# **Environmental Review Tribunal**

# Tribunal de l'environnement



**ISSUE DATE**: October 27, 2014 **CASE NO(S)**.: 14-053

# Citizens Against Melrose Quarry v. Director, Ministry of the Environment

In the matter of an application for leave to appeal by the Citizens of Melrose Quarry, pursuant to section 38 of the *Environmental Bill of Rights, 1993*, S.O. 1993, c. 28, as amended, with respect to a 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, to issue Permit to Take Water No. 7742-9E9TGN, dated June 27, 2014 to C.H. Demill Holdings Inc. for the water taking from Long's Quarry Sump located at Lot 6, Concession 3, Geographic Township of Tyendinaga, Tyendinaga, County of Hastings, Ontario.

Heard: In writing

#### **APPEARANCES:**

<u>Parties</u>	Counsel
Citizens Against Melrose Quarry	Richard D. Lindgren and Joseph F. Castrilli
Director, Ministry of the Environment	Andrea Huckins and Sarah Kromkamp
C.H. Demill Holdings Inc.	Tony Fleming

#### DECISION DELIVERED BY HEATHER McLEOD-KILMURRAY

#### **REASONS**

# **Background**

- [1] Under s. 34 of the *Ontario Water Resources Act*, R.S.O. 1990, c. O. 40 ("*OWRA*"), a permit is required to take more than 50,000 litres of water on any day. On November 6, 2013, the proponent C.H. Demill Holdings Inc. ("Demill") applied for renewal of a Category 3 Permit to Take Water No. 6270-8PJLN9, which was issued February 3, 2012 and which expired January 31, 2014 (the "2012 PTTW"). On June 27, 2014, the Director, Ministry of the Environment ("MOE" or the "Director") issued new Permit to Take Water No. 7742-9E9TGN (the "2014 PTTW") to Demill in relation to Long's Quarry, subject to several conditions.
- [2] Although Demill requested a 10-year permit renewal, the Director issued a permit for only one year, which expires June 30, 2015. This new permit states that it is a renewal of the 2012 PTTW. Notice of the Director's Decision to issue the new permit was placed on the *Environmental Bill of Rights* ("*EBR*") Registry on July 16, 2014, two weeks after the 2014 PTTW was issued.
- [3] Citizens Against Melrose Quarry ("CAMQ" or the "Applicant") served and filed the application for leave to appeal this Director's Decision on July 11, 2014, within the 15-day timeframe under s. 40 of the *EBR*. The Applicant CAMQ is a not-for-profit group incorporated in 2013 and consisting mainly of local residents, farmers and others worried about new or expanded aggregate operations at or beside Long's Quarry. CAMQ submitted comments on the proposed PTTW during the public comment period, based in part on a peer review by its hydrogeological consultants John Pyke and Steven Rose of Malroz Engineering Incorporated ("Malroz"), and CAMQ and Malroz met with MOE staff on March 31, 2014, to discuss these concerns and the draft short-term PTTW that the Ministry was proposing to issue to Demill.

[4] In addition to the submissions of CAMQ filed July 11, 2014, the Director filed submissions August 18, 2014, the Permit Holder also filed submissions August 18, 2014, and the Applicant filed submissions in reply on August 21, 2014.

# **History of Long's Quarry**

- [5] The following section sets out the history of Long's Quarry up to and including current events such as plans to create Melrose Quarry adjacent to Long's Quarry. This history is taken from the submissions of the parties.
- [6] Limestone has been excavated since the 1930's from Long's Quarry but the Quarry was not licenced by the province until 1975. The Quarry is licenced under the *Aggregate Resources Act*, R.S.O 1990, c. A. 8 ("*ARA*") which permits extraction to 99 metres above sea level ("masl"). Long's Quarry covers approximately 24 hectares and is approximately 20 metres deep. Surrounding land is mainly agricultural and residential. Approximately 20 family farms are within three kilometres of Long's Quarry, and five of these are dairy operations which rely on large volumes of well water for herd health and milk production. Blessington Creek also runs through some of these farm properties downstream of Long's Quarry.
- [7] Since the mid-1990's, extraction at Long's Quarry has occurred below the water table (i.e. below the "shallow aquifer"). The Quarry floor reached approximately 104 masl during the 2012 PTTW. Up to 500,000 tonnes/year of limestone is permitted to be extracted from Long's Quarry. The remaining limestone in Long's Quarry is expected to be excavated in the next year or two. The Director, Gillian Dagg-Foster, states in her affidavit that "[m]ining in the fourth lift" of the Quarry, which extends to a depth of 99 masl, "has begun". CAMQ states that the monitoring to date may not accurately predict future potential impacts from the water takings since it was obtained while dewatering and excavation were only down to 104 masl.
- [8] There are both shallow overburden aquifers and bedrock aquifers in the area of the Quarry. Since the Quarry is below the current water table elevation, there is shallow

groundwater inflow into the Quarry from the shallow overburden aquifer, and also surface runoff and direct precipitation. The bedrock aquifers are below the final Quarry excavation floor. The vast majority of the water to be removed from the Quarry comes from precipitation, but also includes some groundwater seepage into the Quarry.

- [9] Water that accumulates in the Quarry is directed by a collection sump and then is pumped out of the sump to a settling pond at the southwest corner of the site. The water is pumped towards a small wetland/ditch which discharges into the downstream Blessington Creek via rip-rap apron/mat. This sewage works is approved under Environmental Compliance Approval ("ECA") No. 4008-93RJMM, dated September 5, 2013, under the *OWRA*. According to Director Dagg-Foster, under the ECA, the "[m]aximum discharge rate to Blessington Creek is not to exceed 2,740 litres per minute" while the maximum discharge hours are a maximum of eight hours under normal Quarry conditions, and 24 hours under spring thaw and melt water conditions. The ECA also requires monitoring and reporting on the quality of the effluent discharged. Blessington Creek contains fish, receives some inflow of groundwater, and has been identified as a potentially sensitive surface water feature. Demill states that the Creek has been very affected by neighbouring land uses, particularly agriculture, and that drainage of these agricultural lands is an issue.
- [10] There was a "pop-up" event at Long's Quarry in 1994. A "pop-up" is a "stress-induced buckling or heaving of rock strata" in a quarry floor. Pop-ups cannot result from water-takings but only from limestone extraction, regulated by the excavation license under the *ARA*. However such pop-ups may permit groundwater to seep into the Quarry. The Director's Instrument Decision Notice states that the 1994 pop-up "allowed for some deeper mineralized aquifer to enter the quarry for a short period." Two reports about this pop-up were written: the Lissom Inc. Report of 1995 and the Golder Study of 2004.
- [11] Long's Quarry has changed ownership several times over the years, and there have been several PTTWs issued to these various owners in that time. For example, the previous owners, Warren Paving & Materials Group Limited ("Warren") held a 10-

year PTTW from 2004 to 2014, which the MOE specifically advised was not transferable. The Warren PTTW (No. 7777-5ZLPX3) allowed water taking from a pond solely for dust control purposes. PTTW No. 89-P-4081 was issued to Tarmac Canada Inc. on June 24, 1997, for dewatering purposes. It expired on March 4, 2004. Demill applied for its own PTTW in 2005 for dewatering, but the Ministry refused the permit in July 2005, based on "well-founded concerns about the possibility of another 'pop-up' (i.e. stress-induced buckling or heaving of rock strata) in the quarry floor, and consequential impacts upon local groundwater users".

- [12] Despite the lack of a permit to take water, Demill continued to dewater the Quarry pursuant to the former owner's PTTW. It was also discharging water without authorization under s. 53 of the *OWRA*. When this water-taking was detected several years later by the Ministry of the Environment ("MOE"), Demill was not prosecuted. The Affidavit of the Director states that "[d]uring this time, the Proponent was not in compliance with section 34 of the *OWRA*. During this period, the Belleville District Office [of the MOE] worked with the Proponent using voluntary compliance efforts and advised the Proponent to apply for both a new PTTW and an ECA under section 53 of the *OWRA*." Demill applied for a new PTTW in September 2011, requesting a 10-year permit. The 2012 PTTW was granted in February 2012 for a two-year period only, and authorized water taking for the purposes of dewatering, dust suppression and domestic water supply at the Quarry. CAMQ states that the Notice of Proposal to issue the 2012 PTTW was not posted on the Environmental Registry, as required by law.
- [13] One of the requirements of the 2012 PTTW was "the development and implementation of a groundwater and surface water monitoring program to monitor the effects of the water taking on Blessington Creek." The monitoring plan was submitted to the MOE April 30, 2012 and was accepted by the MOE with minor amendments in May 2012. CAMQ states that the MOE did not consult any stakeholders about the plan before accepting it. The formal monitoring program began in June 2012, although monitoring had begun in 2011. This monitoring was used to inform the application for renewal of the 2012 PTTW.

- [14] Paragraph 18 of the Director's submissions summarizes the results of Demill's groundwater and surface water monitoring program, which was required by the 2012 PTTW:
  - Water levels in the shallow overburden aguifer are generally stable.
  - Water levels in the bedrock aquifers are also generally stable within normal seasonal variations with a few exceptions.
  - The monitoring report revealed some anomalously high groundwater levels in a few bedrock monitoring wells in 2012. Vertical fractures/faults in the bedrock may play a role in the vertical migration of water and may explain these readings.
  - Monitoring data from Blessington Creek indicated little impact of quarry dewatering on the Creek.
- [15] It also revealed exceedances of Provincial Water Quality Objectives ("PWQO") for a number of parameters at monitoring Station 1 on Blessington Creek downstream of the discharge point.

# The 2014 PTTW Application

- [16] MOE hydrogeologist Robert Holland conducted a technical review of the application for the PTTW and of Demill's October 2013 monitoring report and provided advice and technical assistance to the Director.
- [17] The 2014 PTTW permits water taking levels very similar to the maximum amounts permitted under the 2012 PTTW. The new PTTW permits water taking for (i) dewatering of snowmelt, runoff and rainfall (the previous permit only permitted "spring thaw and melt water") (3.9 million litres/day); (ii) dust control (up to 164,400 litres per day for 300 days maximum per year); and (iii) water supply (up to 2,250 litres per day for up to 365 days a year). The condition limiting the 60 days/year of significantly increased water taking (i.e. 3.9 million litres/day) to only spring months was removed from the new PTTW at Demill's request. The 2014 PTTW contains conditions requiring monitoring and reporting, in section 4 and Schedule A, Item 1.

[18] In relation to concerns about potential pop-ups, the 2014 PTTW adds a new condition that requires Demill to conduct an investigation of "the structural geology in and around Long's Quarry." This is designed to reduce uncertainty in relation to the area geology, particularly the Blessington Fault.

