creeks, exceedances of this bio-accumulation management threshold are more frequent, and greater at downstream stations.

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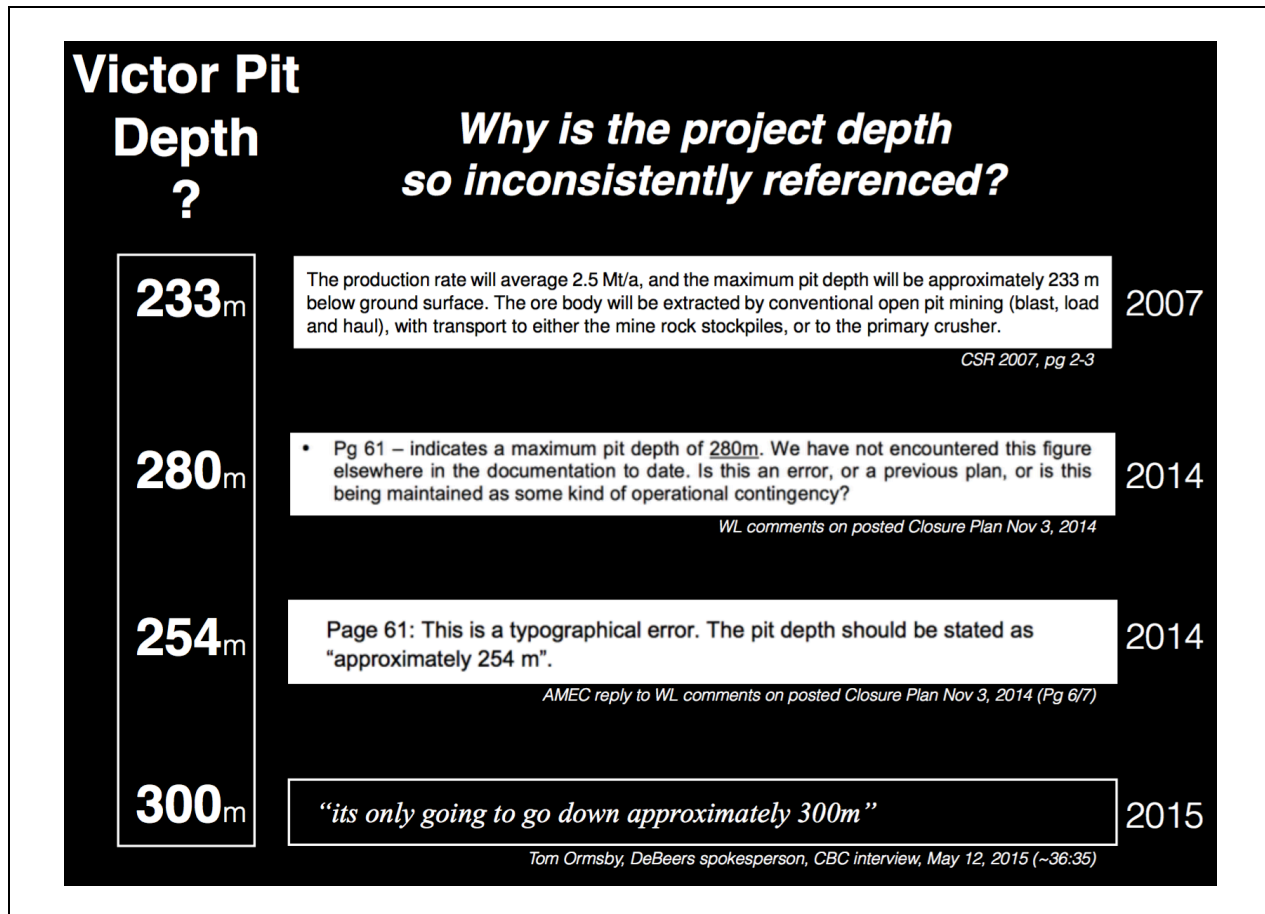
<sup>18</sup> Obtained 1 week before consultation close from the proponent by request by the WL

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[F] THE APPARENT EMERGING VARIABLE OF AN EVOLVING PIT DEPTH

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We are concerned that there exists a substantial discrepancy between what is identified in the original Federal Environmental Assessment Comprehensive Study Report (CSR) for the finished pit depth (233m)<sup>19</sup> and other indications that we have encountered.



