ENVIRONMENTAL REVIEW TRIBUNAL

IN THE MATTER OF sections 38 to 48 of the *Environmental Bill of Rights*, S.O. 1993 c. 28, and section 34 of the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40 as amended;

AND IN THE MATTER OF an application by the Citizens Against Melrose Quarry, pursuant to section 38 of the *Environmental Bill of Rights*, S.O. 1993, c. 28, for leave to appeal the decision of the Director, Ministry of the Environment, under section 34 of the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended, in issuing Permit No.7742-9E9TGN, dated June 27, 2014, to C.H. Demill Holdings Inc., 13 Melrose Road, Lot 6, Concession 3, Township of Tyendinaga, County of Hastings

REPLY OF THE APPLICANT CITIZENS AGAINST MELROSE QUARRY

EBR REGISTRY NUMBER: 012-0410 PTTW NUMBER: 7742-9E9TGN MOE REFERENCE NUMBER: 5148-9D7Q78

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REPLY OF THE APPLICANT

PART I - OVERVIEW

- 1. These are the reply submissions of the Applicant Citizens Against Melrose Quarry ("CAMQ") in relation to the materials filed by the Ministry of the Environment ("MOE") Director and C.H. Demill Holdings Inc. ("Demill") in this proceeding.
- 2. For the reasons described below, CAMQ submits that neither the Director nor Demill have provided the Environmental Review Tribunal ("Tribunal") with any cogent evidence or persuasive reasons for refusing to grant leave to appeal the Director's decision to issue Permit to Take Water ("PTTW") No. 7742-9E9TGN to Demill.
- 3. In light of certain admissions in the materials filed by the Director and Demill, and based upon the evidence and arguments contained in CAMQ's application for leave to appeal and in this Reply, it remains the position of the Applicant that with respect to the issuance of the Demill PTTW, it appears that: (1) there is good reason to believe that the Director's decision was unreasonable in that no reasonable person, having regard to the relevant law and to any government policies developed to guide decisions of that kind, could have made the decision; and (2) the Director's decision could result in significant harm to the environment. Accordingly, CAMQ respectfully requests unrestricted leave to appeal the Demill PTTW pursuant to sections 38 to 48 of the *Environmental Bill of Rights* ("EBR").
- 4. The Applicant's specific replies to the Director and Demill are set out below, and the responding report by CAMQ's hydrogeologists is attached hereto and forms part of this Reply. The Applicant notes that the respondents have not challenged CAMQ's standing to seek leave to appeal in this case, and have not contested CAMQ's submission that the PTTW is a prescribed instrument for which leave to appeal may be sought under the EBR. Therefore, CAMQ's submissions below focus on the main issues raised by the respondents in opposition to the leave application.

Reference: Director's Submissions, para. 33; Demill Submissions, para. 52

PART II – REPLY TO DIRECTOR'S SUBMISSIONS

(a) The Director Misstates or Misapplies the EBR Leave Test

5. The Director argues that CAMQ has failed to demonstrate that the Director "behaved unreasonably" in issuing the PTTW. In reply, CAMQ submits that the Director has misstated or misapplied the "reasonableness" branch of the *EBR* leave test. The focus of section 41(a) of the EBR is not the "behavior" of the Director, but the reasonableness of the decision made by the Director in light of the applicable law/policy framework. On the evidence, CAMQ submits that the Director's decision to issue the

PTTW was unreasonable within the meaning of section 41(a), despite the Director's claims that the decision-making process was "thorough."

Reference: Director's Submissions, para. 6

6. In her later submissions, the Director offers a different (and somewhat puzzling) reformulation of the section 41(a) branch by suggesting that a leave applicant must demonstrate there was a complete failure by the Director to *consider* relevant law/policy, and must further demonstrate that the effect of that failure results in a decision that no reasonable person could have made. In reply, CAMQ submits that this reformulation is not consistent with *EBR* jurisprudence (including the *Dawber* case cited by the Director) and, more importantly, does not conform to the actual language used by the Ontario Legislature in crafting the leave test.

Reference: Director's Submissions, para. 39

7. The proper and well-settled interpretation of section 41(a) is that a leave applicant must only demonstrate that <u>it appears</u> there is good reason to believe that the Director's decision was unreasonable in that no reasonable person, having regard to the relevant law and to any government policies developed to guide decisions of that kind, could have made the decision. Tribunal jurisprudence makes it abundantly clear that this branch may be satisfied by demonstrating that it appears the Director wholly failed to consider a relevant law or policy, or that it appears that the Director's decision does not adequately reflect or incorporate a relevant law or policy. CAMQ submits that both of these variations of the "reasonableness" branch have been satisfied in this case, as described below.

Reference: *Dawber v. Ontario* (2007), 28 C.E.L.R. (3d) 281 (ERT), para. 28 [Applicant's Book of Authorities, Tab 12]; *Corporation of the City of Guelph v. Ontario*, 2014 CarswellOnt 5932 (ERT), paras. 24-27 [Applicant's Book of Authorities, Tab 10]

8. With respect to the second branch of the *EBR* leave test, the Director declares that "harm to the environment will not result from the issuance of this PTTW." This position appears to be largely predicated on the Director's insistence that past water takings at the Long's Quarry have produced "no documented adverse impacts."

Reference: Director's Submissions, para. 9

9. In reply, CAMQ submits that the Director's attempted recasting of the "environmental harm" branch similarly misstates or misapplies the requirements of section 41(b), which focuses upon the <u>potential</u> of the impugned decision to result in significant environmental harm. Accordingly, proof of past or current environmental harm is not required before leave to appeal can be granted under the *EBR*. CAMQ also notes that the Director's statement about the lack of impacts has been couched in careful (if not curious) language. In particular, the Director does not categorically state that there have been <u>no</u> adverse impacts; instead, she simply states that there have been no <u>documented</u> adverse impacts.

10. The Director takes issue with Applicant's inclusion of certain excerpts from the annual and special reports prepared by the independent Environmental Commissioner of Ontario ("ECO"), particularly in relation to MOE's PTTW program. No similar objections to the ECO excerpts have been made by Demill. In reply, CAMQ submits that the ECO excerpts provide important context and valuable insight into systemic problems and implementation difficulties in the PTTW program, many of which have manifested themselves in this very case (as described more fully in CAMQ's leave application). On this point, CAMQ notes that in the leading *Dawber* case, the Tribunal saw fit to cite and/or quote from ECO excerpts which were relevant to the issues raised in that leave-to-appeal proceeding.

Reference: Director's Submissions, paras. 8, 55-56; *Dawber v. Ontario* (2007), 28 C.E.L.R. (3d) 281 (ERT), paras. 41-42 [Applicant's Book of Authorities, Tab 12]

11. Accordingly, there is nothing inadmissible or improper about tendering ECO excerpts as part of the leave application in the instant case. While the Director may disagree with the ECO's findings and recommendations regarding PTTWs in general, it is ultimately up to the Tribunal to determine what weight should be attached to the ECO excerpts filed by the Applicant. At the same time, CAMQ wishes to clarify that for the purposes of satisfying the EBR leave test, CAMQ pleads and relies upon the site-specific evidence pertaining to Long's Quarry which is contained in the three-volume Applicant's Record and in this Reply.

(b) Director's Reliance upon Inadequate Monitoring Program

12. The Director correctly notes that the 2012 PTTW required Demill to prepare and submit a program for groundwater and surface water monitoring, and that "formal" monitoring was commenced by Demill in June 2012. According to the MOE's hydrogeologist, the monitoring results obtained to date suggest that groundwater levels in the shallow overburden aquifer are "generally stable", but some "anomalously high" groundwater levels were detected in some monitoring wells. The MOE hydrogeologist opines that these readings "may" be related to vertical fractures/faults in the bedrock.

Reference: Director's Submissions, paras. 17-18

- 13. In reply, CAMQ notes that the MOE provided no review/comment opportunities to CAMQ, local landowners or other stakeholders before the MOE decided to approve Demill's monitoring program. This is unfortunate since it deprived CAMQ and other interested persons of a meaningful opportunity to flag certain shortcomings in, and to identify some much-needed improvements to, the monitoring program to ensure that it was sufficiently comprehensive to generate the key information required in relation to the Long's Quarry and its potential environmental impacts.
- 14. The unexplained failure of the MOE to solicit public input before approving the monitoring program in 2012 meant that CAMQ has been forced to raise monitoring concerns as part of the comment process on the 2014 PTTW. However, since CAMQ's

concerns about monitoring were not addressed in the Director's PTTW decision adequately or at all, CAMQ must now raise them through the leave application under the *EBR*. In summary, as noted by CAMQ's hydrogeological consultants, the current monitoring program is plagued by a number of serious flaws, including (but not limited to) the following matters:

The Monitoring Program does not address how the following data gaps will be resolved:

adaptive changes to the program based on updated yearly data, limited data beneath the quarry floor,
Effects on domestic well users of potential dewatering of wells, within the area of predicted drawdown, which are completed in low yield aquifer(s), impacts to aquifers south and east of Blessington Creek, and, positive or negative impacts to Blessington Creek.