- [19] The 2014 PTTW also includes a Contingency Measures Plan, which the Director explains in the Instrument Decision Notice: "in the event of a reported loss of non-seasonal water availability, the Permit Holder is compelled to immediately provide a temporary potable water supply (if needed), hire a qualified professional to conduct an assessment, and if quarry water takings are determined to be responsible for the problem, must continue to provide potable water until the well can be restored and an alternative water supply developed."
- [20] In total, 40 comments on the proposal to approve the 2014 PTTW were received by the MOE. The Director's submissions on this application for leave (at para. 23) state that these comments "related primarily to:
  - (a) The impact of the water taking on water quality and quantity in neighbouring wells;
  - (b) The potential for pop-up events as a result of structural concerns;
  - (c) The potential impact of water taking on flows in Blessington Creek; and
  - (d) The increase in water taking over historic levels.

Concerns were also raised relating to blasting noise, dust, traffic, financial assurance, Demill's compliance history, cumulative impacts, and the proposed Melrose Quarry.

[21] In relation to pop-ups, the Director's Instrument Decision Notice states that "[a]vailable information indicates that other shallow pop-ups have occurred and have generally been limited to a depth of a few metres." The Decision Notice also states that "[t]he consultant for the Permit Holder did not provide a satisfactory explanation of the highly fluctuating groundwater levels" at two of the wells being monitored in the monitoring program "and its impact on the hydrogeologic model for the site." It also states that since 2012, groundwater level monitoring indicates that static water levels

PTTW will not result in interference with other water uses, "the presence of the Blessington Fault raises a potential concern. Therefore, the Director has renewed the Permit for only one year and required the proponent to study this matter to the satisfaction of the Director during this time." The condition in the 2014 PTTW to investigate the structural geology in the area "will include an assessment of whether structural geology (i.e. the nearby Blessington fault) may have played a role in the 2012 anomalous groundwater levels given that pop-ups have occurred on site in the past."

[22] Demill is in the process of applying for an ARA licence to create a new quarry, Melrose Quarry, immediately adjacent to Long's Quarry. As early as 2009, Demill submitted a Study to support an application for this new quarry, but the application itself has not yet been submitted. To date there is no licence from the Ministry of Natural Resources ("MNR") nor has the required re-zoning approval been applied for or granted by Tyendinaga Township. The proposed quarry would cover an area of approximately 20 hectares with a quarry floor of approximately 104 masl. The licence would permit a maximum of 500,000 tonnes/year of limestone to be extracted. As currently planned, there would be no separation distance, fencing or permanent physical barrier between the old and new quarries. Given that Long's Quarry and the proposed Melrose Quarry are adjacent to each other, several of the reports and documents related to the application assess conditions and future plans at both quarries, including the Hydrogeological Studies in relation to the application for the proposed Melrose Quarry (prepared by Demill's experts Oakridge Environmental Ltd.) and the peer-review of the Melrose/Long's Quarry documentation by CAMQ's expert hydrogeologists of Malroz Engineering Incorporated dated July 7, 2014. However, the 2014 PTTW is solely for Long's Quarry.

[23] CAMQ seeks leave to appeal the Director's Decision to grant the 2014 one year PTTW to Demill.

# **Summary of Submissions**

[24] Summarized below are the parties' submissions relating to the general context of this application for leave to appeal. The submissions of each party related to the two branches of the leave to appeal test will be listed under the various grounds raised in the "Discussion, Analysis and Findings" section below.

# Applicant CAMQ's Submissions

[25] CAMQ is concerned about adverse environmental impacts and nuisance or other impacts of quarrying activities at Long's Quarry and the proposed adjoining Melrose Quarry. More specifically, it is concerned about the potential effects of Quarry water-takings on:

- the dug or drilled wells for drinking water (there is no municipal drinking water system in this area of Tyendinaga Township and there is no viable groundwater source of drinking water other than these wells);
- other uses of water such as livestock watering and other agricultural purposes;
- environmental features and ecological functions, including the health of Blessington Creek and the Bay of Quinte into which the Creek runs.

[26] Volume of permitted water takings: CAMQ notes that "the maximum daily volumes available under the PTTW are more than double the largest takings reported by Demill's recent water-taking records." CAMQ states that there is no evidence that Demill needs or uses this quantity of water. CAMQ is concerned that these levels of water takings may be so unnecessarily high because they could be used to de-water both the Long's Quarry and the Melrose Quarry if it is approved. CAMQ submits that Demill would have the option of applying to consolidate the two *ARA* licences into a single licence with a single site plan, resulting in a total amount of 1 million tonnes/year of limestone extraction. CAMQ is also concerned that there are no conditions in the PTTW requiring water conservation efforts.

- [27] Contingency Plan: CAMQ states that it has not yet been determined whether it is possible for existing wells to be restored if they are adversely affected, or whether suitable alternative wells are available. CAMQ also alleges that the Contingency Plan lacks "sufficient particulars, appropriate definitions or suitable methodology for ensuring that adverse impacts are promptly investigated and mitigated." For example, it relies on wording such as "unusual change", "sudden occurrence", "unexpected or non-seasonal loss of stream flow", "normal variability", which CAMQ fears will lead to "endless debate" about whether a suspected water impact is related to dewatering activities at the Quarry or some other cause. Demill itself has admitted that "such terms could be better defined".
- [28] Compliance History: CAMQ is also concerned about the compliance history at Long's Quarry. For example, CAMQ states that the Quarry operated without a PTTW or discharge licence for several years; under the 2012 PTTW, Demill violated the condition limiting elevated dewatering to spring months; and Demill submitted the monitoring report required under the 2012 PTTW late.
- [29] CAMQ also raises procedural problems with the handling of the PTTW application and Director's Decision. For example:
  - CAMQ states that the MOE failed to post the proposal to issue a PTTW to
    Demill on the EBR Registry, or solicit public or agency comments on it (in
    violation of Part II of the EBR). (CAMQ argues that this renders the 2012
    PTTW void, although it states that it does not ask the Tribunal to decide on
    the validity of the 2012 PTTW.)
  - The EBR Notice of the proposed PTTW renewal was posted on November 8, 2013 with the usual 30-day public comment period, but it contained no links to supporting documentation or the proposed PTTW. During the 30 days, Demill provided the Ministry with an amended technical report. The Ministry granted CAMQ's request for a copy of this report, which CAMQ received November 26, 2013, and also CAMQ's request for an extension of the public comment

- period to January 6, 2014. CAMQ submitted detailed comments to the Ministry on January 6, 2014, and the MOE met with CAMQ and its consultants in March 2014.
- the Notice of the Director's Decision to issue the 2014 PTTW was placed on the EBR Registry approximately two weeks after the 2014 PTTW was issued to Demill.
- the 2012 PTTW expired on January 31, 2014 and the 2014 PTTW was not issued until June 2014, therefore it cannot be seen as a renewal.
- [30] Finally, CAMQ has several substantive concerns with the 2014 PTTW:
  - during discussions and the meeting with the MOE, there appeared to be disagreement and uncertainty among MOE staff as to whether the Melrose Quarry, if approved, would require a separate PTTW from Long's Quarry. The plan appears to be to direct accumulating water at Melrose Quarry to the existing settling pond at Long's Quarry and then pump the combined collected water from both quarries into Blessington Creek from the existing exit point from Long's Quarry. CAMQ is concerned that "there is no legal guarantee that Demill will apply for a second or separate PTTW for the proposed Melrose Quarry". Demill currently states that the maximum amounts permitted under the disputed PTTW will not be used except in a worst case scenario which is not expected to occur. Yet the permitted water taking levels are large enough to deal with water takings for both quarries. CAMQ says its fears have been substantiated by:
    - an email from MNR staff who indicated that "there would be one PTTW
      and ECA for the entire site (i.e. it would include both quarry licences)",
    - a 2013 MOE email suggesting the same conclusion,
    - an MNR email confirming that Demill's rehabilitation plan for both quarries is to establish a single large water body straddling both quarries,

- the April 2012 groundwater/surface water monitoring program submitted to the MOE by Demill, which covers both quarries.
- CAMQ argues that Demill's supporting documentation is inadequate to describe baseline conditions and evaluate environmental effects that may be caused by the permitted water-takings. In particular, what is missing or incomplete is:
  - the characterization of the hydrogeologic setting, interactions between the aquifers, surface water and water supply wells,
  - impacts on groundwater quality are not adequately assessed,
  - the monitoring plans are vague and need more detail on monitoring, timelines, triggers, etc.,
  - pop-up events and geological structural concerns have not been adequately assessed,
  - the cumulative impacts of the water taking on potable water, surface and groundwater resources have not been adequately assessed.

#### Director's Submissions

- [31] The Director relies on the following submissions:
  - The Director was informed and advised by the MOE hydrogeologist Robert Holland who undertook a technical review of the Application and the October 2013 monitoring report required under the 2012 PTTW and provided advice and technical assistance to the Director; he also considered O. Reg. 387/04 ("the Water Taking Regulation"), the PTTW Manual April 2005 and the MOE's Statement of Environmental Values ("SEV");
  - The Director considered all relevant laws and policies, the Water Taking Regulation; the PTTW Manual; and the MOE's SEV;

- The 2014 PTTW is only for a one year period, rather than the requested ten, so that Demill can gather additional information through a mandated groundwater and surface water monitoring program and an investigation of the structural geology of the area. The resulting information will allow the MOE to evaluate the impacts of the Quarry water taking and to determine the potential for adverse impacts, informing whether future PTTWs should be granted and any necessary restrictions or conditions;

- Concerns relating to the proposed Melrose Quarry are irrelevant to the 2014
   PTTW;
- The reports of the Environmental Commissioner of Ontario ("ECO") relate to broader policy concerns with the provincial PTTW regime in general and are therefore largely irrelevant to the reasonableness of the Director's Decision to issue this permit;
- Monitoring indicates that:
  - Water levels in the shallow overburden aquifer are generally stable; water
    levels in the bedrock aquifers are also generally stable within normal
    seasonal variations with a few exceptions; wome anomalously high
    groundwater levels in a few bedrock monitoring wells in 2012 were found,
    and vertical fractures/faults in the bedrock may play a role in the vertical
    migration of water and may explain these reading; and Monitoring data
    indicated little impact of Quarry dewatering on the Creek;
  - Hastings County, Tyendinaga Township, Quinte Conservation and the Mohawks of the Bay of Quinte were provided notice of the proposal to renew the 2012 PTTW and did not submit any comments.
- The conditions in the 2014 PTTW are stringent and "clarify the interpretation of the permit, ensure its performance, protect the quality of the natural environment so as to safeguard the ecosystem and human health and to foster efficient use and conservation of waters".