**(F-1) An apparently evolving pit design depth presents a key new variable** – We are concerned that there exists a substantial discrepancy between what is identified in the original Federal Environmental Assessment Comprehensive Study Report (CSR) for the finished pit depth (233m)<sup>20</sup> and other indications that we have received:

- (a) May 12, 2015 – the latest depth discussed in the media by DeBeers<sup>21</sup>, where its spokesperson Tom Ormsby indicated an intention to dig the pit approximately 300m,

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<sup>19</sup> Federal Comprehensive Study Report (CSR), page 2-3.

<sup>20</sup> Federal Comprehensive Study Report (CSR), page 2-3.

<sup>21</sup> CBC interview May 12, 2015

- (b) November 3 2014 – an indicated **280m** depth was flagged as different than the CSR by WL in our November comments on the 2014 posted Closure Plan, to which the proponent claimed a “typographical” error, and
- (c) then instead replaced the figure with **254m**<sup>22</sup> in the amended Closure Plan, with no rationale provided.

An additional check-point on this elusive depth came in response to our original concerns on this 2013 PTTW proposal, when the proponent indicated “the design depth has not changed since it was assessed in the comprehensive environmental assessment.”<sup>23</sup>

**(F-2) Federal CSR relied upon as “substantially equivalent”** – the Federal EA has clearly been relied upon by the Ministry, as a “substantial equivalent process” with respect to review and oversight of the risks at hand (see below), any deviations from this plan necessarily call this equivalency into question.

*“The Ministry has used EBR section 30(1) of the EBR to post notice of this Exception as the environmentally significant aspects of the proposal have already been considered in a process of public participation under the EBR or any other Act that was substantially equivalent to the process required under the EBR.”*

*“The instrument is associated with the DeBeers Canada Ltd.'s Victor Diamond Mine (Victor project). A number of environmental assessments have been completed for this project including: A comprehensive study process under the Canadian Environmental Assessment Act (CEAA); ..... Of greatest relevance to this instrument proposal is the comprehensive study (CS) and comprehensive study report (CSR) completed under CEAA.”<sup>24</sup>*

**(F-3) Technical support based on 233m** – Further, the technical support such as the hydrogeological modeling all appears to be premised on the depth identified in the Federal EA (**233m**). The relevance of this original project design is clear to this permit, in the chloride parameter for the discharge water. As chloride is notably higher with depth, this is a critical variable. The depth of pit that the most recent 2012 Chloride levels (updated) modeling appendix is based on appears to be the same as the original project description relied upon by the federal EA, and elsewhere. If this report is based on an earlier assumption of a shallower pit, then the conclusions of this report may not reasonably predict the results of any increased depth planned by the proponent.