Reference: Malroz letter (August 21, 2014), p.4

- 15. Aside from the inadequate monitoring regime, CAMQ objects to the Director's dubious attempt to extrapolate past monitoring results to underpin predictions about the likelihood or significance of future water-related impacts arising from the Long's Quarry. First, it must be recalled that the limited monitoring results to date are only indicative of the operating conditions in effect at the time that the results were obtained (i.e., dewatering and extraction down to 104 masl). This is not the *status quo* going forward, as Demill now intends to significantly deepen the quarry to 99 masl, which is even further below the water table.
- 16. Accordingly, CAMQ submits that the past monitoring results are of limited utility for the purposes of future impact prediction, and there is considerable uncertainty surrounding the Director's claim that dewatering in conjunction with extraction to 99 masl will not cause adverse impacts to other groundwater users or the local environment. Moreover, this uncertainty will not be resolved by allowing Demill to operate under the same inadequate monitoring program pursuant to Condition 4.2 of the 2014 PTTW.

(c) Director's Inadequate Consideration, Incorporation or Reflection of SEV Principles

17. The Director acknowledges that the key environmental principles set out in the MOE's *Statement of Environmental Values* ("SEV") – such as the ecosystem approach, cumulative effects, precautionary principle, and adaptive management – are relevant to her PTTW decision-making. The Director insists that she did, in fact, consider these SEV principles when making her decision to issue the PTTW to Demill. The Director further indicates that <u>how</u> she applied these SEV principles is explained in the *EBR* decision notice posted on the Registry.

Reference: Director's Submissions, para. 43

- 18. In reply, CAMQ submits that the Director's claim that she duly considered these principles cannot be sustained upon a close examination of the record, and therefore should be given no credence by the Tribunal. First, it is noteworthy that the *EBR* decision notice was not posted until approximately three weeks <u>after</u> the decision had been made to issue the PTTW in late June 2014. Prior to the PTTW issuance, it appears that the majority of references on the record to these SEV principles is found in the public submissions from CAMQ and other persons to the MOE, rather than in the MOE documents appended to the affidavits of the Director and the MOE hydrogeologist.
- 19. In these circumstances, CAMQ respectfully submits that the Tribunal should find or infer that it appears the relevant SEV principles were not adequately considered, reflected or incorporated by these MOE officials (or, alternatively, were only given short shrift) during the decision-making process. In particular, it appears that the first (if not only) time that these SEV principles played any prominent role in MOE documentation is in the *ex post facto EBR* decision notice. Given the inexplicable time lag between the PTTW issuance and the *EBR* decision notice (and given the unusual length and prolix nature of this instrument notice), CAMQ can only conclude that the Director anticipated a third-party leave application in this case, and belatedly attempted to provide retroactive justification of the PTTW decision (including SEV consideration) in the *EBR* decision notice.
- 20. Moreover, while the Director maintains that she undertook an ecosystem approach, CAMQ submits that the Director's position is not supported on the record. For example, it is simply not possible to properly implement an ecosystem approach, or to effectively safeguard natural features and ecological functions, when fundamental information is missing, or has not been gathered or analyzed, prior to the PTTW decision.

Reference: Director's Submissions, para. 45

21. Accordingly, while the Director recognizes the need to protect Blessington Creek, the shallow overburden aquifer, and the interests of nearby domestic well owners, CAMQ submits that the existing data sets and overall information base available to the Director prior to the PTTW decision were woefully inadequate for the purposes of implementing the ecosystem approach. Requiring the proponent to gather only some – but not all – of the missing information <u>after</u> the PTTW has already been issued does not correct or cure this critical evidentiary deficiency.

Reference: Director's Submissions, para. 46

22. CAMQ has no doubt that the Director did attempt to "turn her mind" to the effect of quarry dewatering on nearby well owners. However, merely turning one's mind to an issue – but lacking fundamentally important data upon which to make an informed decision – is insufficient for SEV purposes and raises considerable concern about the reasonableness and environmental soundness of the PTTW decision-making in this case.

Reference: Director's Submissions, para. 49

23. The Director further contends that in accordance with the SEV, she "considered" cumulative effects during the PTTW decision-making. However, it appears that this brief consideration resulted in an outright failure by the Director to carry out any cumulative effects analysis in this case. In rationalizing this failure, the Director states that "cumulative effects are not of concern" to the MOE in this case because there are no other existing quarries, and no other "large-scale" groundwater takers, near the Long's Quarry. The Director concedes, however, that there are other residential and farm wells in the area, but she opines that these "are not of a sufficient volume to cause significant cumulative effects."

Reference: Director's Submissions, paras. 59-60

- 24. In reply, CAMQ notes that there is nothing in the SEV that restricts cumulative effects analysis to just situations involving multiple large water users. Moreover, CAMQ submits that cumulative effects analysis is equally important in relation to the combined or additive effects of smaller activities or facilities within the same geographic area or timeframe (i.e., to avoid the "death by 1,000 cuts" scenario).
- 25. CAMQ further notes that the Director has made no effort to quantify the water volumes taken collectively by nearby farms and residences, or the amount required to sustain local water-dependent ecosystems, particularly in the climate change context. CAMQ is also unclear how the Director's stance on cumulative effects can be reconciled with the evidence of the MOE and Demill's consultant that the shallow groundwater is a low yield aquifer, which effectively means that all water-takings large or small take on greater significance in the vicinity of Long's Quarry.

Reference: Malroz letter (August 21, 2014), p.1

- 26. For the foregoing reasons, CAMQ urges the Tribunal to reject the Director's claims about the alleged irrelevance of cumulative effects analysis in this case. CAMQ's further submissions regarding cumulative effects (including those associated with the proposed Melrose Quarry) are set out below in relation to Demill's submissions on this topic.
- 27. The Director argues that she applied the SEV's precautionary approach when deciding to issue the PTTW in this case. Among other things, the Director points to the one year term of the PTTW as "precautionary." In reply, CAMQ submits that there is nothing prudent or precautionary about allowing massive water-takings to occur, even for just one year at this sensitive location, to enable Demill to extract limestone much further below the water table than has occurred in the past. This concern is compounded by the fact that the other items invoked by the Director as indicia of the precautionary approach (and adaptive management) such as the monitoring program, the site geology investigation, and contingency plan remain inadequate and unacceptable for the reasons described by CAMQ's hydrogeologists and outlined throughout this Reply.

Reference: Director's Submissions, paras.73-74, 85; Malroz letter (August 21, 2014), pp. 4-6

28. The Director states that the Applicant's arguments regarding precaution "would require the Director to know absolutely everything", which means that "no approvals could ever be issued." In reply, CAMQ submits that the Director's dire warnings represent a fundamental misstatement of the Applicant's arguments on the precautionary approach, and should be disregarded by the Tribunal. Contrary to the Director's assertions, CAMQ does not take the position that the Director must know everything with 100% scientific certainty (assuming that is even possible) before issuing an approval.

Reference: Director's Submissions, para. 81

29. However, when there are sizeable data gaps, analytical shortcomings and other key information missing from the proponent's documentation, then the Director should insist that these items be satisfactorily addressed, at an appropriate level of detail, before the approval decision is made. Therefore, in the proper exercise of the precautionary principle on the facts of this case, CAMQ submits that the Director should have either refused the PTTW (as had occurred regarding Demill's 2005 PTTW application), or should have deferred her PTTW decision and directed Demill to gather and submit the missing information (i.e. structural geology) that the MOE recognizes is needed in this case for impact assessment purposes.

(d) Director's Reliance upon Inadequate Investigations and Contingency Plans

30. The Director points to her imposition of PTTW conditions requiring a site geology investigation and a contingency plan as further proof that she has taken a precautionary approach in this case.

Reference: Director's Submissions, paras. 74, 79

- 31. In reply, CAMQ submits that the considerable uncertainty about hydrogeological conditions and environmental risks (including pop-up events) at the Long's Quarry will likely remain largely unresolved by the forthcoming site geology investigation, which apparently has been started but not completed by Demill. On this point, CAMQ again notes that the MOE solicited no public input before deciding to approve the work plan for the site geology investigation. Of necessity, CAMQ must now pursue its concerns about this investigation through this leave application.
- 32. After duly considering the affidavit evidence from the Director and Demill regarding the site geology investigation, CAMQ's hydrogeologists have concluded that the investigation will not satisfactorily address concerns about pop-events and related water impacts.

Reference: Malroz letter (August 21, 2014), p.6

33. Accordingly, CAMQ does not share the Director's view that it was sufficiently precautionary to impose PTTW conditions requiring a site geology report in this case. Given its limited scope and other fundamental shortcomings, the site geology investigation is unlikely to resolve the lingering uncertainty about the site's

hydrogeological setting, or the likelihood and significance of impacts to nearby groundwater users or the environment.