#### Instrument Holder's Submissions

# [32] The Instrument Holder relies on the following submissions:

- The 2014 PTTW is in relation to the Long's Quarry only; any information or concerns about the proposed Melrose Quarry are irrelevant to assessing the reasonableness or potential environmental impacts of the 2014 PTTW;
- the Long's Quarry has been in operation for decades "with no appreciable impact";
- the 1994 pop-up "did not release water from the deep aquifer and did not cause it to change", nor did it have any "lasting effect on groundwater;" also, pop-up events cannot be caused by water taking, but only by excavation so relate only to the ARA licence and not the PTTW;
- Demill does not use the water and therefore has no "ability to conserve it or sustain it for future use." It has to remove water that enters the Quarry to maintain a safe working environment. Water for dust control is taken from the pond and stays in the Quarry. "As a bathtub that fills with water, the quarry stands as an intermediary for water that would...have flowed into Blessington Creek in any event." (By contrast, CAMQ described the Quarry as " a 24 hectare, 20 metre bathtub that is being concurrently filled with water from the top, sides and bottom" and "is getting progressively deeper below the water table");
- water takings to remove precipitation and snowmelt have no appreciable
  effect on groundwater; the amount of groundwater that enters the Quarry is
  so small that it cannot be measured; the amount of water pumped from the
  Quarry annually is less than the total volume of precipitation, "meaning that
  any contribution from groundwater seepage is minimal";
- exceedances of the PWQO are minor, and the PWQOs were an interim standard set in 1994, and are stricter that the Canadian Council of Ministers of the Environment's ("CCME") Canadian Environmental Quality Guidelines ("CEQG"), which are more current.

- discharges into the Creek are subject to the ECA;
- the 2014 PTTW allows no increase in total water takings, just more seasonal flexibility;
- Demill has received complaints during the period of the 2012 PTTW one relating to quantity in a well, the other to quality; but they have been found not to relate to water taking;
- the next phase of quarrying will be deeper into the bedrock but since "dewatering of the shallow aquifer has already occurred and is now stable...most wells in the theoretical area of influence (which are shallow) would not be affected":
- the analytical modeling for the 2014 PTTW is based on a worst-case scenario which is very unlikely to occur it could only occur "if quarry deepening intersects a significant water bearing zone that could be dewatered (e.g., within the aquitard). Test drilling below the quarry floor has not encountered any such water bearing zones" so this scenario is unlikely, and would only affect any drilled wells that tap a rare water bearing zone if any of them do; these wells would be west of the Quarry and three drilled well owners in that area have consented to participate in the approved Monitoring Program;
- the Monitoring Program covers an area that extends well over 1 km from the Quarry; water levels in all accessible wells within the monitoring area are measured and recorded manually monthly, making it a very extensive and detailed monitoring program;
- creek stream flow is measured by dataloggers (although there is difficulty with this in winter months due to ice)
- the Contingency plan is detailed and clear for both potential ground water and surface water impacts;
- the feasibility of well replacement has been studied as part of the Melrose proposals, and the test well has been shown to have equivalent or better

- water quantity and quality than the only existing well identified as being possibly at risk;
- Demill agrees that the normal range of variability for water quality should be better defined as this is a key objective of the monitoring program in the new PTTW which is why this permit must remain in place for a year to obtain this data.

# **Discussion, Analysis and Findings**

# Issue No. 1: Standing to Seek Leave to Appeal

[33] Neither the Director not the Permit Holder dispute that CAMQ has standing to seek leave to appeal. The Tribunal finds that CAMQ is a person resident in Ontario. CAMQ commented on the proposal to issue the Director's Decision and, as s. 38(3) of the *EBR* provides, "the fact that a person has exercised a right given by this Act to comment on a proposal is evidence that the person has an interest in the decision on the proposal." Therefore the Tribunal finds that CAMQ has demonstrated an interest in the Director's Decision. Finally, the Permit Holder has a right to appeal under s. 100 of the *OWRA*. CAMQ meets all of the requirements under s. 38 of the *EBR* and therefore has standing to seek leave to appeal this decision.

#### Issue No. 2: The Leave Test

# [34] Section 41 of the EBR states:

Leave to appeal a decision shall not be granted unless it appears to the appellate body that,

- (a) there is good reason to believe 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
- (b) the decision in respect of which an appeal is sought could result in significant harm to the environment.
- [35] The Tribunal starts from the recent decision of the Tribunal in *Guelph v. Director, Ministry of the Environment,* [2014] O.E.R.T.D. No. 25 ("*Guelph"*) in which Associate Chair DeMarco summarized the Tribunal caselaw on leave to appeal decisions under s.

41 of the *EBR* in paras. 13 to 18, stating that "[s]ufficient guidance on the test is found in the wording of the *EBR* and the applicable caselaw and there is no need here to reanalyze many of the statutory interpretation issues that were conclusively addressed in *Lafarge Canada Inc. v. Ontario (Environmental Review Tribunal)* (2008), 36 C.E.L.R. (3d) 191 (Ont. Div. Ct.) ("*Lafarge*")". Associate Chair DeMarco also emphasized that the leave to appeal stage is not an assessment of the merits of the appeal, given that all the evidence is not in and expert opinions have not been tested. The Tribunal takes a similar approach in this case.

# Sub-issue No. 2(a): The First Branch of the s. 41 Test – Reasonableness

- [36] The Applicant CAMQ is essentially relying on three different types of allegations of unreasonableness in the Director's Decision:
  - (i) failure to consider or apply applicable laws, policies and principles;
  - (ii) failure to include appropriate standards and conditions in the permit; and
  - (iii) reliance on inadequate evidence such as scientific data and technical studies.

The Applicant also raises procedural deficiencies in considering, posting and issuing the permit.

[37] Much of the dispute between the parties on this leave to appeal application focuses on the adequacy of the evidentiary basis for the Director's Decision. The Divisional Court clarified the burden and standard of proof in leave to appeal determinations in *Lafarge* at para. 45:

At the leave to appeal stage, the standard of proof is an evidentiary one, i.e., leading sufficient evidence to establish a *prima facie* case, or showing that the appeal has "preliminary merit", or that a good arguable case has been made out, or that there is a serious issue to be tried. Although worded differently, all of these phrases point to a uniform standard which is less than the balance of probabilities, but amount to satisfying the Tribunal that there is a real foundation, sufficient to give the parties a right to pursue the matter through the appeal process. This lesser standard is embodied in the words of s. 41, namely "appears" and "there is good reason to believe". It is not the function of the Tribunal

member who is giving leave to determine the actual merits of the appeal; rather, the member must determine whether the stringent threshold in s. 41 has been passed.

[38] In this case, in fact, the Instrument Holder Demill argues that this leave to appeal application "at best amount[s] to a disagreement amongst hydrogeologists as to whether sufficient study has been completed" to justify the granting of the permit. In *Marshall v. Ontario (Ministry of the Environment)* (2008), 38 C.E.L.R. (3d) 291 (Ont. Env. Rev. Trib.) ("*Marshall*") the Tribunal at paras. 31-32 and 96 held that:

The arguments and evidence that may be needed to meet the s. 41 test will vary considerably from case to case. [...]
...in some cases, it may be sufficient for an applicant to simply bring to the surface any apparent errors from the available documents, and if the respondents do not adequately refute them, then Leave to Appeal may be granted. In other cases, where possible errors or concerns are not so obvious, more may be needed from an applicant in order to satisfy the section 41 test. At one end of the spectrum, an applicant may uncover errors in the Director's decision based on documents that are already available or reveal that a Director failed to consider an applicable law or policy. At the other, an applicant may commission an expert to raise questions about the reasonableness of the scientific and technical basis of the decision. While the arguments and facts that may be needed to address the section 41 test will depend on the decision at issue, the one constant is that an applicant must satisfy the statutory test.

This dispute regarding the evidentiary basis of the Director's Decision is important to all of the grounds for leave to appeal assessed below.

Ground 1: Did the Director Consider the MOE Statement of Environmental Values

[39] The Court in *Lafarge* at para. 45, explained the approach to be taken to the first branch of the s. 41 test:

[T]his part of the test mandates reasonable persons to have regard to relevant law and policies and the factual record. If there has been a failure by the Directors to consider relevant law and policies, then, given the effect of the failure to do so, the Tribunal may conclude that there is good reason to believe that no reasonable person could have made the decision in issue.

[40] Further the Tribunal held in *Concerned Citizens Committee of Tyendinaga and Environs v. Ontario (Ministry of the Environment)* (2012), 67 C.E.L.R. (3d) 94 (Ont. Env. Rev. Trib.) ("*CCCTE*") at para. 21 that the Tribunal must go further to assess "whether

and to what extent the Director's decision 'considered, incorporated and reflected relevant laws and policies.'" (see also *Lafarge* at para. 49).

[41] Most recently, the Tribunal in *Guelph* emphasized the purposes of the first branch of the leave test, at para. 29:

First, the wording of the test is not "appears that there is good reason to believe that the decision-maker failed to consider relevant law and policies". Rather, it focuses on whether any reasonable person, having regard to relevant law and policies, could have made the decision. The apparent reasonableness of the decision is the ultimate focus of the test and not just the path used in reaching the decision (including what was considered). If the Legislature had intended that the test could only be met through a "failure to consider" argument, the section would have been drafted in a much more straightforward manner indicating so. Second, given the environmental protection and public participation purposes of the EBR, it would run contrary to those purposes to find that persons are prohibited from obtaining leave to appeal if a decision-maker considered relevant law and policies but nevertheless appeared to make a substantively unreasonable decision.... It is within the realm of possibility that a decision-maker could fail to consider a relevant policy but still make a substantively reasonable decision, especially where another policy that was considered provides similar direction to or more environmental protective direction than the one that was overlooked. As noted by the Court in Lafarge, the "effect" of the failure to consider a relevant policy is also important to consider in determining whether the test has been met.

- [42] It is on the basis of these tests that the Tribunal will assess the application for leave to appeal, under the headings used by the parties in their submissions.
- [43] The Applicant argues that the Director's Decision is unreasonable because she did not take into account, misapplied, or directly contravened "the impacts of the proposal in light of the guiding principles of the SEV" as required by s. 7 and 11 of the *EBR*, and Tribunal caselaw. The Applicant points out that in *McIntosh v. Ontario* (2010), 50 C.E.L.R. (3d) 161 (Ont. Env. Rev. Trib.) at para. 60 ("*McIntosh*"), the Tribunal held that the SEV also applies to PTTW decisions made under s. 34 of the *OWRA*. In particular, the Applicant argues that the Director failed to apply to five of the fundamental environmental principles in the MOE SEV, the Water Taking Regulation and the PTTW Manual, namely:

- (i) the ecosystem approach;
- (ii) cumulative effects;
- (iii) sustainable development;
- (iv) the precautionary approach; and
- (v) adaptive management.

CAMQ also alleges that the Director failed to adequately take into account the common law rights of the landowners neighbouring the Quarry.