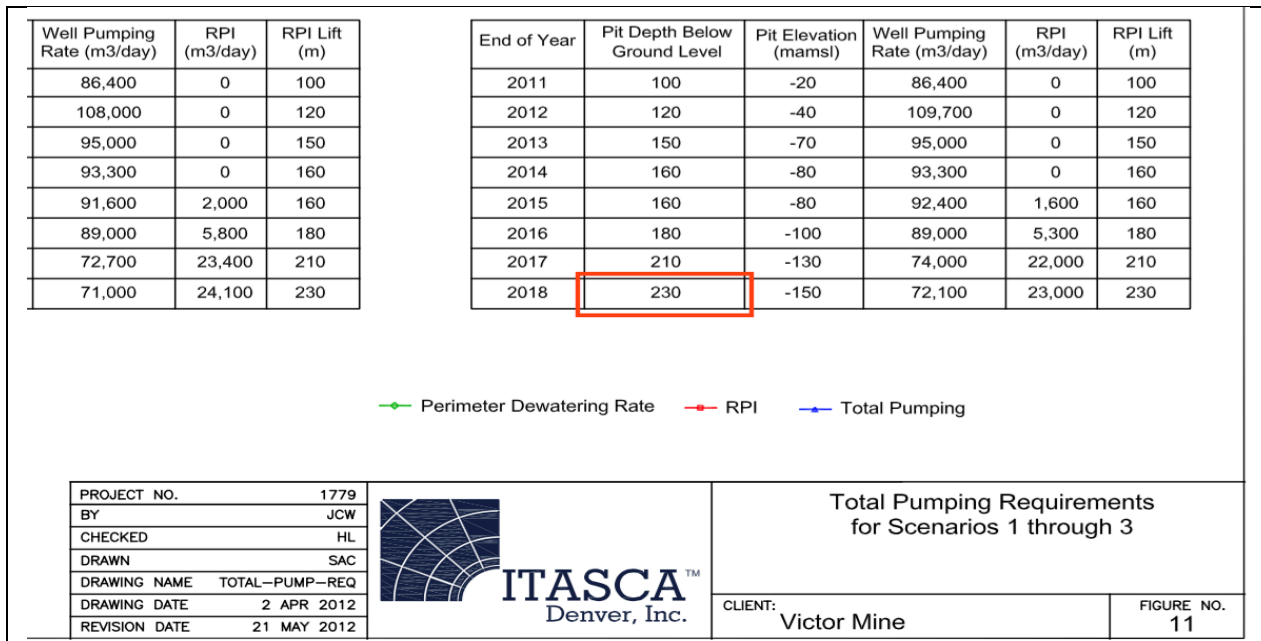
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<sup>22</sup> De Beers Canada Response to Wildlands League Comments on Closure Plan Amendment #3, Nov 28 2014. Pg 6/7.

<sup>23</sup> DeBeers Canada Tabular response to Wildlands League Comments on 2013 PTTW consultation, Appendix to 2013 Annual Mercury Performance Report.

<sup>24</sup> EBR posting 010-5292 – Ministry exception to public consultation, relative to the original permit.





*Example of 230m baseline use: The groundwater modeling efforts appended to the Application appear to be relying upon the depths indicated in the original project description, as described in the original Federal EA.*

**(F-4) Inter-ministry Consistency** – As described above, a **254m** (and previously **280m**) depth is described in another proponent submission to another provincial ministry. In our opinion, it is not appropriate to have disparate project descriptions co-existing across different documents and Ministries.

**(F-5) Clarity / consistency of depth needed for this project** – It is imperative that the proponent be precise and consistent about their intended project depth, in the context of the supporting information that they are providing, and any reliance by the Ministry upon “substantially equivalent” assessment processes. As the latest indications by the proponent are **254m** and **300m**, relative to the **233m** baseline, reliance upon the CSR and other technical support generated on the basis of that baseline is not appropriate.

**(F-6) Clear depth needed as precondition to permit re-issue** – A clear project depth should be established by the Ministry as a pre-condition of re-issuing this subject water-taking, as it is being issued for the anticipated life of the mine, which has been based on a project description established during the Federal Environmental Assessment, and additional technical support in-turn based on that.

**(F-7) Ministry needs to coordinate with sister Ministry on depth discrepancy** – As the proponent has represented their project depth differently in submissions to MOECC and MNDM, this discrepancy needs remedy. For example, this could be resolved by the proponent amending the current Closure Plan to reflect the original 233m depth. The Ministry should encourage this action with its sister Ministry and the proponent.

**(F-8) If the proponent is intent on a deeper pit, other process needed** – then proceeding with the current permitting scheme without a transparent proposal to that end is not appropriate. A new proposal, with appropriate supporting evidence, including modeling, environmental assessment, as well as transparent public consultation are all elements of an appropriately vetted new project direction such as this.

**(G-1) Mid-consultation acquisition of key reporting** – As previously mentioned, we are pleased that the proponent responded to our request last week to provide this key reporting of the mercury monitoring program, though disappointed (a) in the timing of this consultation relative to it, (b) the fact that as a historically interested party we had to request it at all, and (c) that the Ministry failed to respond to our request for this material during this consultation period.