- 34. It is entirely conceivable, of course, that a comprehensive geological investigation for this site could be developed between the parties and implemented by Demill to address the key questions that remain in dispute between the parties. To date, however, such inter-party dialogue has not occurred and will likely not occur unless leave is granted and this matter is adjudicated (or settled) in the context of an appeal hearing.
- 35. With respect to the contingency plan relied upon by the Director as proof of her allegedly precautionary approach, CAMQ submits that the contingency plan continues to lack sufficient particulars, appropriate definitions or suitable methodology for ensuring that adverse impacts are promptly investigated and mitigated. As noted by CAMQ's hydrogeologists, the current contingency plan suffers from a number of serious problems.

Reference: Malroz letter (August 21, 2014), pp.4-5

36. Significantly, even the MOE hydrogeologist concedes that "water quantity and quality in the area is a concern", and that a "viable Contingency Plan to replace prior water uses or users will be a challenge" if the MOE's impact predictions are incorrect. In these circumstances, the Director's refusal to impose financial assurance obligations in the PTTW is both alarming and unreasonable.

Reference: Affidavit of Bob Holland, para. 19; Director's Submissions, para. 113(i)

(e) Alleged Lack of Environmental Impacts

37. The Director acknowledges that the quarry area is underlain by a "highly vulnerable aquifer", and that there are "sensitive uses in the area." She further concedes that the local aquifer is "typical" of the area in that it "can be poor in terms of providing good quality water of sufficient quantity." The Director also states that "the concerns of the neighbours in regards to water quantity and quality are valid."

Reference: Director's Submissions, paras. 100, 103; Affidavit of Gillian Dagg-Foster, para.49

38. However, the Director argues that the quarry dewatering undertaken to date has not caused any adverse environmental impacts, and she therefore does not "expect" that the Long's Quarry will cause any "substantive" interference with domestic wells.

Reference: Director's Submissions, paras. 100, 103

39. In reply, CAMQ submits that the Director's unmeritorious "no impacts" defence of the PTTW is misplaced and irrelevant. First, as noted above, it is well-settled law that the "environmental harm" branch of the section 41 leave test does not require the Applicant to present proof of actual or ongoing environmental harm. Instead, the Tribunal just needs to be satisfied that <u>it appears</u> there is <u>potential</u> for significant

environmental harm, which has been amply demonstrated by the substantial information base filed by the Applicant in this case.

Reference: *Dawber v. Ontario* (2007), 28 C.E.L.R. (3d) 281 (ERT), para. 98 [Applicant's Book of Authorities, Tab 12]

- 40. By insisting upon proof of past impacts, the Director has fundamentally misconstrued the nature of the section 41 leave test, and has misunderstood the type of evidence required to satisfy the "environmental harm" branch of the leave test. In short, by fixating on whether historic quarry dewatering has caused any "documented" adverse impacts (instead of determining whether the newly authorized quarry dewatering while deepening the quarry to 99 masl has any potential to cause adverse impacts), CAMQ submits that the Director has asked herself the wrong question for the purposes of section 41(b) of the *EBR*.
- 41. Second, the Director's steadfast insistence that the impugned PTTW terms/conditions are an effective safeguard against environmental harm essentially amounts to an argument that the Director likes her own handiwork. While it is hardly surprising that the Director would take this position, it is neither persuasive nor dispositive of the leave application, and the Tribunal must weigh the Director's self-serving claim against the relevant evidence, the serious shortcomings in the PTTW terms/conditions, and the applicable legislative and policy framework. Accordingly, CAMQ cautions the Tribunal against adopting the Director's assessment that her conditions in the PTTW are "stringent."

Reference: Director's Submissions, paras. 28, 112

42. The Director states – without elaboration or explanation – that the total volume of water that may be taken under the PTTW is "reasonable," even though the maximum volumes are considerably in excess of what has actually been withdrawn by Demill at the Long's Quarry. The Director attempts to rationalize the total volume limit on the basis that it is smaller than what had been allowed under a PTTW issued in the late 1990s. In reply, CAMQ submits that this is not a meaningful or compelling comparison, particularly in the absence of any records indicating how much water was actually taken by Tarmac under the 1997 PTTW.

Reference: Director's Submissions, para. 113(d)

43. Similarly, the Director argues that the maximum volumes under the 2014 PTTW are needed to "accommodate" precipitation events associated with climate change. However, aside from invoking her personal "experience" regarding storm events, the Director has otherwise provided no information or data to quantify or evaluate the frequency, duration or amounts of rainfall that will allegedly fill the sizeable gap between what Demill has traditionally taken and the excessively large amounts of water now lawfully permitted under the PTTW. Accordingly, the Director's musings about climate change impacts (especially over the one-year term of the 2014 PTTW) are not persuasive or substantiated by evidence.

Reference: Director's Submissions, para. 113(c); Affidavit of Gillian Dagg-Foster, para.39

44. The Director further argues that the risk of a pop-up event in the quarry floor is now "less than previously thought." However, the Director fails to identify the specific evidentiary basis for this revisionist view, but she appears to rest this proposition on short-term groundwater level monitoring (which the MOE hydrogeologist concedes contained some "anomalous" results).

Reference: Director's Submissions, para. 102

45. In reply, CAMQ notes that the risk of a pop-up below 104 masl was invoked by the MOE as the primary reason for denying Demill's PTTW application in 2005. Since that time, it appears that the risk of another pop-up has not been adequately studied by Demill or the MOE, and the structural geology investigation that might potentially shed some light on this issue has not been completed at the present time. Thus, CAMQ submits that Tribunal should give little or no weight to the Director's claims about the likelihood of pop-up events as the quarry gets deepened further below the water table to 99 masl. CAMQ's further submissions regarding pop-ups are set out below in relation to Demill's submissions on the same topic.

Reference: Applicant's Record, Tab 10: Letter to Demill from Clyde Hammond (July 27, 2005); Applicant's Record, Tab 11: Memorandum to D. Joyner from Titia Praamsma (April 21, 2011)

46. The Director suggests that the fact that the classification of Demill's PTTW application as Category 3 is either irrelevant or inconsequential. In reply, CAMQ submits that this classification (and the fact that the PTTW is a prescribed instrument under the *EBR*) underscores the fact that large-scale water takings (such as those proposed by Demill) are environmentally significant and should therefore be carefully scrutinized before approval decisions are made. In any event, CAMQ does not base its case on the mere classification of the PTTW; instead, CAMQ relies upon the site-specific expert and factual evidence tendered by CAMQ in relation to the Long's Quarry for the purposes of satisfying the *EBR* leave test.

Reference: Director's Submissions, paras. 104-07

(f) Uncertainty and Inadequate Monitoring

47. The Director's above-noted claim that dewatering activities at the Long's Quarry have not caused any adverse environmental impacts to date is undermined by the Director's own admission that uncertainty over site conditions (and attendant environmental risks) has necessitated the need for another short-term PTTW and its allegedly "extensive" monitoring requirements. This apparent inconsistency has not been adequately explained by the Director.

Reference: Director's Submissions, paras. 74, 85

48. In the *CCCTE* case, the Tribunal noted that since the Director had acknowledged some uncertainty about environmental risks arising from a closed landfill, it was difficult to accept "at face value" the Director's contention that the impugned approval conditions ensured that the facility was not causing environmental harm:

If uncertainty exists as the Director has described, then the Director is not in a position to state that the ECA ensures that the landfill does not cause environmental harm...

In the face of scientific uncertainty, the application of the precautionary approach requires the Director to consider the landfill to be as hazardous as it could possibly be, and to place the onus of establishing the absence of environmental harm upon the source of the risk. Instead, the ECA provides for further study...postponing preventative and remedial action until such time as monitoring establishes concrete proof of harm. Such an approach is not consistent with the precautionary principle...

Reference: Concerned Citizens Committee of Tyendinaga & Environs v. Director (2012), 67 C.E.L.R. (3d) 94 (ERT), paras. 41, 45 [Applicant's Book of Authorities, Tab 20]; see also Dawber v. Ontario (2007), 28 C.E.L.R. (3d) 281 (ERT), para 58; and Davidson v. Ontario (2006), 24 C.E.L.R. (3d) 165 (ERT), para.44 [Applicant's Book of Authorities, Tab 19]

- 49. In the instant case, the Director has likewise asserted that the water-taking will not cause adverse environmental effects due to the allegedly protective conditions in the PTTW. At the same time, however, the Director appears to concede the existence of continuing uncertainty regarding site conditions and potential water taking impacts, and she acknowledges the need for further information-gathering and analysis about these and other matters. CAMQ submits that the Director cannot have it both ways: either the water-taking is environmentally benign at this sensitive location, OR further site-specific work by the proponent and/or MOE is necessary in order to reach an informed and credible conclusion about adverse environmental impacts arising from industrial-scale water takings at the Long's Quarry.
- 50. It appears on the record that the MOE has implicitly adopted the latter view by requiring a site geology investigation and imposing other (albeit limited) data collection requirements in the PTTW. However, unless and until adequate hydrogeological studies and field work are completed, CAMQ submits that it was premature and unreasonable for the Director to issue a short- or long-term PTTW in this case. Moreover, the Director's oft-repeated claims about the lack of adverse dewatering impacts to date miss the mark and are ultimately unpersuasive, particularly in light of the various shortcomings in the approved monitoring program, as described by CAMQ's consultants.