[44] The Tribunal notes that neither the Director nor Demill disputes that the *OWRA*, *EBR*, MOE SEV, Manual and Regulation are applicable to PTTW decisions or that the Director must consider and apply all of the five principles raised by the Applicant. They simply argue that she did in fact consider and apply all of these principles in her Decision.

# (a) The Ecosystem Approach

- [45] The Applicant argues that the SEV, PTTW Manual and the MOE's Technical Guidance Document in support of Category 3 PTTW applications require assessing whether the water taking would "cause unacceptable impacts to: (a) natural variability of water flow or water levels; (b) minimum stream flow; (c) habitat that depends on water flow or water levels; and (d) interrelationships between groundwater and surface water, including water quality and quantity."
- [46] CAMQ's main argument is that Demill's application and supporting documentation do not address a number of these impacts adequately or at all, making it impossible for the Director to adequately consider them. The Director did not correct, address or fill in the significant gaps in the information on potential impacts upon ecosystem functions and persons who rely upon the local groundwater resources. The Applicant argues that:

where the proponent's supporting documentation is inadequate, flawed, or contains significant information gaps, then it would be clearly unreasonable for the Director to issue the instrument requested. Similarly, where such information problems exist, there will be resulting uncertainty about the environmental impacts, which raises the potential for significant (and possibly unanticipated) environmental harm. This is true even if the missing information is to be collected, monitored and reported at some point in the future after the instrument has been issued (citing the decision in *Dillon* v. Ontario (2000), 36 C.E.L.R. (N.S.) 141 (Ont. Env. App. Bd.) ("*Dillon*") at paras. 11, 29-32, 34).

- [47] CAMQ also relies on the flaws found by the ECO in the MOE's PTTW program, arguing that many of these flaws remain, despite the amendments to former O. Reg. 289/99, and are apparent in the Director's Decision in this case.
- [48] Specifically, CAMQ's hydrogeologist has identified several shortcomings and deficiencies in the application and documentation, including a lack of information to substantiate the following:
  - Demill's claims that Quarry dewatering will not cause adverse groundwater or surface water impacts (Demill's own modelling predicts impacts upon nearby wells);
  - Demill's claim that Blessington Creek serves as a hydraulic barrier to dewatering impacts south of the Quarry lands;
  - the nature, extent, duration and magnitude of the potential direct (and cumulative) impacts of Quarry dewatering upon the quantity and quality of groundwater and surface water;
  - the adequacy of the monitoring program (geographic scope, the level of detail in the triggers, parameters, methodology and other key matters);
  - the required structural geology investigation it is "unlikely to produce the
    types of information and data needed to fully describe baseline conditions, to
    assess the risk of additional 'pop-ups' in the quarry floor, or to predict, with a
    high degree of confidence, that dewatering activities will not cause any
    unacceptable or significant environmental impacts");

the adequacy of the contingency measures to detect, mitigate or remediate
the effects of dewatering on ground or surface water, particularly if the quality
or quantity of the upper aquifers which supply neighbours are affected.

[49] CAMQ had also noted other informational gaps in its January 6, 2014 comments to the Director regarding the proposal to approve the permit, including "(i) the site stratigraphy and the quantitative interactions between local groundwater resources (i.e. basal overburden aquifer and upper limestone aquifer) and Blessington Creek; (ii) the actual number, nature, and location of all drilled or dug wells which may experience interference by the massive water-takings authorized under the proposed PTTW renewal; and (iii) rock strata thickness and the likelihood of further 'pop-ups', in the existing/expanded quarry floor through which groundwater may flow freely such as the early 1990s quarry floor fissure that allowed a significant amount of groundwater inflow". (Additionally, CAMQ argues that an opportunity to reduce these information deficiencies was missed because the application was not circulated for consultation with the local Conservation Authority, municipalities, First Nations, MNR or the Federal Department of Fisheries and Oceans.)

[50] The Director replies that the Instrument Decision Notice explains in detail how the Director and the Ministry hydrogeologist advising the Director considered and applied the SEV, the Regulation and the PTTW Manual. The Director agrees that Blessington Creek is an important part of this ecosystem, however the ECA and the 2012 PTTW required monitoring of both flow and quality by three stream gauges, and no impact has been detected over the past two years. The 2014 PTTW also mandates monitoring of surface water level, flow and water quality information, and its analysis by a qualified person, in combination with the monitoring required by the ECA. If any negative effects are detected, "contingency measures must be immediately implemented to rectify the interference" and "if these measures cannot mitigate the impacts then the water taking must stop or be reduced." The Director can also change the 2014 PTTW conditions under s. 34(6) of the *OWRA* if necessary. These measures all allow for adaptive management also.

- [51] The Director states that no "substantiated" impacts on the neighbouring residential and agricultural wells and users drawing from the shallow overburden aquifer have been detected by the monitoring over the last two years "as a result of dewatering at Long's Quarry". The structural geological investigation required as a condition of the 2014 PTTW "will help to identify vertical fractures/faults that may explain some anomalously high water levels in bedrock monitoring wells." The current monitoring program includes monthly groundwater level measurements from on site and off site wells within 500 metres of the licensed area boundary. This distance was chosen because users of groundwater with shallow wells close to the Quarry are usually impacted before users with deeper wells or further from the Quarry; therefore, monitoring the on-site wells will detect on-site impacts before any potential for impacts on off-site wells arises.
- [52] The monitoring program also includes water quality sampling at participating private wells for some of the major ion parameters. The Director states that during the monitoring program there was only one well water quality complaint and investigation of groundwater chemistry samples before and after the complaint determined that it was unfounded. The Director believes that the risk to the water quality of off-site wells is low, and contingency measures would be put in place or water taking would stop or be reduced if adverse impacts did occur.
- [53] In terms of scientific evidence, the Director is of the view that Demill's studies provide an adequate basis for deciding to issue the 2014 PTTW, and states that the peer review by CAMQ's consultants did not identify any "significant" flaws in Demill's PTTW application. The Director cites *Quinte West v. Ontario* (2009), 46 C.E.L.R. (3d) 237 (Ont. Env. Rev. Trib.) ("*Quinte*") in which the Tribunal held that the peer review by Applicant's consultant did not include sufficient data to challenge the technical basis of the Director's Decision to the point of meeting the s. 41 test that no reasonable person could have made the decision based on the evidence before them. The same applies to the report of CAMQ's hydrogeologist in this case.

- [54] The Director also argues that the criticisms by the ECO of the general PTTW process are not relevant and are not sufficient to show that the Director in this case failed to apply the ecosystem approach, the SEV or other relevant laws and policies.
- [55] The Approval Holder Demill states that the Director had sufficient information to apply the ecosystem approach, and that CAMQ has not explained "how the information it alleges is missing would have impacted the Director's consideration of the ecosystem approach." The burden is on CAMQ to 'provide solid evidence of adverse effects that have been caused by previous groundwater takings' [citing *Greenpeace Alliance of Canada's Capital v. Ontario* [2009] O.E.R.T.D. No. 38 at para. 80 ("*Greenpeace Alliance*")], which they have failed to do… The Director was entitled to use the best information available and conclude there were no adverse effects caused by previous groundwater takings." In addition, what CAMQ has called "missing information" was in fact given to the Director when the 2014 PTTW was being considered.

# Conclusion Regarding the Ecosystem Approach

- [56] The 2005 PTTW Manual includes the ecosystem approach as its first principle: "The Ministry will use an ecosystem approach that considers both water takers' reasonable needs for water and the natural functions of the ecosystem." The MOE SEV also adopts an ecosystem approach, and *OWRA* water taking regulation O. Reg. 387/04 requires the Director to consider "issues relating to the need to protect the natural functions of the ecosystem" among other things.
- [57] All of the parties agree that an ecosystem approach is important in deciding PTTW applications. The dispute on this issue centres around considerable factual disagreement between CAMQ, Ministry and Demill hydrogeologists as to whether the data available to the Director, including the results of the 2012 PTTW monitoring program, are an adequate factual record on which to make reasonable determinations about the health of the ecosystem and predictions about potential future impacts on it resulting from the 2014 PTTW. Among other facts, it is apparent that there is little to no information about the potential effects of water takings, and the source of the waters

being taken, at the depths which are now being mined in this fourth lift of the Quarry. The anomalies in groundwater testing and the potential risks of pop-ups from the Blessington Fault remain to be fully assessed as a result of ongoing monitoring required by the 2014 PTTW. The gaps in the application and supporting documentation mean that the factual basis for the assessment of ecosystem health and future risks to it is incomplete. The Tribunal, therefore, concludes that it does appear that there is good reason to believe that no reasonable person, having regard to the ecosystem approach, could have made the decision to issue the 2014 PTTW. The Tribunal acknowledges that not all information gaps can be easily filled in a timely manner; however, the Tribunal finds here that the gaps are significant enough to warrant a conclusion that the first part of the leave test has been met in relation to the ecosystem approach. More information was needed in order for a reasonable assessment of ecosystem health and future risks to be conducted.

# (b) Cumulative Effects

- [58] CAMQ argues the Director failed to properly identify and evaluate the cumulative effects of the 2014 PTTW. The 2005-06 and 2011-12 ECO Annual Reports concluded that the 2005 PTTW Manual fails to indicate how, when and by whom cumulative effects are to be assessed and monitored, and who will fund this assessment.
- [59] CAMQ argues that the potential effects of the proposed Melrose Quarry should be considered as part of a cumulative effects analysis of the 2014 PTTW proposal because the operation of Melrose Quarry is "reasonably foreseeable" given the planning for it to date, including the Study to support an application for the Melrose Quarry submitted in 2009. The Canadian Environmental Assessment Agency's "Cumulative Effects Assessment Practitioners Guide" (1999) states that reasonably foreseeable future activities should be considered. CAMQ submits that a cumulative effects analysis of both quarries is necessary given the unclear status of the plans in relation to whether Melrose Quarry will be required to have its own PTTW and how this will be monitored and enforced if the two Quarries both collect water into the same settling pond at Long's Quarry and discharge this water from the pond into the Creek.

