ENVIRONMENTAL REVIEW TRIBUNAL

IN THE MATTER OF sections 38 to 48 of the *Environmental Bill of Rights*, S.O. 1993, c. 28, and sections 9, 27, and 39 of the *Environmental Protection* Act, R.S.O. 1990, c. E.19 as amended:

AND IN THE MATTER OF an application by the Loyalist Environmental Coalition as represented by Martin J. Hauschild and William Kelley Hineman; Lake Ontario Waterkeeper and Gordon Downie; and Gordon Downie, Gordon Sinclair, Robert Baker, Paul Langlois and John Fay, pursuant to section 38 of the *Environmental Bill of Rights*, S.O. 1993, c. 28, for leave to appeal the decision of the Director, Ministry of the Environment, under section 9 of the *Environmental Protection* Act, in issuing amended Certificate of Approval No. 3479-6RKVHX, dated December 21, 2006, to Lafarge Canada Inc., to burn alternative fuels at the cement manufacturing facility at Lot 5 and 6, Concession 1, Loyalist Township in the County of Lennox and Addington, with EBR Registry Number: IA04E0464;

AND IN THE MATTER OF an application by the Loyalist Environmental Coalition as represented by Martin J. Hauschild and William Kelley Hineman; Lake Ontario Waterkeeper and Gordon Downie; and Gordon Downie, Gordon Sinclair, Robert Baker, Paul Langlois and John Fay, pursuant to section 38 of the *Environmental Bill of Rights*, S.O. 1993, c. 28, for leave to appeal the decision of the Director, Ministry of the Environment, under section 39 of the *Environmental Protection* Act, in issuing provisional Certificate of Approval No. 8901-6R8HYF, dated December 21, 2006, to Lafarge Canada Inc., for the operation of a waste disposal site at Lot 3 and 4, Concession Broken Front, Loyalist Township in the County of Lennox and Addington, with EBR Registry Number: IA03E1902.

REPLY OF

LOYALIST ENVIRONMENTAL COALITION AS REPRESENTED BY MARTIN J. HAUSCHILD AND WILLIAM KELLEY HINEMAN; LAKE ONTARIO WATERKEEPER AND GORDON DOWNIE; AND GORDON DOWNIE, GORDON SINCLAIR, ROBERT BAKER, PAUL LANGLOIS AND JOHN FAY

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I. INTRODUCTION

- 1. Pursuant to Rule 46 of the Rules of Practice of the Environmental Review Tribunal ("Tribunal") this is the Reply filed jointly by the Loyalist Environmental Coalition as represented by Martin J. Hauschild and William Kelley Hineman (collectively "LEC"), Lake Ontario Waterkeeper ("LOW") and Gordon Downie ("Downie"), and Gordon Downie, Gordon Sinclair, Robert Baker, Paul Langlois and John Fay (collectively the "Landowners"), hereinafter collectively referred to as the Applicants, through their respective solicitors, to the Responses dated February 5, 2007 by Lafarge Canada Inc. ("Lafarge") and the section 9 Director ("Director Low") and section 39 Director ("Director Gebrezghi"), Ontario Ministry of the Environment ("MOE") in respect of the Application for Leave to Appeal filed by the Applicants with the Tribunal on January 5, 2007.
- 2. The Applicants submit that Lafarge and Directors Low and Gebrezghi ("Directors") have not provided the Tribunal with any persuasive basis for rejecting their Application for Leave to Appeal pursuant to section 41 of the *Environmental Bill of Rights*, 1993 ("EBR"). Accordingly, based on the admissions in the Responses of Lafarge and the Directors, the evidence and arguments contained in the Application for Leave to Appeal, and in this Reply, it remains the position of the Applicants that with respect to the decisions of the Directors to issue the section 9 and section 39 Certificates of Approval under the *Environmental Protection Act* ("EPA"), it appears that: (1) there is good reason to believe the decisions of the Directors were unreasonable in that no reasonable person, having regard to the relevant law and to any government policies developed to guide decisions of that kind, could have made the decisions; and (2) the decisions could result in significant harm to the environment.

II. REPLY TO RESPONSES OF LAFARGE AND DIRECTORS, ONTARIO MINISTRY OF THE ENVIRONMENT

- 3. With respect to the two issues identified in the Application for Leave to Appeal the Applicants state:
 - The Responses of both Lafarge and the Directors concede that the Applicants have standing to seek leave to appeal under section 38 of the *EBR*; and
 - The Responses of both Lafarge and the Directors confirm why the Applicants meet the test for leave to appeal under section 41 of the *EBR*.
- 4. Accordingly, the Applicants submit that they meet the requirements for the various Orders requested in the Leave to Appeal Application and Part IV of this Reply, below.

A. Responses of Lafarge and Directors Concede Applicants Meet Test for Standing to Seek Leave to Appeal

5. The Response of the Directors does not dispute that the Applicants have standing under section 38 of the *EBR* to seek leave to appeal in this matter.

Response Reference: Ontario Ministry of the Environment, Directors' Submissions in Response to the Applications for Leave to Appeal, February 2, 2007, page 2, para. 6; page 19, para. 58 [hereinafter Directors' Response].

6. The Response of Lafarge is silent on the issue of the standing of the Applicants under section 38 of the *EBR* to seek leave to appeal in this matter.

Response Reference: Lafarge Canada Inc., Responding Submissions, Volume 1, February 2007 [hereinafter Lafarge Response, Vol. 1].

7. Accordingly, the Applicants submit that the Directors and Lafarge concede that the Applicants meet the test for standing to seek leave to appeal under section 38 of the *EBR* with respect to this matter.

B. Responses of Lafarge and Directors Confirm Why Applicants Meet Test for Leave to Appeal

1. Standard of Proof Under Section 41 of the Environmental Bill of Rights

8. The Response of the Directors contends that in recent cases (i.e. *Simpson*, *County of Grey*, etc.), the Tribunal has misinterpreted and misapplied the leave test under section 41 of the *EBR*. In particular, the Directors claim that the Tribunal's recent decisions "ignore the purpose of the EBR and the regulatory scheme established in Ontario in respect of the environment." The Applicants submit that the MOE's submissions on this point of law are completely without merit and should be rejected in their entirety by this Tribunal for the reasons discussed below.

Response Reference: Directors' Response, page 21, para. 67.

9. The Response of the Directors claims that the appropriate standard of proof at the EBR leave stage, is the traditional civil standard of "balance of probabilities." In contrast, the Lafarge Response correctly acknowledges that the applicable standard of proof "is less stringent than 'a balance of probabilities'." In support of its position, the Directors rely upon *Hunter*, the very first case decided under the *EBR* leave test. However, the Applicants note that *Hunter* was authored over a decade ago by former Chair John Swaigen, who subsequently repudiated his finding regarding the standard of proof in *Residents Against Company Pollution*, where he adopted the holding of Member Jackson in *Barker*, *viz.*, that a lower standard of proof (i.e. *prima facie* case) is all that is required at the *EBR* leave stage.

Response Reference: Directors' Response, page 22, para. 72; page 24, para. 81; Lafarge Response, Vol. 1, page 13, para. 40.

Book of References for Leave to Appeal Application: **Tab 40**, *Re Residents Against Company Pollution Inc.* (1996), 20 C.E.L.R. (N.S.) 97 (Ont. Environmental App. Bd.), para.49-51.

10. The Lafarge Response makes the remarkable claim that the section 41 leave test should be the same test used by appellate courts when deciding whether or not civil jury awards should be set aside. Lafarge's submissions reproduce this civil test (as articulated in *Burlie v. Chesson*), but LaFarge provides no authority to support its view that section 41 of the *EBR* should be interpreted in the same manner. Moreover, Lafarge's suggested interpretation inserts new language (i.e. "so plainly unreasonable") and concepts (i.e. "weight of evidence") not actually found in section 41 of the *EBR*, and should therefore be rejected by the Tribunal.