(g) No Proof that the Director Considered Common Law Rights

51. In her submissions, the Director contends that she considered all relevant laws/policies, which she enumerates as follows: O.Reg. 387/04, the 2005 PTTW Manual and the MOE's *Statement of Environmental Values* under the *EBR*. CAMQ presumes

that the Director also considered the purposes and provisions of the *OWRA*, although this statute does not appear to be specifically mentioned in the Director's list of relevant laws/policies. More alarmingly, the Director's list fails to mention the common law at all.

Reference: Director's Submissions, paras. 6, 26; Affidavit of Gillian Dagg-Foster, paras. 63-64

52. Despite this omission, the Director argues that she took the common law rights of site neighbours into account during her decision-making on the PTTW. As proof of this claim, the Director points to her meeting with CAMQ representatives.

Reference: Director's Submissions, paras. 88-89

- 53. In reply, CAMQ notes that the Director's affidavit does not mention common law rights, and does not clearly explain how such rights were considered prior to her decision to issue the impugned PTTW. Similarly, there are no exhibits attached to the Director's affidavit which would allow the Tribunal to understand whether, when or how the Director considered the common law (i.e., riparian rights in relation to Blessington Creek) when issuing the PTTW.
- 54. CAMQ further submits that the Director's claim that there will be no impacts on common law rights is derivative of the Director's unpersuasive overall argument that quarry dewatering will not cause off-site impacts to nearby well owners. In addition, CAMQ draws no comfort from the Director's fatuous suggestion that it is always open to aggrieved landowners to commence civil actions if off-site damage or wellwater interference occurs despite the MOE's predictions of no adverse impact.

Reference: Director's Submissions, paras. 88, 91

- 55. Similarly, the affidavit of the MOE hydrogeologist does not depose that he considered the common law as part of the decision-making process. As a result, there is not a scintilla of evidence demonstrating that the Director duly considered common law rights prior to issuing the PTTW in this case, although the common law is undoubtedly part of the applicable law/policy framework regarding PTTWs.
- 56. More generally, CAMQ submits that the Tribunal should be loath to accept vague or overbroad claims by a Director that she considered "all relevant laws and policies," particularly in the absence of any specific documents which verify such claims. If a Director elects to make such a grandiose claim when responding to *EBR* leave applications, then, before the claim can be accepted or given weight by the Tribunal, it is incumbent upon the Director to provide a clear, concise and traceable paper trail that substantiates the Director's position. To hold otherwise or to wholly accept such claims at face value defeats the governmental accountability purpose of the *EBR*.

Reference: Director's Submissions, paras. 93-94

(h) Enforcement and Compliance Issues

57. The Director disputes CAMQ's concern that the MOE does not have sufficient capacity to enforce the PTTW conditions. In support of her position, the Director refers to an unannounced inspection that occurred in October 2013, which, according to the Director, revealed no "significant" compliance issues. On the record, this appears to be the only unannounced inspection to be undertaken recently by the MOE at the Long's Quarry. More importantly, the actual inspection report confirms that Demill failed to comply with PTTW restrictions on the amount of hourly pumping allowed at Long's Quarry, which Demill explained away as an "oversight" and the MOE characterized as merely "administrative."

Reference: Director's Submissions, paras. 114-15; Affidavit of Gillian Dagg-Foster, Exhibit I: MOE Inspection Report, section 2.4

58. At the same time, the Director does not contest CAMQ's evidence that Demill has operated without a PTTW in the past, or that Demill submitted its monitoring report beyond the prescribed deadline, or that Demill failed to comply with PTTW constraints on when higher volumes of water could be pumped out of the Long's Quarry. Similarly, neither the Director nor Demill appear to contest CAMQ's evidence that there has also been non-compliance under the *Aggregate Resources Act*.

Reference: Director's Submissions, para. 117

- 59. In reply, CAMQ submits that nothing turns on the MOE's decision not to lay charges in relation to the above-noted non-compliance under the *OWRA*. CAMQ agrees with the Director that the decision to prosecute or not prosecute is a discretionary matter, and that the Tribunal has no jurisdiction to order the MOE to commence a prosecution, or to devote greater resources to the Investigation and Enforcement Branch. However, that kind of relief is not what CAMQ has requested in this proceeding; instead, CAMQ is simply requesting leave to appeal the 2014 PTTW.
- 60. As described in CAMQ's leave application, Tribunal jurisprudence makes it abundantly clear that a proponent's compliance track record is highly relevant to the decision of whether an approval should be granted and, if so, what terms and conditions may be appropriate. In this case, it appears that Demill's multiple instances of non-compliance played little or no role in the Director's decision-making process.
- 61. For example, upon a careful review of the Director's affidavit, it appears that the Director gave no consideration to conditions which require more frequent reporting or timely filings by Demill to confirm ongoing compliance with the PTTW, or which require Demill to retain a qualified person to perform an on-site supervisory role (i.e. on a weekly or monthly basis) to ensure that there are no more erroneous "misinterpretations" or "oversights" of PTTW requirements.

<u>PART III – REPLY TO DEMILL'S SUBMISSIONS</u>

(a) Sources of Water being Pumped out of Long's Quarry

62. Demill has confirmed that the "Long's Quarry has operated under the water table since the mid-1990's (i.e., the shallow aquifer)." Demill further confirms that during the next phase of quarry operations, "extraction will occur deeper into the bedrock."

Reference Demill Submissions, paras. 6, 26

63. However, Demill goes on to assert that virtually all of the water being pumped out of the quarry is precipitation rather than groundwater inflow. Furthermore, Demill denies that the pumped-out water has any hydraulic connection to the shallow aquifer that supplies nearby domestic wells. Demill also claims that its "conservative" worst-case analytical modelling indicates that the shallow groundwater supply "should not be affected."

Reference: Demill Submission, paras. 11-13, 26-27

64. In reply, CAMQ notes that neither Demill nor its consultant have provided any evidence that properly characterizes or quantifies the amount of groundwater inflow into the Long's Quarry. At best, Demill's claim that there is "minimal" groundwater seepage is anecdotal in nature (or wishful thinking), and insufficient evidence has been presented by Demill in this proceeding to clarify or substantiate this claim. On this point, CAMQ notes that Director acknowledges that there is "additional seepage from the shallow overburden aquifer" into the Long's Quarry, but the MOE has not otherwise attempted to quantify this groundwater inflow.

Reference: Demill Submission, para. 13; Director's Submissions, para. 13

65. Demill further argues that under its projected "worst case" scenario, there may be a drawdown effect of 2.5 metres within nearby domestic wells, which, according to Demill, would be "manageable." In reply, CAMQ notes that the predicted 2.5 metre drawdown zone represents the drawdown that could be expected at the outer boundary of the affected area. Accordingly, it is reasonable to anticipate that wells closer to the quarry (and the epicenter of dewatering) may experience drawdown effects greater than 2.5 metres. Indeed, as noted by CAMQ's hydrogeologists, Demill's own materials confirm that the predicted drawdown could be as high as 7 metres in wells closest to the quarry.

Reference: Demill Submission, para. 29; Malroz letter (August 21, 2014), p.2

66. In addition, CAMQ submits that Demill's contention that the pumped-out water is simply accumulated precipitation is not consistent with the evidence that the local conservation authority found it necessary to issue a low water declaration in 2012. Given the existence of local drought conditions, CAMQ questions why Demill nevertheless found it necessary to take and discharge water from the quarry during the summer months in 2012. In CAMQ's view, the answer is obvious: despite little or no rainfall, shallow

groundwater was continuing to flow into the sump hole in quantities sufficient to require pumping by Demill.

Reference: Affidavit of Susan Munro (April 30, 2014), para. 57 and Exhibit BB: Email between CAMQ and Quinte Conservation (April 17, 2014)

67. Demill has offered the simplistic analogy that the Long's Quarry is like a bathtub filling up with water. In the circumstances, CAMQ submits that the better view is that the quarry is analogous to a 24 hectare, 20 metre deep bathtub that is being concurrently filled with water from the top, sides and bottom. It should be further noted that the sources of water flowing into this "bathtub" are also shared with, or relied upon, by area residents and water-dependent ecosystems at the local level. Moreover, since limestone excavation is now proceeding downward to 99 masl, the "bathtub" is getting progressively deeper below the water table.