- [60] CAMQ argues that, even if the Tribunal finds that the potential effects of the proposed Melrose Quarry should not be considered in relation to the 2014 PTTW but only if and when future PTTWs are applied for either for the Melrose Quarry or for both quarries together, the cumulative impact of the water uses of the many residential and agricultural users in this area should have been taken into account in assessing the 2014 PTTW, not just large or industrial water users. "[C]umulative 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)."
- [61] CAMQ argues that the Director should have required Demill to provide sufficient information regarding the cumulative impacts of the 2014 PTTW, and/or the MOE itself should have undertaken "a robust cumulative effects study for the purposes of assessing the environmental impacts of the proposed industrial dewatering at the Long's Quarry and/or the proposed Melrose Quarry." The Director "made no effort to quantify the water volumes taken collectively by nearby farms and residents, or the amount required to sustain local water-dependent ecosystems, particularly in the climate change context." CAMQ states in its reply submissions that "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." It argues that this monitoring program, which covers both, was proposed by Demill and, therefore, the connection between Long's and Melrose quarries is a result of decisions by Demill.
- [62] CAMQ submits that Demill's documentation does not show that it has adequately assessed the current or future potential effects on Blessington Creek, and that this concern is shared by the Quinte Conservation Authority. CAMQ argues that concerns about potential environmental harm are found both in CAMQ's hydrogeological report and the MOE's own technical review of the Demill 2014 PTTW application, which states that the "risk for impact" is "moderate to high due to the relationship of the quarry to

nearby wells, questionable contingency aquifer, and groundwater surface water interactions issues."

- [63] The Director agrees that cumulative effects must be considered for PTTWs where necessary but argues that "[t]here are no other quarries or other large-scale groundwater takers in the vicinity of Long's Quarry, therefore, cumulative effects are not of concern." She and hydrogeologist Mr. Holland were of the view that there was no potential for cumulative impact to aquifers in this case for the one-year duration of the 2014 PTTW; therefore, the criteria for doing a cumulative effect evaluation in the Manual were not triggered.
- [64] The Director argues that the potential impacts of the Melrose Quarry are not relevant "at this time" because it has not yet been, and may never be, approved. If and when it is, a new PTTW application will need to be made and "the cumulative impacts of the two quarries will be assessed at that time with respect to that PTTW application."
- [65] The Director is aware that CAMQ is concerned that the levels permitted in the 2014 PTTW for Long's Quarry may be sufficient to allow dewatering of Melrose Quarry. However, the Director states that (i) the permit expressly states that it is for taking water for the Long's Quarry Sump; and (ii) Condition 1.1 indicates that the water taking shall be in accordance with the PTTW Application of October 30, 2013, and the application makes it clear that it is for the renewal of the water taking permit for Long's Quarry.
- [66] The Director again argues that the findings of the ECO about the general adequacy of the PTTW regime in Ontario are not relevant to the specific decision in this case.
- [67] The Instrument Holder Demill agrees with the Director that (i) cumulative effects should be considered but that (ii) they are not relevant here as there are no other significant users of groundwater in the area; (iii) the potential future Melrose Quarry cannot be considered here, and if it is approved, cumulative effects will be considered at

that time; and that (iv) CAMQ has failed to specify precisely what cumulative effects should have been considered by the Director.

# Conclusion Regarding Cumulative Effects

- [68] Before going further in assessing the arguments relating to cumulative effects, the Tribunal notes the submissions of CAMQ based on ECO Reports. ECO Reports have been cited in previous Tribunal decisions on applications for leave to appeal, such as *Dawber v. Ontario* (2007), 28 C.E.L.R. (3d) 238 (Ont. Env. Rev. Trib.) ("*Dawber*") at paras. 41-42. While these Reports alone are insufficient to determine whether the s. 41 test has been met on the facts of a particular case, the findings of the ECO in relation to the PTTW program in Ontario are relevant and useful to the assessment of best practices and reasonableness in determining applications for PTTWs and, as CAMQ argues, they "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". The Tribunal has, therefore, considered the ECO Reports in this case.
- [69] The Tribunal finds that it appears that there is good reason to believe that no reasonable person, having regard to potential cumulative effects, could have made the decision to issue the 2014 PTTW. The Tribunal has considered the arguments in relation to whether or not the Director has a duty to consider reasonably foreseeable future events as part of the cumulative effects assessment. However, a conclusion on this point is not necessary in this case because, even assuming without deciding that it is premature to consider the potential effects of the Melrose Quarry cumulatively with the potential effects of the 2014 PTTW granted for Long's Quarry, the Director has expressly stated that she did not attempt to cumulatively evaluate and quantify the takings from all sources currently occurring in this area, such as the takings by neighbouring residents and farmers. For example, para. 60 of the Director's submissions states:

concern. While there are neighbouring farms and residential wells, these water takings are not of sufficient volume to cause significant cumulative effects. The Ministry's technical assessment is that the proposed water taking over the duration of the Permit will not interfere with other residential wells in the area that rely on groundwater.

[70] The evidence for this appears to be the opinion of Mr. Holland that "the potential for cumulative impact to aquifers has not been triggered as per the criteria set out on Page 23 Evaluating PTTW – Water Balance and Sustainability of the PTTW Manual" (Director's submissions, para. 61). However, CAMQ argues that "there are numerous residents" in the vicinity of the Quarry who are "wholly dependent on domestic wells for water supply purposes" as well as 20 family farms "including five dairy farms which draw large volumes of well water to sustain herd health and facilitate milk production." CAMQ argues that "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", particularly given that this is an aquifer that, as CAMQ submits, "Demill itself has characterized as a low yield aquifer."

# [71] In *McIntosh*, the Tribunal held at paras. 104-105 that:

Read together, the MOE's policies indicate that cumulative effects should be taken into account prior to a decision being made. As noted above, where there is a great deal of uncertainty, the precautionary approach dictates that the risk be presumed to exist. ... The issue here comes down to whether the Director's approach of issuing the PTTW without a full understanding of those [cumulative] impacts [of multiple adjacent aggregate operation], relying on the power to make modifications to the PTTW later, is one no reasonable person could have made in the circumstances. One can understand that the MOE would not interrupt activity at operating quarries pending the outcome of the assessment without at least some evidence of unacceptable cumulative impact, but it is different to continue to approve new operations when the cumulative impact of all proposed quarries on surface and groundwater is such a serious concern and remains essentially unknown today. It is true that the Director retains the authority to modify permits and change terms and conditions later, and that enhanced monitoring may pick up problems before they have fully developed, but there is no certainty that those problems will be reversible. Where there is a high degree of uncertainty, the precautionary approach indicates that the Director should presume there will be harm. Developing the data to reduce that uncertainty is the appropriate response, however continuing to approve water takings in light of that degree of uncertainty is inconsistent with the direction of MOE policy.

[72] While in this case there is to date only one aggregate operation, another is planned adjacent to it, and there are multiple residential and farming users who take water from the aquifer as well. The Tribunal concludes that there is good reason to believe that choosing not to properly assess whether the cumulative amounts of water taking have the potential to cause adverse environmental effects in this case is unreasonable. The cumulative effects of existing users was not adequately quantified. The relevance of the proposed Melrose Quarry to the cumulative effects assessment of the impact of the 2014 PTTW is deferred to the Panel hearing this appeal. However, there is good reason to believe that the Director's Decision to grant the 2014 PTTW without adequately considering and assessing the cumulative effects of takings by other groundwater and surface water users in the area was unreasonable.

#### (c) Sustainable Development Principles, Including Water Conservation

- [73] CAMQ argues that sustainable development includes water conservation. Therefore, although the Regulation and Manual do not explicitly refer to sustainable development, their reference to water conservation as a relevant factor for consideration is a reference to sustainable development. CAMQ relies on the conclusions of its hydrogeologist that these dewatering activities "have the clear potential to cause unacceptable or significant impacts to local domestic wells and Blessington Creek." CAMQ argues that other stresses on groundwater resources will occur from new development and other pressures such as climate change. The 2014 PTTW "effectively provides no margin for error" in terms of potential impacts to area water quantity. To achieve conservation and sustainability, the 2014 PTTW should contain a condition mandating a water conservation plan. CAMQ cites the 2011-12 ECO report which noted recurring failures of PTTWs to play a role in ensuring water conservation. CAMQ argues that the absence of conditions requiring water conservation in the 2014 PTTW shows that the Director failed to consider, apply or take into account sustainable development principles such as water conservation, which was unreasonable.
- [74] The Director agrees that water conservation is an important principle but argues that it does not apply to PTTWs for quarry operations in the same way as it does to

water consumption takings. The Quarry is merely removing surface water runoff from the Quarry so that operations can occur, and discharges it through a sewage works into the surface water feature of Blessington Creek. Quarry operators generally take the minimum water necessary to ensure safe operations because they wish to minimize energy and cost. Therefore, water conservation plans are not generally necessary for quarry dewatering PTTWs.

- [75] The Director acknowledges that Quarry operators use some of the water for dust control which is necessary to reduce impacts on air quality and nuisance to neighbours.
- [76] The Director declined to include a condition requiring water conservation measures in drought conditions because at such times there will be very little surface water runoff into the Quarry so dewatering will be "negligible". In addition, the Director notes that "quarries often contribute to low flow augmentation of neighbouring watercourses, whereby water stored within the quarry during wet weather is released into a watercourse during drier periods," such as the summer for Blessington Creek.
- [77] Therefore, the Director submits that sustainable development principles such as water conservation have been adequately addressed in this case.
- [78] Demill submits that it is not clear whether the quantity of water takings referred to by CAMQ's hydrogeologist includes Melrose Quarry. Demill's consultant:

provided detailed data and analysis that the modelled impact of the proposed water taking for Long's Quarry is limited to a small subset of private wells, which have the capacity to handle the potential worst-case draw down (which is considered very unlikely). Further, in the unlikely event that a well does run dry, and beyond the contingencies set out in the 2014 PTTW, testing established the availability of an alternate well location that provides water of better quality than the existing well identified as potentially at risk.

Demill submits that since the water taking is solely to remove precipitation and the minimal groundwater seepage, "[t]here is no ability to mitigate the amount of precipitation and/or snowmelt that accumulates in the guarry."

# Conclusion Regarding Sustainable Development and Water Conservation

- The Tribunal notes that the purposes of the *OWRA* are "to provide for the [79] conservation, protection and management of Ontario's waters and for their efficient and sustainable use, in order to promote Ontario's long-term environmental, social and economic well-being" (emphasis added). The Tribunal notes that both the Director and Demill assert in several places in their submissions that water conservation is not applicable to the 2014 PTTW in the same way as it would be for water consumption takings because the permit is merely for dewatering, and therefore the amount of water taken is commensurate with the amount of precipitation received in the Quarry. However, the PTTW states that the permitted water taking is for three distinct purposes: dewatering, dust control and water supply. Neither the Director nor Demill addresses in detail the latter two uses in their submissions. The Director has not argued that she considered requiring water conservation measures in relation to dust control or water supply, and the 2014 PTTW does not appear to address it. The Director states that she considered the amount of water requested for dust suppression "reasonable" but provides no explanation for this view.
- [80] The Tribunal finds that the Director's failure to properly consider water conservation in relation to water taking for dust control and water supply purposes leads to a conclusion that it appears that there is good reason to believe that no reasonable person, having regard to the important purpose of water conservation in the enabling statute, the *OWRA*, could have made the decision to issue the 2014 PTTW.