Response Reference: LaFarge Response, Vol. 1, page 13, paras. 35-38.

11. The Response of the Directors further suggests that *EBR* appeals were intended to be an "exceptional remedy for those few cases where the regulator has failed in its public trust," and should not be used as a "general opportunity for members of the public to second guess decisions made by the government." A similar argument is made by Lafarge that *EBR* appeals should be confined to situations "of real unfairness or bungling" where "regulators have not properly done their jobs." Assuming (without deciding) that these are, in fact, the correct criteria to be considered at the *EBR* leave stage, the Applicants submit that the impugned decisions in this case clearly fall into the "exceptional" category for the reasons set out in the Application for Leave to Appeal and in this Reply.

Response Reference: Directors' Response, page 22, para. 71; LaFarge Response, Vol. 1, page 12, para. 32.

12. Moreover, the Applicants submit that there is nothing in the legislative history or statutory objectives of the *EBR* that supports the narrow view of *EBR* appeals being advocated by the Directors and Lafarge. When interpreting and applying the section 41 leave test, the Tribunal should undertake "modern purposive analysis" by considering the legislative purposes of the *EBR*, and by giving section 41 an interpretation which best achieves those purposes. Among other things, the stated purposes of the *EBR* include protecting the environment, facilitating public participation, and increasing governmental accountability for its environmental decisions.

Reply Reference: **Tab 1,** Sullivan and Driedger on the Construction of Statutes (Butterworths, 2002), pages 197-201; **Tab 2**, Environmental Bill of Rights, 1993, S.O. 1993, c. 28, s. 2.

13. The Applicants submit that these purposes are best achieved by upholding the interpretation of section 41 reflected in *Simpson* and other recent cases, and by granting leave to appeal whenever it appears that the impugned decision was unreasonable and could result in significant environmental harm. Conversely, the narrow interpretation of

section 41 advocated by the Directors and Lafarge is inconsistent with the purposes of the *EBR*, and should be rejected accordingly by the Tribunal.

14. It is further submitted that both the Responses of the Directors and Lafarge fundamentally misconstrue the nature and extent of the evidentiary onus upon the Applicants at this early stage of the proceedings. For example, both the Directors' and Lafarge Responses claim that the Applicants have adduced "conjecture" rather than "hard data", or have presented "no or insufficient evidence." These claims are manifestly untrue. The Applicants have tendered considerable documentary and opinion evidence from a variety of sources, including MOE records and experts retained by the Applicants.

Response Reference: Directors' Response, page 2, para. 7; Lafarge Response, Vol. 1, page 10, para. 24.

- 15. In addition, it must be noted that Lafarge's "alternative fuels" project itself has not been implemented to date. Therefore, it is impossible to obtain actual "hard data" from this non-existent project, which may (or may not) be implemented until some unknown date in the future. While there is an existing cement facility at Bath, it has not yet been modified to burn alternative fuels, such materials have not yet been stockpiled on-site, and burning of alternative fuels has not yet been commenced by Lafarge. Simply put, the Applicants cannot collect empirical data in the field from a project that merely exists on paper at the present time. Of necessity, then, the Applicants' focus is upon: (a) the completeness and reliability of the supporting documentation prepared by Lafarge's consultants and/or relied upon by the Directors (i.e. airshed modelling exercises); and (b) the adequacy of the approval conditions that are predicted to be effective in protecting the environment and human health. Where information is available about impacts from the existing facility (i.e. the CKD landfill), that information has been incorporated into the Application for Leave to Appeal.
- 16. Moreover, there is nothing in the section 41 leave test that requires proof of <u>actual</u> environmental harm in order to obtain leave to appeal. To the contrary, the legislative language merely requires a demonstration that the impugned decision "could" result in significant environmental harm. The Applicants therefore submit that they have properly discharged their evidentiary burden at this early stage of these proceedings.
- 17. In summary, the Applicants submit that the Tribunal's current approach to the section 41 leave test, as summarized in *Simpson* and other recent cases, is correct in law and consistent with the purposes of the *EBR*. Moreover, the Applicants submit that *Hunter* was incorrectly decided on the issue of standard of proof, and that this decision is not binding on the Tribunal Member(s) adjudicating this Application for Leave to Appeal. Put simply, despite the attempt of the Directors to re-litigate this point of law in this case, there is no compelling legal or public policy reason to overrule *Simpson* and return to the older (and now discredited) *Hunter* approach to the *EBR* leave test.
- 18. Thus, the real question in this case is whether it appears that the Directors' decisions were unreasonable and could result in significant environmental harm. For the reasons set out in the Application for Leave to Appeal and in this Reply, the Applicants

submit that this question should be answered in the affirmative, and that leave at large to appeal both approvals should be granted to the Applicants.

- 2. Responses of Lafarge and Directors Confirm Why it Appears There is Good Reason to Believe Decisions of Directors to Issue Lafarge Certificates of Approval Are Unreasonable
 - a. Contrary to Responses of Lafarge and Directors Ontario Air Pollution Control Regulations and Guidelines Deficient and Not Corrected by Decision of Director to Issue Section 9 Certificate of Approval
- 19. The Responses of Lafarge and the Directors in opposition to granting Leave to Appeal to the Applicants with respect to the section 9 Certificate of Approval rely heavily upon not only the contents of the approval itself, but also on anticipated Lafarge compliance with three other regulatory requirements. These requirements are: (1) the point of impingement ("POI") standards contained in O. Reg. 419/05; (2) the emission reduction obligations imposed on Lafarge with respect to nitrogen oxides (NOx) and sulphur dioxide (SO2) contained in O. Reg. 194/05; and (3) the air emission limits contained in MOE Guideline A-7 ("Guideline A-7") that have been incorporated by reference into the section 9 approval.
- 20. The Response of the Directors, for example, states that the Lafarge section 9 application for approval was required to comply with, and does comply with, O. Reg. 419/05.

Response Reference: Directors' Response, page 5, paras. 25-26; page 28, para. 109; page 33, para. 137; Ontario Ministry of the Environment, Directors' Book of Documents - Vol. 1, **Tab 3**, Affidavit of Richard Lalonde, page 4, para. 10; pages 16-17, paras. 42-46 [hereinafter Directors' Documents - Vol. 1]

21. The Response of the Directors also states that applicants for section 9 approvals are expected to demonstrate that the proposal would be capable of compliance with applicable MOE regulations. The Directors' Response refers to MOE responses posted on the *EBR* registry that state in part that O. Reg. 194/05, which sets emission limits for NOx and SO2, requires the Lafarge facility to make reductions of emissions of these two substances in future.

Response Reference: Directors' Documents - Vol. 1, **Tab 4**, Affidavit of Director Low, page 3, para. 7; and **Tab 3**, Affidavit of Richard Lalonde, page 15, para. 39 (referring to Applicants' Book of References for Leave to Appeal Application: **Tab 22**, Ontario Ministry of the Environment, Summary of Public Comments Received Relating to *EBR* Registry Numbers IA03E1902 and IA04E0464, December 21, 2006, page 16).

22. The Response of the Directors states further that as a result of conditions imposed on the section 9 approval, Lafarge also must comply with Guideline A-7.

Response Reference: Directors' Response, page 15, paras. 48-49; and Directors' Documents - Vol. 1, **Tab 3**, Affidavit of Richard Lalonde, page 4, para. 10; pages 17-19, paras. 51-58.

23. The Response of Lafarge states that modelling reports prepared for the company "predict that all applicable air standards will be met..." The Lafarge Response states further that the section 9 air approval requires adoption of new strict emission standards based on Guideline A-7.

Response Reference: Lafarge Response, Vol. 1, page 17, paras. 52-53; page 25, para. 87.