Reference: Demill Submissions, paras. 10, 79

(b) Water Conservation Considerations

68. Demill argues that it does not "use" or "waste" the water taken at the Long's Quarry, but then acknowledges some water is used for dust suppression purposes. Demill goes on to argue that it is "keenly aware" of the need to "minimize" water-takings, but this awareness seems to be solely premised on economic considerations (i.e. the costs of pumping equipment, labour, etc.), rather than the interests of other groundwater users, or the existence of other water-dependent ecosystems, in the vicinity of the Long's Quarry.

Reference: Demill Submissions, paras. 9-10, 20

69. The Director appears to offer the same explanation that the quarry is not a water "consumer", and that Demill has an economic incentive to minimize water pumping due to fuel and electricity costs. The Director goes on to argue that this is why water conservation measures or plans are "generally" not necessary for quarries, and she states that the amount taken by Demill for on-site dust control was deemed to be "reasonable."

Reference: Director's Submissions, paras. 69-70

- 70. In reply, CAMQ draws little comfort from Demill's implied promise that it will only pump out enough water to maintain safe working conditions in the Long's Quarry. Regardless of whether Demill has (or will act upon) such *bona fide* intentions, the legal reality is that the PTTW lawfully permits Demill to withdraw huge volumes of water up to the daily maximum volumes (which are considerably in excess of what Demill has traditionally taken at the quarry).
- 71. In the circumstances, it is unreasonable to expect domestic well owners to "trust" that Demill will continue to only take minimum not maximum amounts of water in order to keep expenses down. In CAMQ's view, further and better (and enforceable) water conservation measures (and smaller volume conditions) should have been

developed and imposed by the Director in the PTTW, particularly given the presence of nearby domestic wells, the highly vulnerable aquifer, and the lack of a deeper contingency aquifer.

72. Demill also argues that it only withdraws and pumps enough water to "maintain a safe working environment" at the Long's Quarry. A similar rationale for the water taking has been offered by the Director. However, Demill provides no other data or information about what water taking volumes are necessary to achieve this purpose, and has not quantified the extent to which quarry dewatering is, in reality, an occupational health and safety issue. If, for example, the water volumes pumped out of the Long's Quarry in 2012 and 2013 were all that were needed to ensure a "safe and efficient" work environment, then the PTTW ought to have been restricted to those approximate volumes, rather than give Demill open-ended approval to pump up to 3.9 million litres/day for 60 days/year, and 1.3 million litres/day for 305 days/year.

Reference: Demill Submissions, paras. 9, 17; Director's Submissions, para. 14

73. In reply to the Director's submissions about dust control, CAMQ submits that the Director has apparently approved a water volume far in excess of what Demill's own documentation suggested would be necessary at the Long's Quarry. In particular, there is evidence that some 30,000 litres/day (for 80 days) would be required for dust control, but the PTTW allows the taking of 164,000 litres/day for 300 days, which is several times larger than the estimated amount needed for dust control at the site. Therefore, if the respondents want a concrete example of how to limit or conserve water at the quarry, then substantially reducing the volumes allowed (or used) for dust control would be a good place to start. CAMQ's hydrogeologists have suggested additional ways to minimize water flow into the quarry.

Reference: Malroz letter (August 21, 2014), p.3

(c) The "Adjusted" Pumping Schedule

74. Demill correctly points out that the 2014 PTTW does not "increase" the amount of water-takings previously permitted under the 2012 PTTW. Instead, the 2014 PTTW allows the same excessively large daily takings that were ostensibly allowed under the questionable 2012 PTTW.

Reference: Demill Submission, para. 16

75. In reply, and for the reasons outlined above, CAMQ submits that it is inherently unreasonable (and could result in significant environmental harm) to allow the proponent to take up to take up to 1.3 million litres/day for 305 days, and up to 3.9 million litres/day for 60 days at this sensitive location. This is particularly true in light of ongoing uncertainty about baseline conditions and the structural geology of the site and surrounding areas, and in light of the inadequate PTTW conditions regarding monitoring, reporting and contingency measures.

76. Demill claims, however, that the pumping schedule was "adjusted" in the new PTTW to give the proponent greater operational "flexibility", and to accord with Demill's "understanding" of the allowable water takings. In reply, CAMQ submits that conferring greater discretion upon the proponent in the guise of maximizing "flexibility" tends to minimize predictability and accountability under the PTTW. CAMQ is also unaware of any other instance where legal requirements in a PTTW have been substantially altered in order to conform to the proponent's erroneous interpretation of such requirements. More importantly, CAMQ reiterates its position that there has been insufficient justification for this abrupt departure from the pumping schedule constraints duly imposed in the 2012 PTTW.

Reference: Demill Submission, paras. 16-17

77. In relation to the apparent discrepancies between the PTTW and the ECA that governs the discharges into Blessington Creek, Demill states – without elaboration - that this will be "corrected" (and other "improvements" will be proposed) in a forthcoming application to amend the ECA. Given the proponent's history of non-compliance (and mistaken interpretations of approval requirements), neither CAMQ nor the Tribunal should draw any comfort from Demill's promise to rectify the situation at some unspecified point in the future. For the purposes of this leave application, it is submitted that it was unreasonable for the Director to issue a new PTTW that appears to be at odds with the previously issued ECA.

Reference: Demill Submission, para. 19

(d) The Relevance of "Pop-Ups" in the Quarry Floor

78. Demill argues that stress-induced buckling or heaving of quarry floor strata (commonly referred to as "pop-ups") is attributable to limestone extraction rather than water taking, and is therefore only relevant to licencing under the *Aggregate Resources Act* ("ARA") rather than the PTTW provisions of the *Ontario Water Resources Act* ("OWRA")

Reference: Demill Submissions, paras. 35, 68-69

79. In reply, CAMQ submits that there is no merit to Demill's submissions on this point. First, Demill's position regarding the alleged irrelevance of pop-ups under the *OWRA* is not shared by the Director. To the contrary, the Director specifically relied upon the risk of pop-ups (and potential impacts on nearby groundwater users) as the primary reason for denying Demill's application for a PTTW in 2005:

I am concerned that the potential for a quarry floor pop-event to impact area residential groundwater users has not been adequately assessed. The current PTTW application and supporting documentation does not discuss the potential for such an event to impact area groundwater users. Additional information is required to assess potential adverse impact to residential groundwater users in the vicinity of the quarry that may occur as a result of quarry operations.

Reference: Applicant's Record, Tab 10: Letter to Demill from Clyde Hammond (July 27, 2005); see also Tab 11: Memorandum to D. Joyner from Titia Praamsma (April 21, 2011)

- 80. Second, this 2005 MOE refusal, in turn, effectively prevented Demill from deepening the quarry floor to the *ARA*-approved depth of 99 masl. However, from 2005 until June 2014, the MOE did not require Demill to prepare and submit a structural geology report for the site. At the present time, this report is still incomplete and has not been submitted to the MOE to date, and yet the MOE has issued not one but two PTTWs to Demill in recent years (i.e. the 2012 PTTW and the 2014 PTTW).
- 81. CAMQ submits that the ongoing paucity of detailed information about the structural geology of the site (particularly the risk of further pop-ups) remains as one of the most alarming deficiencies in the decision-making process for the latest PTTW. CAMQ further notes that Demill and the Director have both declined to file the Golder's report and Lissom reports which were prepared in the wake of the 1994 pop-up at the Long's Quarry.
- 82. CAMQ further notes that the much-hyped structural geology investigation to be undertaken by Demill does not include the specific objective of identifying or evaluating the risk of further pop-up events. Despite this significant omission, Demill has nevertheless made the *a priori* declaration that pop-up events would be "exceedingly rare" or "exceedingly remote", and would not cause any actual water-related impacts. Given that the site geology investigation work has not even been completed to date, CAMQ submits that the Tribunal should give no weight to Demill's assurances regarding pop-ups and related water impacts.

Reference: Demill Submissions, paras.68-69, 70(vi); Malroz letter (August 21, 2014), p.6

83. Demill makes the further claim that pop-up events (or their water-related impacts) are unlikely to occur due to "thickly bedded limestone" at the Long's Quarry. It appears to CAMQ that the primary (if not solitary) piece of evidence relied upon by Demill to support this opinion is the single borehole that was drilled into the underlying limestone deposit.

Reference: Demill Submissions, para. 39

84. Given the 24 hectare size of the existing quarry (and the previous pop-up event), CAMQ submits that a single borehole is wholly inadequate for understanding the underlying strata and assessing the risk of another pop-up event. At the very least, a number of additional boreholes (including angled boreholes) at multiple locations will be required in order to accurately interpret the hydrogeological conditions under the Long's Quarry. Unless and until such further work is completed in a satisfactory manner, CAMQ submits that the Tribunal should give no weight to Demill's claims about the likelihood or impacts of pop-up events as the quarry gets deepened to 99 masl.