#### (d) Precautionary Principle

[81] CAMQ states in its submissions that the ECO Reports indicate that many commentators have critiqued the PTTW Manual and Regulation for not using a precautionary approach; they merely require the Director to consider certain ecological factors "to the extent that information is available". In its submissions to the Director on the proposed decision, CAMQ underlined the data gaps relating to baseline conditions, monitoring and contingency plans which resulted in "considerable uncertainty about

potential environmental impacts". CAMQ's hydrogeological expert concluded that the dewatering "has clear potential for significant impacts in several areas." The alleged information gaps include:

- [t]he site stratigraphy and the quantitative interactions between local groundwater resources (i.e. basal overburden aquifer and upper limestone aquifer) and Blessington Creek;
- the actual number, nature, location of all drilled or dug wells which may experience interference by the massive water-takings authorized under the proposed PTTW renewal;
- rock strata thickness, and the likelihood of further pop-ups, in the
  existing/expanded quarry floor through which groundwater may flow freely
  (such as the early 1990s quarry floor pop-up that allowed a significant amount
  of groundwater inflow).
- [82] CAMQ argues that the Director's stated goal of obtaining more information to inform future PTTW applications will not be achieved because, in the view of CAMQ's hydrogeologist, the monitoring plan and geological study are inadequate to answer all remaining questions about the existing and future realities and risks at the Quarry. CAMQ suggests that consultation with other parties could result in a "comprehensive geological investigation for this site", but this has not been done. CAMQ notes that Demill has had several years to gather information under the previous PTTW, yet the Director has decided that yet another year is needed to gather further information to reduce the remaining uncertainties.
- [83] CAMQ argues that "there is nothing 'precautionary' or 'science-based' about the Director's Decision to authorize high-volume industrial water-takings at this sensitive location, even for just one year, without a full understanding of structural geology in the vicinity of the Long's Quarry (including the risk of additional 'pop-ups'), or without knowing the full extent of potential impacts to the natural environment or nearby domestic wells." CAMQ argues that the MOE's "approve first, gather data later"

approach is not precautionary, and leave to appeal based on this approach was granted in both *Dawber* and *CCCTE*. The Director should have insisted that the informational gaps be addressed at an appropriate level of detail before making her decision. She could have refused the PTTW as occurred in 2005 or deferred her decision until this information was available.

- [84] The Director asserts that she applied the precautionary approach in this case, but the evidence shows that the risk of adverse impacts from the water taking remains low. The MOE's hydrologist undertook detailed scientific assessments of the PTTW application, its supporting documents and all initial assessments in MOE files for past approvals. This database provides "a significant amount of baseline data" from which to predict that "the quarry will likely be able to continue operation with no adverse impacts."
- [85] The Director submits that, despite this low risk of harm, the 2014 PTTW is preventative as it requires ongoing surface and ground water monitoring, a structural geology investigation and implementation of a contingency plan in case of unexpected events. The one-year, rather than a 10-year, term of the PTTW is precautionary in itself. The Director relies on the Tribunal's reasons in *Greenspace Alliance* where it stated that "[w]here there is credible evidence that shows that harm is unlikely the degree of uncertainty is significantly reduced and it is consistent with the precautionary approach for the Director to approve the activity and include measures to prevent harm or to confirm the predictions." (see also *Simpson v. Ontario* (2005), 18 C.E.L.R. (3d) 123 (Ont. Env. Rev. Trib.) ("*Simpson*"), at para. 79).
- [86] The Director argues that this is not an "approve first, gather data later" approach, because there is "an abundance of information" from past monitoring results, hydrogeological reports from past PTTW applications and eighty years of history at this Quarry. To require more is to interpret the precautionary approach to mean "the Director [must] know absolutely everything about an undertaking before an approval can be issued", which, as the Tribunal held in *Greenspace Alliance*, is "not a realistic expectation of science, or of the Director." The Director distinguishes *Dawber* and

*CCCTE* because in those cases there was uncertainty about the possible effects of the operations in question, and in *CCCTE* there was no contingency plan in place.

[87] Demill agrees that the precautionary approach was properly applied in this case. That approach is "not intended to be an absolute pre-condition to the granting of a permit" but rather "a guiding principle not a statutory or regulatory requirement." The monitoring and contingency plan requirements are evidence that precaution was applied. There is "considerable evidence" that there is no risk of harm in this case:

- The age of the operations;
- "Since the mid-1990s the quarry has operated below the level of the shallow aquifer, where the majority of wells in the area draw their water."
- "There is no evidence that the water in the Quarry, which is removed by the 2014 PTTW, is drawing from these wells (either actively or passively). Indeed, this has not been alleged by CAMQ or its consultant."
- "Demill's consultant, with nine years' experience with the quarry, confirms his experience of extremely limited groundwater infiltration into the quarry."
- the water removed is less than the amount of natural precipitation;
- the worst-case scenario was considered and the effects of such a case
   "would be limited to only those drilled wells which tap a rare water bearing zone that may be found in the aquitard, if any exist."

#### Conclusion Regarding the Precautionary Principle

[88] The Tribunal has considered the references to the *Greenspace Alliance* case cited by the Director and Demill which held that "[w]here there is credible evidence that shows that harm is unlikely the degree of uncertainty is significantly reduced and it is consistent with the precautionary approach for the Director to approve the activity and include measures to prevent harm or to confirm the predictions," (see also *Dawber* and *Simpson*) and that it is unreasonable to expect the Director to "know absolutely everything about an undertaking before an approval can be issued." Again, this issue

comes down to competing interpretations of the adequacy of the evidence and information base in this case.

- [89] The Tribunal notes that the pop-up occurred in 1994, that this raised concerns about a lack of knowledge in relation to the geology of the area, and that anomalous readings have been found in the monitoring reports required by the 2012 PTTW over the past two years which may or may not be related to the Blessington Fault.
- [90] While the Tribunal recognizes that the Director is trying to ensure that the causes of these anomalies are found and that a clear picture of the geology and water quality and quantity in the area is created by the study and monitoring required as conditions of the 2014 PTTW, the uncertainty regarding the geology has endured for almost twenty years. In addition, the excavation of the Long's Quarry will be at a deeper level during the course of the 2014 PTTW, and monitoring of the effects of excavation and dewatering at these depths has not been done. There are conflicting expert analyses, and the conditions in the 2014 PTTW require further information to be gathered on issues that have been known to be uncertain for many years.
- [91] In these circumstances, the approval of another permit to take very large volumes of water despite these continuing gaps in information, at a deeper level of excavation, even for a short period, appears to be one that no reasonable person, having regard to the precautionary principle, could have made. As above regarding the ecosystem approach, the Tribunal acknowledges that not all information gaps can be easily filled in a timely manner. Nevertheless, in these particular circumstances, the Tribunal finds that more information was needed in order for the Decision to be consistent with the precautionary principle. The Tribunal also finds that there was ample opportunity for more information to be gathered. A course of action consistent with precaution would have entailed being more proactive in obtaining data so as to ground a more informed decision on the part of the Director.

## (e) Adaptive Management Principles

- [92] The report of CAMQ's hydrogeologist "identified significant problems with Demill's monitoring program and understanding of baseline conditions in the vicinity of the Long's Quarry." CAMQ submits that these flaws in the monitoring program in the 2012 PTTW mean that the Director had insufficient information to "adaptively manage in response to future changes in environmental conditions and/or impacts." CAMQ argues that this lack of information means that the Director should in fact *not* be relying on adaptive management in this case, but rather on the precautionary principle, and should have refused the 2014 PTTW on the basis of inadequate information. CAMQ submits that the Director therefore either misapplied or failed to properly consider the adaptive management principles, which was unreasonable.
- [93] The Director states that she applied adaptive management principles, in particular in relation to the conditions of the 2014 PTTW such as the monitoring and reporting and contingency plans which include the requirement to stop taking water if adverse impacts are occurring. The 2014 PTTW also includes obligations for data gathering, and therefore is an example of active adaptive management both during the short one-year permit and in terms of future possible applications for future water taking. The Director states that she finds the monitoring programs "sufficient". The "informational foundation" for applying adaptive management is found in the past history of water takings at the site, including data from monitoring required by the 2012 PTTW.
- [94] Demill reiterates that the criticisms of CAMQ's consultant do not show that the baseline data is inaccurate. Nor does CAMQ argue that the condition in the 2014 PTTW to require hydrogeological investigation is unnecessary or that it will not provide useful information to help the Ministry "continue to require adapted management of Long's Quarry's water takings." The one year term, the "comprehensive monitoring programs and contingencies" show that the Director has "required improvement and adaptive management" of water takings at the Quarry.

## Conclusion Regarding Adaptive Management Principles

[95] The Tribunal notes that Principle 3 of the 2005 PTTW Manual defines adaptive management as "a process that explicitly recognizes changes in natural systems, stresses learning from experiences and monitoring, and revisiting management goals and objectives to adapt them as required in the light of new information gained." It also specifies how adaptive management should be applied to PTTW applications:

it comprises evaluating permit applications in light of available information on potential impacts, setting of permit conditions, monitoring, evaluating, and adjusting of water taking and permit conditions, as necessary. In cases where the Director believes that the taking poses an unacceptable adverse effect, or where there is no additional water available, the Director may refuse to issue the permit in response to an application, or curtail or revoke an existing permit.

[96] Again, the Tribunal held in *Greenspace Alliance* that "[w]here there is credible evidence that shows that harm is unlikely the degree of uncertainty is significantly reduced and it is consistent with the precautionary approach for the Director to approve the activity and include measures to prevent harm or to confirm the predictions."

[97] As noted above in relation to the analysis of the precautionary approach, the Tribunal is of the view that the degree of evidence in this case does not reduce the uncertainty sufficiently to make it reasonable for the Director to approve now and continue monitoring in the hopes of eventually resolving these long-known hydrogeological uncertainties. The significant debates about the baseline data and the adequacy of the monitoring program and contingency plans, and the long delay in resolving the hydrogeological uncertainties, coupled with the new depths which excavation will reach in this current phase, suggest that precaution should have played a stronger role than adaptive management in this case. The Tribunal finds that the lack of evidence showing that these very large amounts of water would ever likely be necessary for the Long's Quarry suggests that the amounts could and should have been adapted from the last permit. Adapting to the continuing uncertainties despite the two years of monitoring under the 2012 PTTW, in addition to the incidents of noncompliance by the proponent in this case which the Director's submissions have confirmed, would seem to require a more rigorous approach to adaptive management

than extending the permit for another year to obtain further information and analysis. The Tribunal, therefore, finds that it appears that there is good reason to believe that no reasonable person, having regard to the principles of adaptive management, could have made the decision to approve the 2014 PTTW.