- 24. However, for the reasons set out below, the Applicants say that reliance by Lafarge and the Directors on these three regulatory requirements as a basis for refusing to grant Leave to Appeal to the Applicants is misplaced, even if one assumes that Lafarge could comply with these requirements. The record is clear that each of these regulatory requirements contains substantive gaps and deficiencies well known to Director Low and that should have been well known to Lafarge. Accordingly, it was incumbent on Director Low, if he was going to issue an air approval to Lafarge, to impose additional site-specific obligations on the company in order to make up for the recognized gaps and deficiencies in each of the three regulatory requirements. Unfortunately, Director Low, in issuing the section 9 approval to Lafarge, failed to fill these gaps or correct these deficiencies, which are set out more fully below.
- 25. In any event, this Tribunal, otherwise constituted, has held that a proponent's predicted compliance with regulatory standards is not determinative of an *EBR* application for leave to appeal. Moreover, in the instant case, there is good reason to doubt that the proposed monitoring regime for this project will be capable of detecting whether LaFarge will, in fact, be in compliance with all applicable regulatory requirements, as described below.

Book of References for Leave to Appeal Application: **Tab 37**, *Simpson v. Ontario (Director, Ministry of the Environment)* (2005), 18 C.E.L.R. (3d) 123, 131, paras. 26-28 (Ont. Environmental Review Trib.).

i. Deficiencies in O. Reg. 419/05 Left Uncorrected by Decision of Director to Issue Section 9 Certificate of Approval

(A) Overview

26. In November 2005, O. Reg. 419/05 came into force, replacing Regulation 346 as Ontario's primary air pollution control regulation. Regulation 346 required facility owners to predict (for each contaminant) how diluted the emissions from their facility will be once they reach either an off-site location or the nearest resident, and to compare the modelled concentration against a list of POI standards in the regulation. The prediction was done by means of a mathematical model called an air dispersion model.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, page 76; **Tab 4**, Environmental Commissioner of Ontario, 2005/2006 Annual Report, page 89.

27. MOE and the regulated community had recognized Regulation 346 as providing a weak regulatory framework for controlling industrial air emissions. The Regulation 346 framework relied on outdated air standards (the POI list in Regulation 346) and on seriously outdated dispersion models that were poor assessments of how emissions behave in real life situations. Depending on conditions, the old models could underpredict concentrations of contaminants by two to 20 times, with the result that the environment was not always adequately protected.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, page 76; **Tab 4**, Environmental Commissioner of Ontario, 2005/2006 Annual Report, page 89; **Tab 5**, Office of the Provincial Auditor of Ontario, 2004 Annual Report, page 121.

- 28. The purpose of O. Reg. 419/05 is to manage local air emissions and to update the regulatory framework that had been in place in Ontario for more than 30 years. Three key improvements in O. Reg. 419/05 over the old Regulation 346 regime are:
 - A move to "effects-based" air standards, some of which are up to 100 times more stringent than previous standards;
 - More accurate dispersion models that can more realistically assess the concentrations of contaminants under a range of conditions; and
 - More detailed emission reporting to demonstrate compliance.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario 2005/2006 Annual Report Supplement, page 77; **Tab 4**, Environmental Commissioner of Ontario, 2005/2006 Annual Report, page 90.

29. Both Director Low and Lafarge rely upon the improvements contained in O. Reg. 419/05 and on the anticipated compliance by the company with the new regulatory regime based on the reports filed by Lafarge in support of its application for a section 9 Certificate of Approval. Therefore, according to both Director Low and Lafarge, there is no need for the Tribunal to grant Leave to Appeal to the Applicants because in their view the decision of the Directors to rely upon, and for Lafarge to comply with, O. Reg. 419/05 is not unreasonable.

Response Reference: Directors' Response, page 33, para. 135; page 58, para. 254; Lafarge Response, Vol. 1, page 17, paras. 52-53.

30. In the respectful submission of the Applicants, reliance by both Director Low and Lafarge on O. Reg. 419/05 is seriously misplaced. Notwithstanding the improvements to Ontario's air pollution control regulation brought in by the promulgation in November 2005 of O. Reg. 419/05, there are serious and well-recognized gaps and deficiencies in

this new regime. As the Environmental Commissioner of Ontario ("ECO") put it: "There are a number of important things the new regulatory framework does not do."

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario 2005/2006 Annual Report Supplement, page 83.

(B) Key Air Standards Still Missing

31. The ECO reported in his 2005/2006 Annual Report that as of November 2005, MOE had still not finalized air standards for a number of contaminants that MOE calls "Group 1 - high priority candidates, based in part on toxicities and quantities emitted. Technical background documents released by MOE in 2004 underscored the need to give these substances prompt attention. Contaminants on this list of un-finalized standards that are known to be emitted, or to have been emitted, by Lafarge at its Bath cement manufacturing facility include: chromium, mercury, dioxins and furans.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, page 81; **Tab 4**, Environmental Commissioner of Ontario, 2005/2006 Annual Report, page 92; **Tab 6**, Lafarge Canada Inc., Bath Cement Plant, 2001-2005 (data is from Lafarge annual information filings with Environment Canada under the National Pollutant Release Inventory pursuant to the requirements of the *Canadian Environmental Protection Act*).

32. As of December 21, 2006, the date the section 9 Certificate of Approval was issued to Lafarge, MOE still had not updated air standards for these contaminants.

Reply Reference: **Tab 7**, Ontario Ministry of the Environment, List of Updated Air Standards, (proposals and decisions on standards for 75 listed contaminants, none of which include decisions on chromium, mercury, dioxins or furans).

(C) Continued Reliance on Point of Impingement Approach

33. The O. Reg. 419/05 regime is still based on POI. Facilities must use the new dispersion models to predict contaminant concentrations at POI anywhere beyond their own property line. The ECO found that continued reliance on a POI approach means that while MOE has some control over short-term *concentrations* of contaminants (measured over minutes or hours), MOE is not directly controlling annual *loadings* of contaminants. According to the ECO, for some types of persistent contaminants that accumulate in the environment, such as mercury or certain organic toxic substances, the annual load to the environment is a parameter with a great deal of significance. Furthermore, the ECO reports that with regard to controlling cumulative loadings of persistent toxic substances over time, Environment Canada noted that MOE will never be able to assess or control cumulative loadings effectively until the POI approach is replaced.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, pages 78, 83; **Tab 4**, Environmental Commissioner of Ontario, 2005/2006 Annual Report, pages 94, 96 (emphasis in original).

(D) Failure to Address Background Concentrations, Cumulative or Synergistic Effects, or Persistent or Bioaccumulative Contaminants That May Impact on Environment or Health

34. The ECO reports that O. Reg. 419/05 does not address the impacts that mixes of various contaminants may have on environment or health. Moreover, the ECO also reports that MOE has itself previously acknowledged that O. Reg. 419/05 needs more work in that: "The Regulation does not explicitly deal with background concentrations, cumulative or synergistic effects, persistence and bioaccumulation of contaminants.' "According to the ECO: "These are thorny policy issues as well as complex science challenges, but they cannot be ignored if the ministry's goal is truly as stated, 'cleaner, healthier air, healthier communities and healthier Ontarians.' "

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, pages 83, 87; **Tab 4**, Environmental Commissioner of Ontario, 2005/2006 Annual Report, pages 94-95.

35. These observations about the deficiencies of O. Reg. 419/05, also were made by experts for the Applicants concerning weaknesses in the section 9 Certificate of Approval issued to Lafarge. The approval lacked requirements with respect to establishing baseline air quality in the Bath area; addressing cumulative effects; and related concerns.

Book of References for Leave to Appeal Application: **Tab 28**, Dr. Brian McCarry, *Review of Fugitive Dust and Odour Issues Pertaining to the Lafarge Canada Inc. Site near Bath, Ontario*, January 2007, (the "McCarry Report").