Though we have only been in receipt of this document for less than a week, our quick perusal was sufficient to flag several concerns of note:

**(G-2) Table 36 problematic** – Several problems were noted between the data in Tables 11, 12, and 36 in the 2014 mercury performance monitoring report. Table 36 compares the downstream North Granny Creek (location G3) and South Granny Creek (location G6) filtered methylmercury concentrations with those in Tributary 5A, the negative control sampling location south of the mine beyond the drawdown curves. This data is important because it indicates whether the proponent’s operations may have increased methylmercury concentrations in these creeks beyond normal seasonal variation. These problems include:

**(G-2.1) Downstream labeling inconsistent, misleading and incorrect** – Careful cross-checking was initially required to ascertain which downstream location was in fact being illustrated on Table 36, as the sampling locations were labeled differently on these tables. However, by comparing the table to the G3 and G6 data reported in Table 11 and 12, and also to the various tables reported in all annual reports for G4 and G7, it was determined that the proponent was apparently reporting here the G3 and G6 monitoring stations as “downstream”.

We take exception to this representation, as G3 and G6 are only located part way downstream of the minesite, and there are 3 separate monitoring stations that are actually located farther downstream, below the site (G4, G7, and G8)<sup>25</sup>, all of which have not been adequately reported per the reporting conditions of the dewatering discharge permit (see above for detailed comments).

**(G-2.2) Serious discrepancies between separate reporting of the same monitoring** – stations G3 and G6 are reported in two separate places in the report. While the reported data in Table 36 should be identical to the data presented in the rightmost columns in Tables 11 and 12, over 20 discrepancies were noted. For example, a significant number of data were missing in Table 36 for these monitoring stations, which was available in Tables 11 and 12, including some data recording particularly high MeHg levels (e.g. July 2013 sampling). Additionally, and more concerning, there are differences in the values reported for the same months are also noted (e.g. July 2011 SGC-G6 and October 2011 NGC-G3). Together these discrepancies significantly challenge the credibility of the reporting. They also cast any subsequent calculated averages and other analysis of the consultants into question, such as confounding assessments of whether there are significant trends in methylmercury concentrations in these locations over time.

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<sup>25</sup> see for example Fig 3, 2013 Annual Mercury Performance Report

**(G-3) Continued failure to report monitoring results for G2 and G8** – in checking to see if the proponent has remedied this previously identified failure in this latest annual report, we are disappointed in noting only a continued failure in this regard.

**(G-4) Continued failure to report complete mercury monitoring results for G3 and G7** – in checking to see if the proponent has remedied this previously identified failure to report unfiltered mercury at these stations in this latest annual report, we are disappointed in noting only a continued failure in this regard. Additionally, total mercury (neither filtered and unfiltered) for these stations is reported.

**(G-5) Continued failure to report complete mercury monitoring results for ST 5a** – similarly: (a) only the filtered portion of the sampling continues to be reported for this reference creek, and (b) no results for total mercury (neither filtered and unfiltered) either.

**(G-6) WL requests the rights to reasonable review and provide additional comment** – Because we have only had access to this key annual reporting for this short period, but also have previous experience in reviewing these Reports, we know that a more reasonable review will take additional time, and we further expect that such review will generate additional relevant commentary. The seriousness of the findings from (a) our previous review comments of the 2013 Report (described farther above), and (b) the cursory screening of the 2014 edition (described above), provide clear evidence of the relevance of this additional scrutiny to this process. These reviews are being provided in the public interest, and under the rights for meaningful engagement in environmental decision-making provided to Ontarians under the Environmental Bill of Rights.

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## [H] CONCLUDING / SUMMARY COMMENTS

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Our concerns above describe a circumstance of persistent project scale failures, within the systemic context of inadequate Ministry oversight performance. In our opinion, a series of strong remedial effort at both scales is required to address these liabilities to this subject project and the current permitting system that is supposed to be overseeing it.

**(H-1) Immediate remedial provision of monitoring results needed** – Our interpretation of the required monitoring program and its reporting obligations has always led us to the expectation of a clear and comprehensive representation of the G1-G2-G3-G4 (NGC), G5-G6-G7 (SGC), and G8 (below confluence) stream data for this important creek system, and its designated reference creek ST5a, for both unfiltered and filtered compartments of the sampling. As we have documented in these comments, this has patently not occurred.