## (f) Common Law Rights of CAMQ Members

- [98] CAMQ notes that decisions on instruments such as PTTWs can affect common law rights in various ways, including "(a) approvals protecting facilities from liability; (b) influencing the standard of conduct considered to be negligent; and (c) by courts deferring to regulatory officials' assessments of environmental dangers." CAMQ is concerned that any adverse effects of the 2014 PTTW on the water quality, quantity, particularly on their domestic wells and Blessington Creek, and related ecosystems could interfere with the common law rights of CAMQ members and other local residents, including riparian rights, negligence, private nuisance and strict liability. CAMQ argues that, since there is no evidence that the Director turned her mind to these potential infringements of common law rights, the decision is unreasonable.
- [99] The Director affirms that she did take into account the concerns of CAMQ in relation to common law rights of neighbours. She communicated with CAMQ regularly and held a meeting to discuss their concerns. The Instrument Decision Notice details how these concerns were considered. The Director states that the common law rights of landowners are not expected to be affected based on the history of water takings at the Quarry and the monitoring since 2012. Condition 2.4 of the 2014 PTTW explicitly preserves the common law rights of action of neighbouring landowners ("The issuance of, and compliance with this Permit shall not be construed as precluding or limiting any legal claims or rights of action that any person, including the Crown in right of Ontario or any agency thereof, has or may have against the Permit Holder, its officers, employees, agents, and contractors."). The Director submits that the 2014 PTTW therefore does protect these common law rights.
- [100] Demill did not expressly address this issue in its submissions.

## Conclusion Regarding Common Law Rights

[101] The PTTW Manual recognizes that "common law rights to the use of water can be affected" by PTTWs. The Tribunal and the Divisional Court have held that common law rights are relevant to the leave test in s. 41(a) (see, e.g., *Dawber* at paras. 70-74, and *Lafarge* at paras. 63-65). The Tribunal finds that the Director did consider these concerns expressed by CAMQ in writing and at the meeting. Condition 2.4 explicitly preserves the common law rights of action of neighbouring landowners.

[102] However, if the monitoring and contingency plans eventually show that it is not possible to use other wells or other means to replace any wells that may be permanently affected by the water taking, or to provide adequate remedies for harm to other common law rights, then these common law rights of action for past harms may not be able to adequately remedy these harms, or prevent their continuance. The Tribunal recognizes that there is uncertainty as to whether any common law causes of action preserved in Condition 4.2 would in fact be able to be adequately remedied. Given the Tribunal's overall conclusion that leave to appeal the entirety of the 2014 PTTW should be granted, the Tribunal finds that it is not necessary to determine whether this ground forms another basis for concluding that the leave test has been met.

# Conclusion on Sub-issue 2(a): The First Branch of the s. 41 Test – Reasonableness

[103] The Tribunal finds that it appears that there is good reason to believe that no reasonable person, having regard to the principles of the ecosystem approach, cumulative effects, sustainable development including water conservation, the precautionary approach and adaptive management, could have made the decision to approve the 2014 PTTW. The Tribunal, therefore, moves on to the second branch of the leave to appeal test.

## Sub-issue No. 2(b): The Second Branch of the s. 41 Test – Significant Harm

[104] Section 41(b) of the Leave to Appeal test is as follows:

Leave to appeal a decision shall not be granted unless it appears to the appellate body that,...

(b) the decision in respect of which an appeal is sought could result in significant harm to the environment.

[105] CAMQ underlines that s. 41(b) asks whether it "appears to" the Tribunal that the Director's Decision to issue the 2014 PTTW "could result in significant harm to the environment." CAMQ, citing several Tribunal leave to appeal decisions, states that this means that the Tribunal must determine "whether the decision has the potential to cause significant environmental harm." In general, CAMQ argues that the test does not require CAMQ to prove past harm, as the Director and Demill seem to be suggesting. CAMQ submits that the question is "whether the newly authorized quarry dewatering while deepening the quarry to 99 masl has any potential to cause adverse impacts."

[106] The Tribunal agrees with the interpretation of the second branch of the test set out in *Guelph*, at para. 109:

[a]t the leave stage, as confirmed by the wording of the statute and the holding in *Lafarge*, the City only needs to show that it appears that significant harm *could* result. In a situation such as this, with competing expert opinions that have not been fully tested, the lower threshold set out in the wording of the test helps resolve the debate at the leave stage. There is enough information for the Tribunal to conclude that significant water quantity harm could result even if it is not clear that it will. In particular, the implementation of the 2013 PTTW could result in the Applicant being unable to continue its established pattern of water use.

[107] CAMQ makes arguments under six headings in relation to the potential for significant harm to the environment, and the analysis of the Tribunal will follow these headings. Demill has combined all of its arguments on the second branch of the leave test into para. 109 of its submissions, not according to CAMQ's sub-headings, and therefore Demill's arguments are listed at the end of this section of the reasons of the Tribunal.

## (a) Existing Environmental Conditions Already at Risk

[108] CAMQ argues that the existing environmental conditions at and around the Quarry appear to constitute a "'perfect storm' of pre-existing site conditions" which the 2014 PTTW will exacerbate:

- the area has been identified as a Highly Vulnerable Aquifer ("HVA") by the local Source Protection Committee under the Clean Water Act, 2006;
- Blessington Creek may already be under stress from several other factors such as local agriculture;
- the presence of nearby domestic wells;
- Demill's March 2013 monitoring report states that "sufficient data to determine baseline conditions is not available" in the context of well water quality.

[109] The Director responds that while this area is an HVA and there are existing sensitive uses, the Quarry is not adversely impacting the watershed or neighbouring users, and CAMQ has not brought any evidence that it is. She believes that "pop-up events have had limited impacts on groundwater levels and have generally been of short duration [which] would not have had impacts on water supply of neighbouring wells." The MOE's hydrogeologist has also stated that "the potential for pop up events is less than previously thought."

## (b) Classification of the PTTW as an Environmentally Significant Instrument

[110] The 2014 PTTW is qualified as a Category 3 application under the *OWRA* PTTW Regulation (defined as having "a greater potential to cause adverse environmental impact or interference" and therefore subject to additional application requirements and greater scrutiny by the MOE) and a Class I instrument under s. 20(2)(4) the *EBR* (a type of proposal "that has potential to have a significant effect on the environment"). Therefore, CAMQ argues that by definition this permit has the potential to cause adverse environmental effects.

[111] The Director states that there are three classes of instruments under O. Reg. 681/94, and that Class 1 is the lowest in terms of risk of harm. The Director admits that PTTW applications for *renewal* of PTTWs that have already undergone detailed Ministry evaluation are normally classed as Category 1 instruments under the PTTW Regulation, meaning permits that are "unlikely to pose adverse impact". The Director submits that this PTTW renewal was classified as a Category 3 application, which does mean applications posing greater risk, but this was only because "the [new] monitoring data submitted pursuant to ... the 2012 PTTW required technical review" by MOE staff. The Director argues that, if CAMQ's argument is accepted, any Category 3 PTTW or Class I instrument would by definition meet the second branch of the test for leave to appeal, rendering s. 41(b) meaningless and redundant, and this cannot have been the intention of the legislator and regulators.

#### (c) Potential Environmental Impacts Arising from the 2014 PTTW

[112] CAMQ argues that "taking multi-million litres of groundwater from within an HVA in a sensitive geographic area" near a body of water that may already be under stress and near domestic wells is an environmentally significant activity with potential for environmental harm. Potential effects include long-term or cumulative effects at the "current/expanded quarry". As stated above, CAMQ submits that Demill's documentation does not show that it has adequately assessed current or future potential effects on the Creek, a concern shared by the Conservation Authority. CAMQ argues that concerns about potential environmental harm are found both in CAMQ's hydrogeological report and the MOE's own technical review of the Demill 2014 PTTW application.

[113] CAMQ submits that Demill has not properly characterized or quantified the amount of groundwater inflow into the Long's Quarry. Demill's worst case scenario projects a 2.5 metre drawdown potential at the outer boundary of the affected area, but this means it is reasonable to anticipate that wells closer to the Quarry "may experience drawdown effects" as high as seven metres, according to CAMQ's hydrogeologist. CAMQ also notes that Demill took and discharged water from the Quarry during the

summer months of 2012 while at the same time the local conservation authority issued a low water declaration. This suggests to CAMQ that the water being discharged from the Quarry at that time was not accumulated precipitation, but rather that "shallow groundwater was continuing to flow into the sump hole in quantities sufficient to require pumping by Demill." There is, therefore, a risk that this is currently happening and may continue to happen in the future.

[114] The Director responds that the allegations of CAMQ in relation to potential environmental harm are not supported by evidence. Some of this evidence is in relation to potential impacts of the Melrose Quarry, and these are premature and irrelevant to the one year 2014 PTTW for Long's Quarry. The concerns of CAMQ's hydrogeologist that the water taking is impacting groundwater quality and quantity are not explained or supported.

## (d) Inadequate PTTW Terms and Conditions

[115] CAMQ argues that the terms and conditions of the 2014 PTTW are inadequate for "identifying, evaluating, preventing, monitoring or mitigating significant environmental harm" that may result from the decision to grant the permit. It says that the 2014 PTTW contains "perfunctory" and often boilerplate conditions that are not tailored to this site, and merely tinker with the problems at the Quarry.

[116] CAMQ submits that the one-year term of the permit does not alleviate its concerns "if the underlying intent is to generate further documents from the proponent which will be used to help build a foundation to re-issue the PTTW for 10 years." Any missing information which may be generated should have been required *before* issuing the one-year 2014 PTTW.

[117] In terms of permissible quantity of takings, although the duration is only one year, the amount per year has not been reduced from the 2012 PTTW. CAMQ states that this very large quantity of permissible takings is unnecessary, has never been used by Demill in the past, and therefore "there is no public interest justification" for such

"arbitrarily... high maximum amounts." The PTTW Manual states that permission should not be requested or granted to take an amount far in excess of what is actually needed. CAMQ argues that "the Director has ...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."

[118] CAMQ also objects to the removal of the condition that high volume takings can only occur in the spring. It notes that Demill was in breach of this limitation in the past, and submits that Demill now being rewarded by having it officially removed as a permit condition.

[119] CAMQ is also concerned that the 2014 PTTW conflicts in part with the ECA which does put limits on the timing of permitted discharge, leading to potential confusion.

[120] CAMQ is also concerned about the adequacy of the monitoring conditions, finding them "substantively inadequate", as set out above.

[121] CAMQ states that new Condition 4.3 (requiring an investigation of the area's structural geology) and Condition 4.4 (requiring a report on the results of all monitoring and investigation activities required by the 2014 PTTW if an amendment or renewal of the 2014 PTTW is proposed by Demill in future) are vague in relation to the "nature, scope, methodology, parameters or other key components" of these reports, and allows no public comment or review. The required site geology plan is very narrowly focused, does not adequately address the risk of future pop-ups, particularly given the new deeper excavation to 99 masl, and is not required to be shared with other interested parties such as CAMQ, municipalities and neighbours, and the draft geology work plan was also not shared before being approved.