(E) Failure to Address Odour Impacts

36. The ECO report further pointed out that while MOE had intended to address odour impacts in O. Reg. 419/05, the MOE heard many concerns from industry that this approach was too stringent. Consequently, MOE decided not to include any odour-based air standards or 10-minute odour averages in the new rules. Instead, MOE proposed to develop an Odour Policy Framework, which as of February 2006 remained at the proposal stage.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, page 83.

- 37. As of December 21, 2006, the date the section 9 Certificate of Approval was issued to Lafarge, MOE still had not implemented even this policy.
- 38. These observations about the deficiencies of O. Reg. 419/05 with respect to odour also were made by experts for the Applicants concerning weaknesses in the section 9 Certificate of Approval issued to Lafarge.

Book of References for Leave to Appeal Application: Tab 28, McCarry Report.

(F) Summary

- 39. Arising from the foregoing, the Applicants submit that the Responses of Lafarge and Director Low in relying on compliance with O. Reg. 419/05 miss the mark. The failure of Director Low to correct in the section 9 Certificate of Approval issued to Lafarge the above-recognized gaps and deficiencies contained in O. Reg. 419/05 appears unreasonable in the circumstances.
- 40. The Applicants' concerns in this regard are amplified by the MOE's apparent unwillingness to undertake its own systematic or comprehensive air-monitoring program in the vicinity of the Bath facility. In particular, the Response of the Directors filed in this matter does not contain any commitments by MOE to either undertake its own air quality monitoring during the alternative fuels project, or to retain a qualified third-party contractor to carry out such work on behalf of the MOE. Despite the fact the MOE is touting Lafarge's alternative fuels proposal as a project with province-wide implications (i.e. using the results to determine if tire-burning should be permitted elsewhere in Ontario), it appears that no independent air quality monitoring will be conducted by or for the MOE.
- 41. At best, the MOE may respond to future air quality complaints by local residents on a case-by-case basis, but given the transitory nature of air impacts (especially odour), these sporadic *ex post facto* responses by MOE are not an acceptable substitute for comprehensive monitoring by the regulatory agency. The net result is that the MOE like the Applicants and other stakeholders will be totally dependent on the accuracy, reliability, and veracity of the air monitoring data gathered by the proponent itself. However, given the substantive deficiencies of the monitoring requirements in the section 9 approval, this approach by MOE is inherently unreasonable and fundamentally unacceptable in the circumstances.

ii. Deficiencies in O. Reg. 194/05 Left Uncorrected by Decision of Director to Issue Section 9 Certificate of Approval

42. In their Response the Directors also point to the existence of O. Reg. 194/05 as part of the regulatory framework within which the section 9 approval must operate. This regulation imposes reductions over time on Lafarge air emissions of NOx and SO2 from the company's cement manufacturing facility at Bath, as part of the province's emissions trading program for several industrial sectors, such as the cement sector, that emit these two contaminants. According to the Directors, there is no need for the Tribunal to grant Leave to Appeal to the Applicants because in their view the decisions of the Directors to rely upon, and for Lafarge to comply with, regulations, which would include O. Reg. 194/05, is not unreasonable.

Response Reference: Directors' Documents - Vol. 1, **Tab 4**, Affidavit of Director Low, page 3, para. 7; and **Tab 3**, Affidavit of Richard Lalonde, page 15, para. 39 (referring to Applicants' Book of References for Leave to Appeal Application: **Tab 22**, Ontario Ministry of the Environment, Summary of Public Comments Received Relating to *EBR* Registry Numbers IA03E1902 and IA04E0464, December 21, 2006, page 16); Directors' Response, page 33, para. 135; page 58, para. 254.

43. In the respectful submission of the Applicants, reliance by the Directors on a regulation such as O. Reg. 194/05 also is seriously misplaced. This regulation contains serious and well-recognized gaps and deficiencies as set out below.

(A) Overview

44. Background studies prepared by MOE as lead-up to the introduction of O. Reg. 194/05, identified the cement-manufacturing sector, which includes the Lafarge Bath plant, as a significant contributor to both industrial NOx and SO2 emissions arising from the production of clinker. Over the period 1990 to 2000, as clinker production increased, so did NOx and SO2 emissions. The cement industry also anticipated a 21 per cent increase in clinker production for the period 2000 to 2010. The Lafarge Plant at Bath is itself identified by MOE as having the capacity to produce the third highest level of clinker on an annual basis in Ontario.

Reply Reference: **Tab 8**, Ontario Ministry of the Environment, Discussion Paper on Ontario's Clean Air Plan for Industry: Developing NOx and SO2 Emission Limits, December 2002, pages 23, 34; **Tab 9**, Ontario Ministry of the Environment, Appendix II: Ontario's Industry Emissions Reduction Plan: Abatement Cost Report for Nitrogen Oxides (NOx) and Sulphur Dioxide (SO2), June 2004, pages 14 (1072 kilotonnes of annual clinker capacity at Lafarge Bath plant), 17 (clinker production increases).

45. Accordingly, with O. Reg. 194/05 MOE sought to reduce NOx and SO2 emissions from this industry sector (as well as several others) by establishing emission limits for these contaminants in conjunction with emissions trading to achieve these limits.

Reply Reference: **Tab 4**, Environmental Commissioner of Ontario, 2005/2006 Annual Report, page 97.

46. However, the ECO has stated that he "remains concerned about the many unaddressed shortcomings of" this regime.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, page 96.

(B) Lack of Consistency With MOE Statement of Environmental Values

47. The ECO has stated that it is debatable whether the MOE decision to promulgate O. Reg. 194/05 is completely consistent with MOE's Statement of Environmental Values ("SEV"). The SEV states that MOE will consider cumulative effects on the environment.

However, according to the ECO, O. Reg. 194/05 fails to consider the potential for local airshed impacts that might be concentrated as a result of the lack of provisions in the regulation to prevent such local hotspots. Furthermore, while the SEV also commits MOE to the precautionary approach, the ECO stated that one could argue that the weak caps on emissions contained in O. Reg. 194/05 fail to promote this approach.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, page 96.

(C) Lengthy Period Over Which Emission Caps Hold Emissions Close to Current Levels

48. The ECO also expressed concern about emissions caps established for various industry sectors, including the cement industry sector. The ECO noted that for many of the sectors included in O. Reg. 194/05, emission caps appear to hold emissions close to current levels over the next 10+ years. A review of tables in O. Reg. 194/05 pertaining to the cement industry sector generally, contained in the ECO report, and of tables in O. Reg. 194/05 pertaining to the Lafarge Bath plant in particular, confirm this ECO concern. According to the ECO, given the problematic impacts of NOx and SO2 emissions on the environment and human health, more aggressive steps must be taken to reduce these emissions from Ontario's industrial sector.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, pages 97-100; **Tab 10**, O. Reg. 194/05, Tables 1, 4, 6 and 9.

(D) Lack of Penalties

49. The ECO also raised concerns regarding the lack of penalties should capped industrial sectors fail to comply with the requirements of O. Reg. 194/05. The ECO was of the view that the regulation should contain penalties such as fines or the docking of future emission allowances as measures to ensure capped industries, such as the cement sector, of which the Lafarge Bath plant is a part, achieve the required emission reductions.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, page 97.

(E) Summary

50. Arising from the foregoing, the Applicants submit that the Responses of the Directors, in relying on Lafarge compliance with a regulation such as O. Reg. 194/05, miss the mark. The failure of Director Low to correct in the section 9 Certificate of Approval issued to Lafarge the above-recognized gaps and deficiencies contained in O. Reg. 194/05 appears unreasonable in the circumstances.

iii. Deficiencies in Guideline A-7 Left Uncorrected by Decision of Director to Issue Section 9 Certificate of Approval

51. In their respective Responses, both Lafarge and the Directors also point to the air emission limits of Guideline A-7 as part of the regulatory framework within which the section 9 approval must operate. Therefore, according to the Directors and Lafarge, there is no need for the Tribunal to grant Leave to Appeal to the Applicants because, in their view, the decision of Director Low to rely upon, and for Lafarge to comply with, Guideline A-7 is not unreasonable.