Therefore, at this time, and before entertaining this subject proposal further, we advise the Ministry to insist on a full and transparent provision of all monitoring data in spreadsheet form to ensure (a) that this monitoring has in fact occurred, and (b) that this required reporting has been comprehensively met, remedying the significant reporting failures identified to date. Once these remedial actions have been met, then an annual reporting program can be used to consistently and transparently populate it.

**(H-2) Application should be updated before proposal can be considered at this time** – The information and context of the subject application is seriously dated at this time. We recommend that the Ministry require this application be updated before entertaining this subject proposal further.

**(H-3) Additional monitoring intensity needed for Granny Creeks** – The facts above also point to a need for an enhanced monitoring of the receiving waters closest to the mine. These proximate creeks are (a) the most sensitive receivers, (b) a sentinel for potential impacts to the Nayshkootayouw, (c) they are experiencing site loadings that are demonstrably enhancing methylation conditions to levels above bioaccumulation thresholds such as the US EPA limit referenced, and (d) they are seeing levels that are increasing mercury body burdens in local minnows. Together these facts point to more careful scrutiny, and not waiting for effects to be realized in the much more larger-volume receiving rivers.

We suggest that, for these reasons, additional monitoring intensity and resolution would be an appropriate response to the current circumstance, for better informing site activity and mitigation measures going forward. This might appropriately include (a) that all water quality monitoring stations on the Granny Creek system be sampled consistently, (b) at an increased, monthly, frequency between the current April and October sampling points, in addition to the Jan winter sample, (c) for both filtered and unfiltered compartments for each of Hg ttl, and MeHg, and (d) that all of these results are reported annually, in order to better discern specific site activity influences and mitigation measures going forward.

We note that, under the circumstances that have evolved along the Granny Creek system, and the sulphate-loading reported, we would have expected that the Ministry would have been more pro-active in this regard to-date.

**(H-4) Independent monitoring and reporting should be considered** – Having reviewed these annual Mercury Performance Reports, and identified the number of serious issues that we have to-date, we can only conclude that these monitoring activities might be better implemented by a independent party that could help bridge the apparent reporting gap: making the reporting more responsive, comprehensive and clear, and reducing the need for intensive Ministry review. It is these challenges which have contributed to our current opinion that this monitoring program is not contributing to the oversight of this project to the extent originally intended.

Given the significant concerns raised above, expansion-plans being indicated by the proponent, and in order to restore the appropriate level of credibility to the established mercury monitoring program, we recommend that any further extension of this permit, or consideration of this proposal, require that this associated mercury monitoring and reporting be implemented by a independent party selected by the Ministry, and carried out at the proponent's expense.

**(H-5) Monitoring and reporting need to be comprehensively and transparently available to all parties.** – We recommend Ministry action to remove reporting barriers. To mitigate the problem of barriers to informed engagement of Ontarians in environmental decision-making such as this, we respectfully request that, for (a) this subject project specifically and (b) more generally where permits are issued on the basis of conditional monitoring and reporting, that:

- (1) Such monitoring and reporting be intrinsically understood as being compatible with public domain access,
- (2) The Director transitionally use their discretion to release any information provided to the Ministry in fulfillment of the conditions of a permit, to any interested parties upon request, instead of relying on the FOI process for this type of request,
- (3) The Director require all raw monitoring data for such reporting to be provided in future as supplementary information in spreadsheet format, and

- (4) The Ministry expediently review any current practices of requiring a formal Freedom of Information Request before considering any such request, and instead develop protocols to make routine such information transfers, per the previous Privacy Commissioner recommendations, and the current government policy priority of “Open Government.”

**(H-6) Review of capacity for overseeing permits needed.** – We recommend that the Ministry examine the capacity and quality service problems identified here in the context of its ability to provide adequate oversight of (a) this project, and (b) in the likely event of accelerated permitting demands for this specific region, in the context of (c) its other routine priorities. The role of systemic independent monitoring and reporting as a cost-effective option might also be appropriately considered in such a review.

We remain at the disposal of the Ministry and the proponent to further explain or discuss any of these observations or remedies.