[122] In terms of the notification and remediation in case of adverse impacts, CAMQ states that these conditions (5.1 and 5.2) are reactive rather than proactive. CAMQ is

concerned that it will not be possible to deepen neighbouring wells if that becomes necessary. In fact, "Demill's vaguely worded 'contingency measures' document (PTTW Schedule A, Item 2, page 4) acknowledges that the proponent is still trying to determine whether there are any 'available options for restoration or replacement of affected water supplies." CAMQ, in its January 6, 2014 comments to the Director in relation to the proposal to approval the Permit, stated that "[t]he deeper aquifer may not be usable or viable due to elevated iron, hydrogen sulphide and chlorides that are expensive or difficult to effectively treat for drinking water purposes."

[123] In addition to the inadequacy of the existing conditions, CAMQ also argues that some important conditions are missing, such as: (i) satisfactory financial assurance (the MOE guidelines on financial assurance indicate they should be required where there is risk of interference with municipal or private wells, health or environmental risks, or a history of non-compliance); (b) water conservation measures; (c) "definitions, triggers, protocols or requirements for reducing (or ceasing) water takings during low water or drought conditions at the local level" (citing in particular the fact that in 2011 and 2012, the Quinte Conservation Authority had to issue low water declarations, and the presence of such conditions in other PTTWs issued by the MOE).

## [124] The Director replies that:

- the one year limit is precautionary and adaptive;
- the volume permitted is the same as in the 2012 PTTW;
- water conservation does not apply to quarry operations in the way it does to consumptive water takings;
- the seasonal restriction was removed to accommodate storm events that can
  occur any time of year, and increasingly so due to climate change; the
  maximum number of days per year when higher volume takings are permitted
  has not changed, only the seasonal limits have been removed;

 the maximum volume is less than permitted in the 1997 Tarmac PTTW for this site. "The Director sees no need to constrain the quantity of water taking for dewatering since this is directly responsive to the amount of precipitation received" and because this PTTW "does not permit dewatering at the proposed Melrose Quarry";

- there is no conflict between the 2014 PTTW and ECA because Demill must comply with both the maximum water taking rate in the 2014 PTTW and the maximum discharge rate in the ECA, and if the higher taking rate that would now be permitted by the PTTW required a greater discharge rate, Demill could apply to MOE for an amendment to the ECA; since the maximum discharge rate to the Creek is not altered by the 2014 PTTW, this argument is essentially a collateral attack on the ECA;
- the Warren Paving PTTW applied only to "water taking for dust" and not dewatering. The 2014 PTTW applies to "both dust suppression and dewatering" so the comparison is not appropriate (noting that the amount for dust control in the Warren and current PTTW are comparable);
- financial assurance is not necessary given the short duration, additional monitoring and contingency measures plan, which combine to make the risk of harm very low.

### (e) MOE Enforcement Limitations

[125] CAMQ argues that the 2007 ECO special report to the legislature on "MOE budget and staffing shortfalls" revealed that "many facilities go decades without inspection" and that "extremely high levels of non-compliance are often found". This was echoed in the 2012-13 ECO annual report. CAMQ submits that a lack of enforcement capacity increases the risk of adverse environmental impacts of the permit.

[126] The Director states that concerns about the budgetary and staffing issues of MOE are unwarranted and not relevant. It does have the capacity to enforce the 2014 PTTW and conducted an unannounced inspection on October 8, 2013. A condition of

the 2014 PTTW requires Demill to notify the local district office in case of any complaints arising from water takings. The enforcement of the 2014 PTTW is not within the scope of the s. 41 test for leave, and the adequacy and use of MOE resources is a policy issue and therefore outside the scope of this leave to appeal.

## (f) Proponent's History of Non-Compliance

[127] CAMQ argues that Demill's history of non-compliance with PTTWs and other legal requirements is relevant to the reasonableness of the Director's Decision to grant the 2014 PTTW, as stated by the Tribunal in *Scharfe v. Ontario* (2009), 49 C.E.L.R. (3d) 142 (Ont. Env. Rev. Trib.), *Marshall* and *McRae v. Ontario*, [2009] O.E.R.T.D. No. 41. It is also relevant to the risk of harm likely to result from the Director's Decision to grant a permit. CAMQ relies on at least four instances of failure to comply with PTTWs and some indication of violations of *ARA* conditions cited, some continuing "for years". For example, CAMQ was informed by AI Sudds of the MOE in March 2013 that "the PTTW investigation failed to find sufficient evidence that Demill had been taking water in excess of 50,000 litres/day [and therefore required a PTTW] primarily because neither Demill nor the MOE had been measuring or recording the volume of its water-takings." CAMQ states that Demill also discharged industrial wastewater into the natural environment without an approval in violation of the *OWRA*. CAMQ suggests that it would have been possible to add conditions to the 2014 PTTW requiring more frequent reporting or an on-site supervisor or other means of ensuring compliance.

[128] The Director responds that while Demill has operated without a valid PTTW for some time, submitted reports late and exceeded permitted levels of water discharge, the MOE decided not pursue charges, which is a discretionary decision outside the jurisdiction of the Tribunal. Given this and the short term of the permit, the Director is satisfied that the existing compliance framework is satisfactory to ensure compliance with the 2014 PTTW.

[129] Demill has combined all of its arguments on the second branch of the leave test into para. 109 of its submissions, not according to CAMQ's sub-headings. It states that:

- There is no evidence that the dewatering at this Quarry has had any adverse impact on the environment or local wells since the 1990s.
- CAMQ has not provided evidence to support its concerns; CAMQ's concerns
   "at best amount to a disagreement amongst hydrogeologists as to whether
   sufficient study has been completed".
- The 2014 PTTW conditions require further investigation of the structural geology, and terms of reference for this study were submitted by Demill on June 12, 2014.
- The permit expires in one year and if this additional investigation and monitoring reveal problems, it will not be renewed and a subsequent permit will not be issued.

Conclusion on Sub-issue 2(b): The Second Branch of the s. 41 Test - Significant Harm [130] In the recent Guelph leave to appeal decision in a quarry PTTW renewal case, Associate Chair DeMarco held as follows at para. 97:

At renewal points in a permit, especially in the face of concerns being raised by a third party such as the City, the Director should not treat the water taking as effectively grandparented indefinitely. Rather, the Director should take the initiative at the renewal point (or earlier where warranted) to examine the proposed new period of water taking according to a proper factual and scientific record and determine whether it should in fact continue under largely the same conditions as before, This does not mean that every renewal should cause instrument holders and directors to start from scratch and pretend that the application is for a new water taking. Rather, at a minimum, they should address all valid concerns from third parties and ensure that an up to date factual and scientific record is obtained to inform the decision on the renewal. The scope of inquiry that should be undertaken ... should be determined on a case-by-case basis. In some circumstances, such as this one, a wider inquiry may be merited. In other situations, where circumstances have not changed and third parties (or a director or instrument holder) are not raising specific concerns and the previous factual and scientific record remains up to date, it may be reasonable to undertake a narrower inquiry.

[131] The Tribunal recognizes that the above comments were made in relation to the first branch of the s. 41 test in *Guelph*. Nevertheless, they are also relevant to the

Tribunal's analysis of the second branch in this case. The Tribunal finds that several facts have changed since the 2012 PTTW was issued: among other things, the excavation will occur further below the water table, and the seasonal limitations have been removed in the 2014 PTTW. In addition, the hydrogeology study still has not been done so uncertainty regarding pop-ups remains. This evidentiary uncertainty was part of the basis for the Tribunal's earlier finding that CAMQ has met the first branch of the leave to appeal test. In the *Greenspace Alliance* leave to appeal a PTTW decision, the Tribunal held at para. 149 as follows:

The Tribunal has found that some aspects of the Director's decision meet the first branch of the section 41 test. With each of these aspects, information or evidence to justify the Director's decision is lacking. Because of this, there is a great deal of uncertainty about what the potential impacts of the decision could be. Given the context of the decision and this degree of uncertainty, the Tribunal finds that the Applicants have provided sufficient evidence to demonstrate that it appears that there could be significant harm to the environment as a result of the Director's decision to issue the PTTW.

[132] The informational uncertainty in this case also makes it appear that the Director's Decision to issue the 2014 PTTW could result in significant harm to the environment. The following factors are sufficient to conclude that it appears that the Director's Decision to issue the 2014 PTTW could result in significant harm to the environment: this is an HVA with existing sensitive uses (as confirmed by the Director in her submissions); Blessington Creek, the receiving water, has been identified as a potentially sensitive surface water feature; the continuing uncertainty regarding the hydrogeology of the area; and the debate among the hydrogeological experts regarding the adequacy of the monitoring and contingency plans in the 2014 PTTW. The additional factor of the troubled compliance history of the Instrument Holder, including in relation to conditions of the most recent 2012 PTTW, adds to the risk of future environmental harm in case of non-compliance with the 2014 PTTW.

[133] Therefore, the Applicant has met the onus of showing that it appears that significant environmental harm could result to the quantity and quality of water as a result of the 2014 PTTW.

## Issue No. 3: The Automatic Stay

[134] Section 42(1) of the EBR provides:

The granting of leave under section 41 to appeal a decision stays the operation of the decision until the disposition of the appeal, unless the appellate body that granted the leave orders otherwise.

[135] CAMQ argues that the automatic stay should remain in place, given the unreasonableness of the Director's Decision and its potential to result in significant harm to the environment and neighbouring well users. CAMQ argues that Tribunal Rules 108-110 require a motion to remove a stay, and that if the leave to appeal is granted, Demill can bring such a motion at that time, supported by evidence for the Tribunal to consider.

[136] The Director argues that leave should not be granted, and therefore is silent in relation to the stay. Demill requests that if leave is granted, the automatic stay be lifted pending the hearing of the appeal.

[137] The Tribunal notes that none of the parties have made detailed submissions on the test for lifting a stay under the *EBR* and Tribunal Rule 110. Therefore, the automatic stay shall remain in place pending a motion to remove it.

#### **DECISION**

[138] The Tribunal grants leave to appeal the 2014 PTTW, in its entirety.

[139] The automatic stay set out in s. 42(1) of the EBR shall remain in place.

Application for Leave to Appeal Granted Request to Lift Automatic Stay Denied

"Heather McLeod-Kilmurray"

HEATHER McLEOD-KILMURRAY
MEMBER

## **Environmental Review Tribunal**

A constituent tribunal of Environment and Land Tribunals Ontario Website: www.elto.gov.on.ca Telephone: 416-212-6349 Toll Free: 1-866-448-2248