Reference: Demill Submissions, para. 39; Malroz letter (August 21, 2014), p.6

(e) Alleged Lack of Wellwater Complaints

85. Like the Director, Demill flatly denies that dewatering activities to date have resulted in any actual impacts to wellwater quality or quantity in the vicinity of the Long's Quarry. Demill further contends that CAMQ "must provide evidence of harm" in order to succeed on the leave application. For reasons described above in this Reply, CAMQ submits that the Tribunal should give no weight to such claims, particularly since the section 41 leave test does not require proof of actual or ongoing environmental harm.

Reference: Demill Submissions, paras. 27, 56, 61-62, 65

86. Demill makes the further argument that it has generally received few wellwater complaints from neighbours to date, and that the two complaints received in 2012-2014 were investigated and were found to be unrelated to quarry dewatering, at least according to Demill. Again, CAMQ submits that Demill has conflated "no complaints" with "no impacts", and, more to the point, "no potential" for significant environmental harm within the meaning of the section 41(b) leave test.

Reference: Demill Submissions, paras. 21-24

- 87. Assuming (without deciding) that the lack of wellwater complaints is relevant to the *EBR* leave test, CAMQ further submits that the claimed lack of complaints may be attributable to the fact that the quantity of water actually taken at the Long's Quarry in recent years has been substantially less than the maximum takings now permitted under the PTTW. Put another way, the maximum daily volumes available under the PTTW are more than double the largest takings reported in Demill's recent water-taking records.
- 88. In addition, the new PTTW now effectively allows quarry excavation to occur down to 99 masl (referred to by the Director as the fourth lift at the Long's Quarry). This represents an unprecedented and significant deepening of the quarry floor to further below the water table. Previously, the quarry floor had remained intact (and dewatered) at 104 masl for several years.

Reference: Affidavit of Gillian Dagg-Foster, para. 7

- 89. Therefore, even if Demill's quarry dewatering rates to date (at the 104 masl elevation) have historically triggered few wellwater interference complaints, it does not necessarily follow that doubling the water-taking quantity (or deepening the quarry to 99 masl) will similarly not cause off-site impacts or result in wellwater complaints. To the contrary, given the close proximity of domestic wells, the existence of a highly vulnerable aquifer, and Demill's own predictions about drawdown effects in nearby wells, CAMQ submits that it is precisely this risk of significant harm that warrants the careful scrutiny of the Tribunal at an appeal hearing.
- 90. Demill further argues that if CAMQ's submissions about potential harm and environmental significance are accepted by the Tribunal, then "the Director could never

reasonably issue a permit" for a Category 3 water taking. This claim is manifestly untrue, as a Director could, in theory, issue a PTTW in such cases, but before doing so, the Director must nevertheless ensure, on a firm evidentiary basis, that adverse impacts will not occur, and that sufficiently protective terms/condition are included within the PTTW. CAMQ submits that this has not occurred in this case, which is why leave to appeal is being sought in this proceeding.

Reference: Demill Submissions, para. 64

(f) Relationship to the Proposed Melrose Quarry

91. Demill confirms that although it has applied to establish and operate the Melrose Quarry immediately adjacent to the Long's Quarry, no approvals for this proposed quarry have been issued to date. However, if the Melrose Quarry is approved, Demill promises to apply for a separate PTTW for the Melrose Quarry.

Reference: Demill Submission, paras. 40-42

- 92. In reply, CAMQ submits that while Demill's stated intentions may be laudable, it is by no means clear how two separate PTTWs (one for Long's Quarry and one for Melrose Quarry) can co-exist or operate independently. This is particularly true in light of CAMQ's understanding that water from the Melrose Quarry (if approved) would be conveyed by gravity-drainage to the sump hole in the Long's Quarry, and then be discharged into the Blessington Creek pursuant to the ECA. CAMQ's understanding of the intended water management regime for the two quarries has not been contradicted by Demill in its submissions filed in this proceeding. Therefore, as a practical matter, Demill has failed to adequately explain, or provide sufficient particulars about, its apparent intent to dewater two adjoining quarries at the same time under separate PTTWs (but under the same monitoring program) and using the same discharge point for the pumped-out water.
- 93. Demill claims that CAMQ's leave application is an "indirect attack" on the proposal to establish the Melrose Quarry beside the Long's Quarry. In reply, CAMQ submits that Demill's claim is completely devoid of merit, and disregards the considerable evidence adduced by CAMQ in relation to the 2014 PTTW, its deficient terms/conditions, and potential impacts upon groundwater and surface water in the vicinity of Long's Quarry.

Reference: Demill Submissions, paras.57, 59

- 94. If, as suggested by Demill, a second PTTW will be applied for the Melrose Quarry (if approved), it is reasonable to anticipate that CAMQ will carefully scrutinize the application, make submissions to the Director and, if necessary, exercise third-party appeal rights under the *EBR*.
- 95. However, in the meantime, CAMQ has a number of serious and legitimate concerns about the 2014 PTTW, and CAMQ intends to vigorously pursue such concerns at an appeal hearing if leave is granted by the Tribunal. For example, if CAMQ's

concerns result in further and better conditions in the PTTW (either through adjudication or settlement), then a useful precedent may be in place to ensure that the future Melrose Quarry PTTW (if approved) will contain sufficient safeguards to protect the environment and the interests of local landowners.

(g) Demill's "Extensive" Monitoring Program and Contingency Plan

96. Demill describes its groundwater and surface water monitoring program as "extensive" and "comprehensive." Demill also claims that "there is a clear and direct link between the monitoring data, the trigger mechanisms and contingency plan." It should be noted that the current monitoring program, on its face, applies to both the Long's Quarry and the proposed Melrose Quarry. Thus, this monitoring linkage between the two quarries has been established by Demill itself, not CAMQ.

Reference: Demill Submissions, paras. 43, 46, 72

- 97. In reply, CAMQ submits that the current monitoring program is inadequate and anything but "extensive", and that the contingency plan is far from "clear." Indeed, Demill concedes that many of the so-called "trigger events" are "somewhat subjective", and CAMQ notes that determining whether a trigger has (or has not) occurred remains in the sole discretion of the proponent on the basis of the highly qualitative criteria set out in the monitoring plan.
- 98. More specifically, CAMQ draws no comfort from ambiguous terms, such as "unusual change", "sudden occurrence", "unexpected or non-seasonal loss of streamflow" or "exceedance of a parameter beyond normal variability," that Demill has put forward as trigger events. In fact, Demill has acknowledged that such terms should be "better defined." Accordingly, CAMQ submits that the current monitoring program and contingency plan cannot be construed as robust or rigorous. If anything, Demill's proposed triggers and methodology appear to be a tailor-made recipe for endless debate between local residents and Demill about whether a suspected water impact is or is not related to dewatering activities at the quarry. Contrary to Demill's suggestion, the issuance (or continued existence) of the 2014 PTTW is not necessary in order to substantially improve the monitoring program and contingency plan.

Reference: Demill Submissions, para. 51

99. CAMQ further notes that Demill has already publicly (and repeatedly) declared on the record that quarry dewatering cannot impact nearby wells. Having staked out this position in this proceeding, it stretches credulity for Demill to indicate that it will nevertheless be open to neighbours' suggestions that groundwater or surface water impacts have occurred as a result of massive water pumping out of the Long's Quarry. Indeed, in the wellwater complaints already received by Demill, the proponent's own investigations have predictably concluded that the impacts were not attributable to quarry dewatering.

100. Similarly, Demill's submissions go on at length to discount or explain away the boron exceedance that Demill itself detected in Blessington Creek due to pumping water out of the Long's Quarry. In light of this track record, it is reasonable to anticipate that residents' future concerns or complaints about groundwater or surface water impacts will not trigger contingency measures by Demill, but will instead trigger outright denials from the proponent that the impacts are significant or that they emanate from activities at the Long's Quarry.

Reference: Demill Submissions, paras. 80-86

101. More importantly, the Tribunal should place little or no weight on the current monitoring program and contingency plan for the purposes of identifying, assessing and mitigating environmental impacts in a timely and effective manner. In particular, CAMQ's hydrogeological consultants have carefully reviewed the Brian King affidavit tendered by Demill, but they continue to identify significant shortcomings in the current monitoring regime.

Reference: Malroz letter (August 21, 2014), p.4

(h) Demill's Explanation for Non-Compliance

102. Demill does not dispute that it has not complied with certain regulatory requirements that apply to the Long's Quarry, including previous PTTWs. However, Demill briefly attempts to discount or explain away such non-compliance on the basis that "misunderstandings of the effect of a valid and operating permit happen."