Response Reference: Directors' Documents - Vol. 1, **Tab 3**, Affidavit of Richard Lalonde, page 4, para. 10; Directors' Response, page 58, para. 254.

52. Indeed, in general the ECO endorses MOE reliance on Guideline A-7 because it sets emission limits measured at the stack (not at the property line) for certain persistent contaminants like cadmium, lead, and mercury and also requires that stack emissions be tested annually. With good data on stack concentrations, according to the ECO, annual loadings for such contaminants can be calculated.

Reply Reference: **Tab 3**, Environmental Commissioner of Ontario, 2005/2006 Annual Report Supplement, page 83.

53. However, as noted in the report prepared for the Applicants by Dr. Neil Carman there are major concerns about whether the terms and conditions in the section 9 Certificate of Approval, many of which incorporate by reference Guideline A-7, are adequate. The Responses of Lafarge and Director Low are not persuasive that compliance with Guideline A-7 will produce the information needed during the test burn period or operationally thereafter for an informed judgment to be made on the wisdom of incineration of alternative fuels at the Lafarge Bath cement manufacturing facility.

Book of References for Leave to Appeal Application: **Tab 29**, Dr. Neil J Carman, *Independent Review of Stack Emissions and Odour Issues Relevant to the Lafarge Canada Inc. Site Bath, Ontario*, January 2007, (the "Carman Report").

54. Moreover, the ability to calculate loadings, even if it were not undermined by the gaps in Guideline A-7 incorporated by reference into the Section 9 Certificate of Approval, is not the same thing as placing a cap on total loadings of the contaminants identified. MOE has experience placing a cap on annual total loadings of certain contaminants by regulation. Neither Guideline A-7, nor the section 9 Certificate of Approval, imposes a cap on annual total loadings of the contaminants identified from the Lafarge cement manufacturing facility at Bath.

Reply Reference: **Tab 11**, Ontario Power Generation Inc., O. Reg. 153/99 (cap on total annual loadings of NOx and SO2 expressed in kilotonnes).

- 55. Accordingly, the Applicants submit that the Responses of Lafarge and the Directors in relying on compliance with Guideline A-7 miss the mark. The failure of Director Low to correct in the section 9 Certificate of Approval the gaps and deficiencies in Guideline A-7 identified above appears unreasonable in the circumstances.
- 56. In addition, the Applicants note that the Response of Lafarge requests that the Tribunal disregard the opinion evidence of Dr. Carman on the grounds that he is not "independent" and has represented advocacy groups in other alternative fuel cases in North America. The Applicants submit that the Tribunal should give no effect to this unwarranted attack upon Dr. Carman and his evidence in this case. There is no legal or other reason for the Tribunal to disregard the evidence of Dr. Carman, just as there is no reason to disregard the evidence of the Lafarge experts merely because they have a history of representing proponent interests, or to disregard the evidence of the MOE's experts merely because they are employed by MOE to represent its interests.

Response Reference: Lafarge Response, Vol. 1, pages 11 to 12, para. 30.

Reply Reference: Tab 12, Reply of Dr. Neil Carman, February 7, 2007.

b. Contrary to the Response of the Directors Section 9 Certificate of Approval Issued to Lafarge Threatens to Cause Non-Compliance With O. Reg. 194/05

57. The Directors state that the Applicants have provided no substantial evidence that the section 9 Certificate of Approval issued to Lafarge could result in increased air emissions.

Response Reference: Directors' Response, page 37, para. 156.

58. However, the record shows that MOE recognized that emissions of at least SO2 from the cement manufacturing facility at Bath may increase, not decrease, over time, as a direct result of the issuance of the section 9 approval to Lafarge to burn alternative fuels.

Book of References for Leave to Appeal Application: **Tab 47**, Memorandum dated November 3, 2004 to Dave Bell, MOE Project Officer from Eric Loi, MOE Air Policy and Climate Change Branch.

- 59. Accordingly, the Applicants submit that the issuance of the section 9 Certificate of Approval is per se unreasonable and may be unlawful to the extent it may cause Lafarge to not be in compliance with its SO2 emission reduction obligations over time under O. Reg. 194/05.
- c. Contrary to Responses of Lafarge and Directors Section 9 Certificate of Approval Issued to Lafarge is Not as Stringent as Guideline A-7 in Key Respects

60. Both Lafarge and the Directors also state that Lafarge will have to meet strict air emission standards based on Guideline A-7.

Response Reference: Directors' Documents - Vol. 1, **Tab 3**, Affidavit of Richard Lalonde, page 4, para. 10; Directors' Response, page 15, paras. 48-49; Lafarge Response, Vol. 1, page 25, para. 87.

61. However, the Applicants say Lafarge and MOE submissions on these points are wrong in at least two respects. First, the Lafarge section 9 certificate of approval is three times less stringent than Guideline A-7 with respect to particulate matter ("PM") limits. That is, the section 9 certificate does not incorporate the Guideline A-7 limit with respect to PM, but rather a limit three times higher. Second, the Lafarge section 9 certificate of approval appears less stringent than Guideline A-7 with respect to SO2 and NOx.

Book of References for Leave to Appeal Application: **Tab 4**, Ontario Ministry of the Environment, Amended Certificate of Approval (Air) Number 3479-6RKVHX, issued to Lafarge Canada Inc., Bath Cement Plant, December 21, 2006, page 35 [Schedule F - Cement Kiln Exhaust Stack Emission Limits for PM (50 mg/RM³), SO2 (550 ppm), and NOx (780 ppm calculated as the geometric average of 30 days of data from a continuous emission monitoring system)].

Response Reference: Ontario Ministry of the Environment, Directors' Book of Documents - Vol. 2, **Tab T**, Ontario Ministry of the Environment, Guideline A-7: Combustion and Air Pollution Requirements for New Municipal Waste Incinerators, February 2004, [Table 1 stack emission limits for PM (17 mg/RM³), SO2 (21 ppm), and NOx (110 ppm calculated as the arithmetic average of three stack tests conducted in accordance with standard methods, or as the geometric average of 24 hours of data from a continuous emission monitoring system)] [hereinafter Directors' Book of Documents - Vol. 2].

- 62. Accordingly, the Applicants submit that the issuance of the section 9 Certificate of Approval appears unreasonable to the extent it allows Lafarge to not be in compliance with the PM, SO₂, and NO_x limits of Guideline A-7.
- d. Contrary to the Response of Lafarge Issuance of Section 9 and 39 Certificates of Approval Failed to Take Into Account Concerns of Medical Officer of Health for Area Where Lafarge Bath Cement Plant Located
- 63. The Lafarge material implies that it is not relevant that the Acting Medical Officer of Health for Hastings and Prince Edward Counties expressed concerns about the Lafarge proposal to burn alternative fuels because the facility is not located in those counties. Indeed, Lafarge states that the Medical Officer of Health for the area where the Lafarge facility is located (Kingston, Frontenac, Lennox & Addington) did not support having the Lafarge proposal designated under the *Environmental Assessment Act* ("EAA") and "expressed no objections to the proposal."

Response Reference: Lafarge Response, Vol. 2: **Tab 2**, Affidavit of Robert Cumming, February 1, 2007, page 15, paras. 40-41; and **Tab 2c**, page 10.

64. To the contrary, both the Medical Officer of Health and the Board of Health for the area where the Lafarge facility is located (Kingston, Frontenac, Lennox & Addington)

did express concerns about the Lafarge proposal. Furthermore, they requested that the MOE refer the Lafarge proposal to the Tribunal for a hearing pursuant to section 32 of the *EPA*.

Reply Reference: **Tab 13**, Letter dated January 12, 2007 from Ian MacDonald Gemmill, Medical Officer of Health, Kingston, Frontenac, Lennox & Addinton Board of Health to Susan and Tim Quinton, enclosing copy of Board of Health Motion dated November 23, 2006.

65. Furthermore, the Medical Officer of Health for the area where the Lafarge facility is located indicated that: "The Board of Health could not have been clearer or more forceful to the Minister [the Hon. Laurel C. Broten, Minister of the Environment] in its support of the concerns of local citizens. That position has not changed, and is known to the Ministry, despite recent developments."

Reply Reference: **Tab 13**, Letter dated January 12, 2007 from Ian MacDonald Gemmill, Medical Officer of Health, Kingston, Frontenac, Lennox & Addington Board of Health to Susan and Tim Quinton, enclosing copy of Board of Health Motion dated November 23, 2006.

- 66. The failure of the Directors to heed the concerns of the Medical Officer of Health and the Board of Health for the area where the Lafarge facility is located is a further indication that the decisions appear unreasonable in the circumstances.
- e. Contrary to the Responses of Lafarge and Directors Issuance of the Section 9 and 39 Certificates of Approval Sets Back, or Circumvents, Statutorily Mandated Program on Waste Designated for Diversion, Not Burning, Under Ontario Law
- 67. Both Lafarge and the Directors state that the Applicants were wrong to suggest that the Lafarge proposal to burn tires at the Bath cement manufacturing facility would have the effect of undermining tire recycling measures. They say the approvals issued to Lafarge are not contrary to the *Waste Diversion Act* ("WDA"), which mandates that a waste diversion program cannot promote the burning of wastes designated for diversion, because the Lafarge proposal to burn tires is a private undertaking, not a program subject to the WDA. Lafarge and the Directors also state that the section 39 Certificate of Approval contains requirements restricting Lafarge from using recyclable tires or plastics in its process.

Response Reference: Lafarge Response, Vol. 1, pages 19-20, paras. 56-62; Lafarge Response, Vol. 2, **Tab 2**, Affidavit of Robert Cumming, pages 8-10, paras. 17-25, and **Tab 2c**, page 31; Directors' Response, page 37, para. 155; Directors' Documents - Vol. 1, **Tab 1**, Affidavit of Timothy Edwards, pages 8-9, paras. 18-22.

68. The Applicants submit that the responses of Lafarge and the Directors are themselves wrong in the following respects. First, section 25(2) of the WDA prohibits a waste diversion program developed under the WDA from promoting the burning of a designated waste. Second, used tires were identified as a designated waste by regulation under the WDA in 2003. Third, pursuant to this designation, the Minister of the Environment requested that Waste Diversion Ontario ("WDO") develop a waste

diversion program for used tires. Fourth, in September 2004 the WDO approved a Scrap Tire Diversion Program Plan, which included as part of a five-year stockpile abatement program, the possibility of burning tires as fuel. Fifth, in February 2005 the Cement Association of Canada, which includes Lafarge, in response to the WDO proposed Plan, repeated its earlier (2002) insistence on access to a long-term supply of tires to burn (10-15 years) and not just abatement of the existing 5-year stockpile recommended by WDO. Sixth, in April 2006 the Minister deferred finalization of the used tire program without providing reasons. Seventh, in December 2006, the Directors grant Lafarge an indefinite approval to burn tires that does not on its face prohibit the company from burning non-recyclable tires.

Reply Reference: **Tab 14**, *Waste Diversion Act*, 2002, S.O. 2002, c. 6, s. 25(2); **Tab 15**, O. Reg. 84/03; **Tab 16**, Waste Diversion Ontario, *Used Tires*, www.wdo.ca; **Tab 17**, Ontario Tire Stewardship, *Scrap Tire Diversion Program Plan*, prepared for Waste Diversion Ontario, September 2004, page 31; **Tab 18**, Letter of February 15, 2005 from Cement Association of Canada to Amanda Mulkins, Waste Management Policy Branch, Ontario Ministry of the Environment; **Tab 19**, Legislative Assembly of Ontario, Select Committee on Alternative Fuel Sources, Testimony of Cement Association of Canada, February 20, 2002, pages S-547 to S-550; **Tab 20**, Hon. Laurel C. Broten, Minister of the Environment, Notes for Remarks at the Waste Diversion Ontario Annual General Meeting, April 20, 2006.

Reference: Leave to Appeal Application, pages 41-43, paragraphs 110, 111, 117.

69. The Applicants submit that from the above chain of events the Tribunal should infer the following. First, there is a 5-year stockpile of used tires in the province that MOE would like to get rid of but it could not sanction tire-burning in a tire diversion plan, because it would be contrary to the WDA. Second, there is no provincial program to address used tires notwithstanding that they have been designated wastes under the WDA since 2003 and, therefore, should be the subject of a program by now. Third, with its December 2006 approvals from the Directors, Lafarge is now in a position to burn used tires. As a private venture, Lafarge's activity is not constrained by the restrictions on burning designated wastes that would make such action unlawful under the WDA if it were part of a provincial program. Fourth, even if the approval of such a private venture is not in violation of the WDA it is, as the Applicants stated in our Leave to Appeal Application, not consistent with the MOE's SEV obligations to promote resource conservation and the diversion of materials from disposal. Accordingly, the Applicants submit that the Tribunal should find that at a minimum the approvals issued to Lafarge are premature because they pre-empt development of a better solution under the WDA. Furthermore, the Applicants submit that the Tribunal should find that this chain of events leading to the issuance of the approvals to Lafarge constitute indicia of both a failure to promote resource conservation otherwise required by the MOE SEV and the unreasonableness of the decision of the Directors.

f. Responses of Lafarge and Directors Are Not Persuasive on Other Indicia of Unreasonableness Identified by the Applicants Regarding Decisions of Directors

i. Ecosystem Approach

70. The Responses of the Directors and Lafarge state that the decisions of the Directors to issue the approvals were consistent with the ecosystem approach identified under the MOE SEV. Both respondents rely on the Lafarge emissions being within the allowable limits of O. Reg. 419/05. Lafarge also relies on the conditions imposed. In addition, the company relies on *Residents* for the proposition that where the combined effect of existing and potential pollution is not either likely to exceed standards or likely to create an adverse effect then there is no reason for the Directors to refuse to issue an approval.

Response Reference: Directors' Response, pages 33-34, paras. 137-143; Lafarge Response, Vol. 1, pages 15-16, paras. 46-50.

- 71. The Applicants refer the Tribunal to the above concerns expressed by the ECO with the adequacy of Ontario's air emission regulations. The views of the ECO on these matters, as the officer appointed by the Legislative Assembly of Ontario to oversee and report upon the *EBR* and all other relevant and applicable environmental laws in the province, should be accorded great weight in the circumstances of this case. The Applicants submit that in this case compliance with O. Reg. 419/05, given the above deficiencies identified by the ECO with that regulation, can provide neither the Directors nor Lafarge with any comfort. More than O. Reg. 419/05 was needed, but was not provided by the Directors, in the section 9 approval.
- 72. Furthermore, there are existing environmental problems at the Lafarge plant as noted in the Leave to Appeal Application and in this Reply (see Part II.B.3.f.i, below) some of which have been quantified, others of which have not. When existing problems are combined with the problems in O. Reg. 419/05 itself noted by the ECO, the Applicants say that Lafarge can take no comfort from the ratio in *Residents* noted above.
- 73. Finally, the Applicants should place little to no weight on the Lafarge Response to the extent it relies on the affidavit of Dr. John Richards as summarized in Part II.B.3.f.ii, below, and the Cantox report, summarized in Part II.B.3.e, below.

ii. Precautionary Approach

74. The Response of the Directors suggests that reliance by the Applicants on the precautionary approach is misplaced because it would lead to the banning altogether of a process or proposed action such as the Lafarge proposal in circumstances of uncertainty. The Directors say that in any event they acted in a manner consistent with the precautionary approach in issuing decisions to approve the Lafarge proposal on a trial basis.