Reference: Demill Submissions, paras. 71-72

103. In reply, CAMQ notes that mistake of law is not a valid defence, and CAMQ disagrees with Demill's unpersuasive attempt to blame the instances of non-compliance on poorly worded or ill-defined conditions in previous approvals. For example, the 2012 PTTW clearly restricted higher water taking volumes to spring months, yet Demill failed or refused to comply with this straightforward condition. CAMQ submits that Demill's *ex post facto* attempt to attribute its non-compliance to the wording of the PTTW is both unconvincing and objectionable. In addition, Demill's attack on the wording of PTTW conditions does not satisfactorily explain why Demill operated without a PTTW at all, contrary to the *OWRA*. For the purposes of this leave application, nothing turns on Demill's weak protestation that the non-compliance was not prosecuted by the MOE.

(i) Demill's Interpretation of the Ecosystem Approach

104. Despite the serious documentation deficiencies identified by CAMQ, Demill argues that the Director was nevertheless able to apply the ecosystem approach in this case. Demill also contends that CAMQ has failed to identify how the missing information may have affected the Director's decision-making regarding the PTTW.

Reference: Demill Submissions, para. 75

105. In reply, CAMQ relies upon the findings and conclusions of CAMQ's hydrogeological consultants, who maintain that the supporting documentation filed by Demill (and relied upon by the Director) is inadequate, incomplete, and does not support the respondents' conclusion that there is no potential for adverse impacts upon groundwater or surface water in the vicinity of the Long's Quarry.

Reference: Malroz letter (August 21, 2014), pp.6-7

- 106. Until such time that the missing information is duly gathered by Demill and presented to the Director (and other stakeholders), it is difficult (if not impossible) to predict how such information should influence regulatory decision-making (i.e. whether the PTTW should be refused/granted, or whether more protective terms/conditions should be imposed in the PTTW). Accordingly, for the purposes of this leave application, it is not necessary for CAMQ or, more importantly, the Tribunal to engage in speculation about the decision-making implications of critical information that has not been gathered to date.
- 107. In short, CAMQ submits that the ecosystem approach requires reliable and accurate information, at an appropriate level of detail, about a number of key matters, including baseline conditions and the nature/extent of potential environmental impacts. Simply put, this condition precedent for sound environmental decision-making has not yet been satisfied in the instant case, for the various reasons put forward by CAMQ's hydrogeological consultants. For this reason alone, the Director's decision can be fairly characterized as premature, unreasonable and inconsistent with the ecosystem approach.
- 108. The *Greenspace* decision heavily relied upon Demill (and the Director) is distinguishable and of no assistance to the respondents' submissions regarding the ecosystem approach, the precautionary principle, or the types of evidence required to satisfy the *EBR* leave test. First, unlike the partially successful leave applicants in *Greenspace*, CAMQ is not simply raising broad questions or objections about the potential impacts of the approved activity; instead, CAMQ has presented a detailed factual record, retained experts to provide opinion evidence, and pointed to various concessions and admissions in the respondents' own materials to substantiate CAMQ's position regarding the impugned PTTW. For the reasons described in this Reply, CAMQ submits that the respondents have not fully answered or responded to the numerous issues raised by CAMQ in this proceeding.
- 109. Second, CAMQ submits that the respondents are overstretching the *ratio* in *Greenspace* if they are relying on this case for the proposition that *EBR* leave applicants must always prove past or present environmental harm in order to obtain leave to appeal. This is an interpretation of section 41 that is fundamentally at odds with the approach taken by the Tribunal in the leading *Dawber* case and upheld by the Divisional Court, and the respondents' interpretation should therefore not be embraced by the Tribunal in this proceeding. In short, the merits of the intended appeal should not be determined at the leave stage.

Reference: *Dawber v. Ontario* (2007), 28 C.E.L.R. (3d) 281 (ERT), para. 12 [Applicant's Book of Authorities, Tab 12]; affd. (2008), 36 C.E.L.R. (3d) 191 (Ont. Div. Ct.), para. 47 [Applicant's Book of Authorities, Tab 8]

(j) Demill's Approach to Cumulative Effects

110. Like the Director, Demill makes the startling argument that there is no need to undertake cumulative effects analysis in this case. In making this claim, Demill suggests that it is not necessary to consider the potential effects of the proposed Melrose Quarry since it is not yet approved. Demill further suggests that there are no other "significant" users of groundwater in the area.

Reference: Demill Submissions, paras. 87-90

111. In reply, CAMQ submits that the Tribunal should reject Demill's arguments in the strongest possible terms. First, it is unknown what Demill means by "significant" groundwater users, but the evidence tendered by CAMQ (and not seriously challenged by Demill) is that there are numerous residents currently living in the vicinity of the Long's Quarry, all whom are wholly dependent on domestic wells for water supply purposes. Each of these private wells represents an individual and collective draw upon groundwater, particularly from the shallow groundwater, which Demill itself has characterized as a low yield aquifer.

Reference: Applicant's Record, Tab 2 - Affidavit of Susan Munro (April 30, 2014), paras. 4-6

112. CAMQ's uncontradicted evidence also establishes that there are 20 family farms in the vicinity of the Long's Quarry, including five dairy farms which draw large volumes of well water to sustain herd health and facilitate milk production. Again, these agricultural users of the local groundwater resource represent additional draws upon the low yield aquifer, both on an individual and collective basis.

Reference: Applicant's Record, Tab 2 - Affidavit of Susan Munro (April 30, 2014), para. 12

- 113. Accordingly, it is unclear why Demill's approach to cumulative effects appears to exclude the interests of local residents and farmers, and their existing/future uses of the shallow aquifer. In CAMQ's view, the combined or additive effect of the massive water takings now allowed under the PTTW should have been carefully quantified and evaluated in the context of other known draws (small and large) upon the same groundwater resource in order to determine whether there are any potential adverse cumulative effects (in which case, an appropriate outcome would be to either deny the PTTW or impose smaller volume limits). However, an appropriate cumulative effects analysis has not been completed by Demill or the Director to date.
- 114. CAMQ further submits that there is no compelling reason to exclude or overlook the potential cumulative impacts of the proposed Melrose Quarry. While it is true that the Melrose Quarry has not been approved to date, provincial and municipal decisions on Demill's applications are pending and, more importantly, the new quarry (if approved) will undoubtedly be taking large water amounts of water from the same groundwater

resource for various industrial purposes. On this point, CAMQ submits there is nothing in the applicable law/policy framework (i.e., O.Reg.387/04 or the 2005 PTTW Manual) that restricts cumulative effects analysis to just approved activities or existing facilities, or that excludes future activities that may occur in the same geographic area and over the same general timeframe as the activity under consideration.

115. To the contrary, it has been long understood among environmental practitioners that cumulative effects analysis should be undertaken in relation to past and existing activities as well as future activities that are "reasonably foreseeable". In CAMQ's view, the planning and approvals processes for the Melrose Quarry are sufficiently advanced that it is reasonably foreseeable that a new quarry (and large-scale dewatering) might be established beside the existing Long's Quarry.

Reference: Applicant's Record, Tab 32 – CEA Agency, Cumulative Effects Assessment Practitioners Guide (1999)

116. Accordingly, CAMQ submits that the cumulative effects of the proposed Melrose Quarry should have been specifically modelled and considered during the decision-making process for the 2014 PTTW, despite uncertainty on precisely when the Melrose Quarry might be approved. The Director's failure to consider cumulative effects of the Melrose Quarry can only be characterized as unreasonable in the circumstances of this case.

(k) Demill's Approach to the Precautionary Principle and Adaptive Management

117. Demill argues that the precautionary principle has been duly considered and applied in the context of the PTTW. Suffice it to say that CAMQ joins issue with Demill on this point, and submits that the Tribunal should give no weight to Demill's claim that it has discharged the onus of establishing the absence of environmental risk. In light of the above-noted gaps in Demill's supporting documentation, the incomplete nature of the ongoing site geology investigation, the failure to conduct a proper cumulative effects analysis, the inadequate PTTW terms/conditions, and various other evidentiary shortcomings, CAMQ submits that Demill has <u>not</u> demonstrated the absence of environmental risk to domestic well owners or the local environment.

Reference: Demill Submissions, paras. 97-100, 103

118. Demill further argues that upon the expiry of the PTTW in 2014, the Director will have in hand more monitoring data and the results of the site geology investigation. In reply, CAMQ submits that Demill's argument assumes that there will be full and timely compliance with the PTTW conditions that require the submission of such information. In light of the proponent's track record, this is an assumption that CAMQ is not prepared to make, and cautions the Tribunal against accepting the proponent's compliance promises at face value.

Reference: Demill Submissions, para. 107.