Response Reference: Directors' Response, page 35, paras. 147-148.

75. The Lafarge Response relies on the modelling, which the company says shows compliance with all applicable air standards, monitoring, and follow-up conditions in the approvals as evidence that the approach of the Directors was precautionary. Lafarge also relies upon *Simpson* for the same proposition.

Response Reference: Lafarge Response, Vol. 1, pages 16-18, paras. 51-55.

The Applicants submit that the Directors' and Lafarge have again misconstrued 76. and mis-characterized the position of the Applicants. The question of whether to allow Lafarge to permanently burn alternative fuels at the Bath cement plant is, of course, predicated on what the test burns will show. However, if the test burn conditions of approval are deficient to the point of being incapable of providing the correct answers, as suggested in the Leave to Appeal Application, then any decision to allow permanent burning of alternative fuels based on flawed test burn results will be similarly deficient. By any yardstick, such a decision is not precautionary. Where decisions are not precautionary, they offend the SEV. A decision that offends the SEV would appear, by definition, to be unreasonable. Furthermore, the Applicants have noted above the concerns of the ECO with the adequacy of Ontario's air emission regulations. The views of the ECO on these matters, as the officer appointed by the Legislative Assembly of Ontario to oversee and report upon the EBR and all other relevant and applicable environmental laws in the province, should be accorded great weight in the circumstances of this case.

iii. Public Participation

77. The Responses of both Lafarge and the Directors state that the decisions of the Directors fostered public participation. The Directors state that all technical documents submitted by Lafarge to MOE would have been available to the public upon request at MOE offices. Lafarge states further, relying on *Residents*, that the fact that the Director received and acted upon information without giving participants an opportunity to see or comment upon the information does not make the decision to approve unreasonable. Whether the decision is unreasonable depends on whether the additional information fails to address concerns raised by the public or raises concerns about whether an approval should be issued.

Response Reference: Directors' Response, page 37, paras. 157-159; Lafarge Response, Vol. 1, pages 20-21; paras. 63-73.

78. The position of the Directors appears to amount to "information that the Applicants did not know about was available on request." The Applicants say, the Directors have it wrong. The Directors knew about the interest of the Applicants in the Lafarge proposals because they had received no less than five separate submissions from the Applicants during the notice and comment period. Accordingly, it should have been incumbent on the Directors to notify the Applicants when the Directors received material documents from Lafarge, particularly documents that the Directors thought so important that they incorporated them by reference into the certificates of approval.

Reference: Leave to Appeal Application, pages 8-10, paras. 7-9; page 16, para. 30; page 14, para. 23; page 33. para. 75.

79. Furthermore, the decision in *Residents* goes on to state that:

"...it appears that the additional information received does not raise such concerns [i.e. does not fail to address concerns raised by the public or does not raise concerns about whether an approval should be issued], and that although the Director did not give the public adequate opportunity to see this material, she did take the public's concerns into account in making her decision. This is apparent from the unprecedented conditions placed in the C of A."

Book of References for Leave to Appeal Application: **Tab 40**, *Residents Against Company Pollution Inc.*, *Re* (1996), 20 C.E.L.R. (N.S.) 97, 147, para. 219 (Ont. Environmental App. Bd.).

80. As the Applicants set out in the Leave to Appeal Application, there are numerous problems with the Lafarge documents and the conditions associated with them. Accordingly, it is fair to say that this information both: (1) fails to address concerns raised by the public, and (2) raises concerns about whether an approval should be issued. Furthermore, there is no indication in the decision in *Residents* that the applicants in that case referred to the SEV requirement for MOE to foster public participation. The Applicants say that the failure of the Directors to notify and provide the Applicants with this additional information in connection with the Lafarge proposal manifestly did not foster public participation within the meaning of the SEV. The Applicants submit that the failure to do so is *per se* further evidence of unreasonableness in rendering the decisions.

iv. Common Law Rights of Landowners

81. The Responses of both Lafarge and the Directors contend that there will be no adverse legal impacts on the common law rights of the adjacent landowners as a result of the decisions of the Directors to issue the approvals to Lafarge. The Directors frame the issue as "there is no right to a hearing under the [EAA]," but any causes of action currently available to the landowners will continue to be available.

Response Reference: Lafarge Response, Vol. 1, pages 33-34, paras. 122-126; Directors' Response, pages 39-40, paras. 167-170.

82. In the respectful submission of the Applicants the responses of Lafarge and the Directors fundamentally misconstrue as well as mischaracterize what is at issue. The issue is not "do the landowners have a cause of action now or in future?" Nor is the issue "is there a right to a hearing under the *EAA*?" Rather the issue is, "as a result of the status of the landowners as adjacent property owners whose common law rights might be adversely impacted by the issuance of the approvals, should they have been afforded a hearing before such approvals were issued?" The Applicants say the answer should have been and is now "yes."

83. The Directors suggest that "it is trite law" that "validly enacted legislation is paramount to the common law." The Directors go so far as to say that the common law rights of the landowners are not even a "consideration."

Response Reference: Directors' Response, page 39, para. 167 and heading above para. 167.

84. However, the Applicants submit that it has always been a fundamental principle of administrative law that the common law in appropriate circumstances will fill the gaps in legislation that is either silent on or has been administratively interpreted to not grant a hearing. In the instant case, the Directors chose to deny an opportunity for hearing under the *EPA* (after the Minister chose to deny an opportunity for a hearing under the *EAA*). The Applicants say the decisions of the directors to issue approvals without a hearing afforded to the landowners, in light of all the circumstances, were unreasonable. Furthermore, the Tribunal pursuant to section 41 of the *EBR* can remedy that unreasonableness.

v. Local Airshed and Watershed Conditions

85. The Response of the Directors states that knowing something about existing baseline environmental conditions (air and water) is not a relevant consideration in the context of issuing approvals because of the "global approach of setting regulatory standards." Moreover, the Directors state that nothing under existing law requires a baseline determination of ambient air quality, monitoring for cumulative effects, or developing an air monitoring network.

Response Reference: Directors' Response, page 38, paras. 160-161.

86. In a similar vein the Lafarge Response states that monitoring data from Belleville and Kingston indicate that baseline air quality in the vicinity of Bath is generally good but is not, in any event, a relevant consideration in the context of issuing air approvals. Lafarge refers to *Residents* and states that if an approval does not result in exceedances of applicable standards then the Tribunal cannot consider issues of general air quality.

Response Reference: Lafarge Response, Vol. 1, pages 29-31, paras. 103-108.

87. The Applicants submit that both the Directors and Lafarge are wrong for the following reasons. First, both *Residents* and *Simpson* are authority for the proposition that a proponent's predicted compliance with regulatory standards is not determinative of an *EBR* application for leave to appeal. It is open to leave applicants to show that the potential harm from smaller amounts of contaminant is significant; for example, by evidence that emissions are capable of causing adverse effects at a level that complies with the numerical standards. Second, in this regard the Applicants have noted above the concerns of the ECO with the adequacy of Ontario's air emission regulations. The views of the ECO on these matters, as the officer appointed by the Legislative Assembly of Ontario to oversee and report upon the *EBR* and all other relevant and applicable

environmental laws in the province, should be accorded great weight in the circumstances of this case. Third, the views of the Directors that nothing under existing law requires monitoring for cumulative effects is simply not consistent with the MOE SEV. Finally, the Applicants' air quality expert, Dr. Brian McCarry, has reviewed the Lafarge Response material and Dr. McCarry has concluded that:

- The Town of Bath has clearly been impacted by the Lafarge plant and without local (i.e. Bath) air quality data, there is no hard data to determine whether the Lafarge plant has had impacts on the Town;
- Without this background data it is impossible to assess any claim by Lafarge that the plant has had no impact on the community, before and/or after burning of alternative fuels;
- Based on the experience of residents of the Town of Bath, the Lafarge plant
 has had real impacts that are not captured in any of the modelling work
 performed to date on behalf of Lafarge;
- There is no monitoring data to show whether the Lafarge modelling results or the experiences of Town residents are correct;
- Given this discrepancy between the Lafarge modelling calculations and the long-term experiences of area residents, it would be prudent to resolve the question by requiring Lafarge to monitor the air quality in Bath through the establishment of an air monitoring network.