- 119. More importantly, it must be noted that the 2012 PTTW also imposed data collection and reporting requirements. However, upon the expiry of that PTTW, the Director still did not have a sufficient understanding of local hydrogeological conditions or the nature/extent of potential impacts upon nearby well owners or the environment. In light of this ongoing uncertainty, the Director has again decided to issue another short-term PTTW to Demill in the hope that the outstanding data gaps and residual uncertainty may be satisfactorily addressed this time by the proponent.
- 120. In CAMQ's view, this dilatory approach by the Director has effectively given Demill up to three years to gather and analyze the much-needed information for the MOE's decision-making process. However, in the current absence of such data, it remains business as usual for the proponent, who is now lawfully entitled to withdraw well over 600 million litres of water over the next year at the Long's Quarry.
- 121. Moreover, in light of the narrow scope (and other above-noted problems) associated with the current monitoring program and the site geology investigation, it appears highly unlikely that another year's worth of field work will generate an adequate evidentiary basis for the Director to make reasonable and informed decisions regarding water takings at the Long's Quarry. Accordingly, CAMQ submits that the Director's issuance of another short-term PTTW to Demill, in the apparent hope of finally obtaining long overdue information, is not laudable or precautionary; instead, it is misguided and unreasonable in the circumstances of this case, and could result in significant environmental harm.

(1) Conflicting Expert Opinions

122. Demill attempts to characterize CAMQ's numerous concerns as a mere "disagreement amongst hydrogeologists as to whether sufficient study has been completed." Given CAMQ's long-standing concerns about unacceptable environmental impacts which may be caused by massive water-takings at the Long's Quarry, the Applicant submits that Demill has either misunderstood or misdescribed the nature and seriousness of the present dispute. In short, the matters raised in this leave application are not, as suggested by Demill, merely trivial disputes on inconsequential matters between the parties' experts. To the contrary, the leave application raises fundamental questions of law and fact which go to the heart of the *EBR*: environmental protection, public participation, and governmental accountability.

Reference: Demill Submissions, para.109(c)

- 123. Moreover, even if this dewatering controversy simply reflects conflicting opinion evidence from the parties' experts, this unresolved technical debate would not bar the granting of leave to appeal in this case. If anything, CAMQ submits that the continuing disagreement among the parties' experts militates in favour of granting not refusing leave to appeal in this case.
- 124. In *Dawber*, for example, the Tribunal noted that the parties' expert evidence was "diametrically opposed." Nevertheless, the Tribunal granted unrestricted leave to appeal

after finding that the section 41 leave test was satisfied despite disagreement among the experts, and despite uncertainty over the environmental effects which may result from the Directors' decisions in that case. This precautionary approach was subsequently upheld by the Divisional Court.

Reference: *Dawber v. Ontario* (2007), 28 C.E.L.R. (3d) 281 (ERT), paras.90-95, 98 [Applicant's Book of Authorities, Tab 12]

125. The Applicant urges the Tribunal to adopt a similar approach in this case, and to grant leave to appeal despite (or, alternatively, because of) the wide divergence of expert opinions filed by the parties. By any objective standard, CAMQ's significant concerns about the Director's PTTW decision are well-founded and properly supported by relevant and probative evidence. The Director's weak argument that CAMQ's hydrogeologists have only conducted a technical peer review to date (as opposed to a full-blown environmental impact assessment, complete with on- and off-site drilling and testing) should be given no weight by the Tribunal.

Reference: Director's Submissions, para. 98

126. Thus, the Applicant submits that it is in the public interest for the Tribunal to grant leave to appeal in order to convene a public hearing to take a closer examination of the PTTW issuance, its meagre terms/conditions, and its potential environmental impacts, and to facilitate the exercise of the Tribunal's broad powers to impose appropriate remedies in this case.

(m) Demill's Alternative Relief Requested

127. Not surprisingly, Demill has requested that the Tribunal refuse to grant leave to appeal to CAMQ. However, in the alternative, Demill has made the astounding suggestion that if leave is granted, then the scope of the appeal should be confined to the "adequacy and sufficiency" of the existing conditions imposed within the PTTW. Demill further suggests that the evidence on appeal should be "limited" to the "material available to the Ministry of the Environment during its review of the application for the PTTW." Demill also argues that the automatic stay of the PTTW should be lifted pending the hearing of the appeal.

Reference: Demill Submissions, para.110

128. In reply, CAMQ submits that at this early stage of the proceeding, it would be premature and highly inappropriate to limit the scope of the appeal, or to restrict the types of evidence to be adduced during the appeal, as suggested by Demill. For example, Demill's request overlooks or ignores the jurisdictional fact that if leave to appeal is granted, then the appeal will take the form of a *de novo* hearing before the Tribunal, as set out in subsection 100(10) of the *OWRA*.

Reference: OWRA, subsection 100(10) [Applicant's Book of Authorities, Tab 1, p.8]

- 129. On its face, there is nothing in subsection 100(10) that restricts the grounds of appeal that may be considered by the Tribunal, or that constrains the exercise of the Tribunal's broad remedial powers, or that compels the Tribunal to restrict itself to only those materials which pre-date the Director's issuance of the PTTW in this case. If unrestricted leave is granted in this case, then the scope of the appeal may be reviewed and/or determined by the Tribunal panel hearing the appeal.
- 130. Similarly, CAMQ submits that the Tribunal should not accept Demill's suggested lifting of the statutory stay that is automatically imposed by section 42 of the EBR if leave to appeal is granted. Aside from its brief one-sentence request, Demill has provided no evidence or argument in support of this requested relief. In addition, Rules 108 to 110 of the Tribunal's *Rules of Practice* clearly require a motion for the removal of a stay, and these Rules set out detailed requirements for scheduling and arguing such motions.
- 131. Accordingly, if leave to appeal is granted, then it is open to Demill to contact the Tribunal Case Coordinator to convene a teleconference between the Tribunal Member(s) and the parties in order to obtain directions on bringing the requisite motion (supported by proper evidence) on lifting the automatic stay. Until the applicable Rules are complied with by Demill, CAMQ submits that the Tribunal should not seriously entertain the suggested lifting of the automatic stay at this time.
- 132. Moreover, in accordance with the principle of judicial economy, the Tribunal's leave decision in this case should only determine what actually needs to be determined at the leave stage pursuant to section 41 of the *EBR*. Therefore, the Tribunal should refrain from making findings of fact or law which are best left to the appeal hearing (or appropriate motions) on the basis of a full evidentiary record.

PART IV - CONCLUSIONS

- 133. For the foregoing reasons, CAMQ respectfully submits that the materials filed by the Director and Demill do not provide any persuasive reasons, evidence, or arguments that dispel the Applicant's well-founded concerns about issuance of the PTTW, its inadequate terms and conditions, or its potential impacts upon the environment. In most instances, it appears that the Director and Demill have misunderstood or misstated CAMQ's concerns, or have otherwise failed to provide any credible response to such concerns. Accordingly, CAMQ reiterates its position that the terms/conditions in the Demill PTTW appear inadequate to protect the environment (i.e. Blessington Creek) and the interests of nearby domestic well owners.
- 134. The Director and Demill allege that the Applicants' case is "unsubstantiated" or merely amounts to "assertions". As noted above, this claim is manifestly untrue, as CAMQ has adduced considerable documentary, technical, and opinion evidence outlining the numerous problems with the issuance of the PTTW, the substantive inadequacy of the terms/conditions contained within the permit, and the potential for the water takings to result in significant environmental harm.

- 135. Moreover, the Director and Demill both fail to recognize that their own case in support of the PTTW can be fairly summarized as "unsubstantiated" and "assertions" since it is largely premised on: (a) limited monitoring and inadequate modeling (b) self-serving and unproven predictions about environmental risks and impacts; (c) questionable assumptions about the efficacy of proposed mitigation measures or contingency planning; (d) flawed or incomplete data sets, particularly in relation to baseline conditions; and (e) debatable extrapolations from past practice at the Long's Quarry.
- 136. The bottom line is that the large-scale water takings now permitted at this sensitive location is an "experiment" in every sense of the word, particularly as the quarry is deepened further below the water table. While the Director and Demill have hypothesized that the approved activity will be environmentally benign, these parties have failed to present any credible or empirical evidence that proves this hypothesis.
- 137. In contrast, the detailed expert and factual evidence presented to date by CAMQ in this proceeding amply demonstrates that there are a number of serious red flags regarding the issuance of the PTTW, its deficient terms/conditions, and its potential environmental impacts in the vicinity of the Long's Quarry.
- 138. In essence, the Director has decided, on an incomplete and inadequate evidentiary basis, to issue a problematic PTTW that allows a proponent with known compliance problems to undertake an environmentally significant activity (massive industrial water takings) at a sensitive location fraught with environmental risks and clear potential for causing major off-site impacts. Accordingly, CAMQ submits that the section 41 leave test has been duly satisfied on a *prima facie* basis since it appears that the Director's decision is unreasonable and could result in significant environmental harm.
- 139. CAMQ therefore respectfully requests the Tribunal to issue an Order granting CAMQ unrestricted leave to appeal the Director's PTTW decision in its entirety.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

August 21, 2014

RE_

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