Reply Reference: Tab 21, Report of Dr. Brian McCarry, dated February 2007.

88. In the circumstances, all of this speaks to the apparent lack of reasonableness in the decisions of the Directors to issue approvals to Lafarge that fail to correct the deficiencies in existing air pollution regulation requirements applicable to Lafarge through appropriate conditions of approval.

vi. Non-Compliance with Local Zoning

89. The affidavit filed in these proceedings by Lafarge representative Robert Cumming indicates that the current zoning for the Lafarge property is "Industrial" and "Extractive Industrial." However, Mr. Cumming fails to report that neither of these zoning categories allows "waste disposal" or "waste management" as permitted uses. For example, it appears that the bulk of the Lafarge property in Loyalist Township (including the manufacturing facility) is zoned as "M4-2", which permits "a cement plant", but does not permit waste disposal or waste management.

Response Reference: Lafarge Response, Vol. 2, **Tab 2**, Affidavit of Robert Cumming, page 4, para. 8.

Reply Reference: **Tab 22**, Loyalist Township Zoning By-Law No. 2001-38, sections 5.27, 5.28, and Schedule 3.

90. The issue of non-compliance with local zoning was originally raised in the submissions filed by LOW and Downie during the *EBR* comment period on the sections 9 and 39 approvals. These submissions were filed as part of the Application for Leave to Appeal. However, the Response of the Directors does not appear to dispute the issue of zoning non-compliance, and there is no evidence explaining how – or whether – the Directors addressed their minds to this important consideration. Accordingly, the Applicants submit that the Tribunal cannot accept the Directors' bald assurance that all public comments received during the *EBR* comment period were "carefully considered" by the Directors prior to issuing the approvals.

Book of References for Leave to Appeal Application: **Tab 7**, LOW and Gord Downie, Submissions to the Ontario Ministry of the Environment on Applications for Approval, Air and Waste Disposal Site, Lafarge Canada Inc., EBR Registry # IA04E0466 (Air) and # IA03E1902 (Waste Disposal), March 21, 2006.

Response Reference: Directors' Response, page 2, para. 4.

91. Under Ontario's *Planning Act*, it is an offence to contravene zoning by-laws passed by local municipalities. While municipalities have the primary responsibility to ensure compliance with zoning requirements, the Applicants submit that, in the circumstances, it was unreasonable for the Directors to issue approvals for a specific land use that contravenes the applicable zoning restrictions, and that cannot be lawfully carried out on the subject property unless and until rezoning is obtained by Lafarge. Moreover, it was premature for the Directors to issue the approvals without any knowledge as to when – or whether – Loyalist Township council might agree to rezoning of the subject property. Indeed, there is no evidence on the record to suggest that Lafarge has even filed a re-zoning application with Loyalist Township officials.

Reply Reference: **Tab 23**, *Planning Act*, R.S.O. 1990, c. P.13, s. 67.

92. In addition, there is no evidence in the Response of the Directors that the Director under Part V of the EPA intends to refer the question of by-law applicability to the Tribunal for a public hearing pursuant to section 36 of the *EPA*. Accordingly, at the present time, the zoning by-law of Loyalist Township remains applicable to the Lafarge property, and, more importantly, it continues to prohibit waste disposal uses upon the Lafarge property.

Reply Reference: Tab 24, Environmental Protection Act, R.S.O. 1990, c. E.19, s.36.

vii. Scale and Duration of the Alternative Fuels Project

93. In the Application for Leave to Appeal, the Applicants raised a number of concerns about the excessively large scale and inordinately slow pace of the alternative fuels experiment at the Bath facility. In response, the Directors now contend that the

proposal, as approved by the sections 9 and 39 approvals, is not a "designated pilot project."

Response Reference: Directors' Response, pages 50-51, para. 220-221.

94. However, the Response of the Directors fails to define what is meant by the term "designated pilot project". More importantly, there can be little doubt that the alternative fuels demonstration project was, in fact, publicly promoted by the MOE as a "pilot project" intended to generate alternative fuel burning data that does not currently exist within Ontario. For example, the MOE's press release that accompanied the issuance of the two Lafarge approvals clearly refers to the Bath experiment as a "pilot project". The press release further noted that test data from this facility will be reviewed by MOE to determine if other facilities should be permitted to burn tires in the future.

Reply Reference: **Tab 25**, Ontario Ministry of the Environment, News Release, "Province Imposes Strict Conditions on Lafarge for Testing of Used Tires as Fuel: Further Tire Burning to Halt While Pilot Project Undertaken" (December 21, 2006).

95. The Applicants therefore reiterate their concerns that it was unreasonable for the Directors to issue approvals for an experimental undertaking that, by any objective standard, is too big and environmentally significant to be truly considered as a mere pilot project. Although the MOE admittedly has no experience monitoring the environmental performance of tire-burning facilities, the Directors' approvals grant permission to Lafarge to undertake waste burning at a significant operational scale for an extended period of time, despite the considerable uncertainties, risks, and data gaps identified in the Application for Leave to Appeal and in this Reply.

viii. Relationship to Proposed Regulatory Ban on Tire-Burning

96. The Response of the Directors makes the disingenuous claim that the proposed regulatory ban on tire-burning in Ontario is completely foreign or irrelevant to the Tribunal's deliberations in this case. In particular, the Directors point out that it is Cabinet – not the Directors – that will decide whether the ban is enacted. The Directors further argue that the Tribunal should not consider the proposed ban because it was conveniently posted on the Registry after the *EBR* comment periods on the Lafarge approvals expired, and "did not exist during the period in which the Directors were making their decisions."

Response Reference: Directors' Response, page 36, paras. 151-152.

97. In reply, the Applicants submit that the Tribunal should give no credence to the arguments of the Directors regarding the proposed regulatory ban. First, the above-noted MOE press release clearly underscores the inextricable link between the proposed ban and the issuance of the Lafarge approvals in this case. Second, even if the proposed ban post-dates the *EBR* comment periods on the approvals, it nevertheless came out at the commencement of the 15-day appeal period under the *EBR* for the approvals. Third, the

proposed ban is clearly part of the public record at the present time, and it would behoove the Tribunal to consider this relevant policy development along with other statements of governmental intention. Fourth, it stretches credulity for the MOE to suggest that the Directors were blissfully unaware that the proposed ban was being considered, or that it would be announced on the very same day (in the very same press release) that the approvals were issued. This sequence of events is a further indication of the unreasonableness of the decisions of the Directors.

- 98. In summary, while the Directors would prefer that the Tribunal remain oblivious to the proposed ban, the Applicants submit that the Tribunal should have regard for the latest and best available information regarding significant policy or regulatory developments (i.e. the proposed ban), regardless of whether they occur before, during and after the issuance of the impugned approvals.
- 3. Responses of Lafarge and Directors Confirm Why It Appears the Decisions of the Directors Could Result in Significant Environmental Harm
 - a. Contrary to Responses of Lafarge and Directors Potential for Significant Environmental Harm Exists Where Air Pollution Control Regulations and Guidelines Deficient and Decisions of Directors do Not Correct Problem in Issuing Section 9 Certificate of Approval
- 99. As noted above, the responses of Lafarge and the Directors in opposition to granting Leave to Appeal to the Applicants with respect to the section 9 Certificate of Approval rely heavily upon not only the contents of the approval itself, but also on anticipated Lafarge compliance with regulatory requirements such as (1) O. Reg. 419/05; (2) O. Reg. 194/05; and (3) Guideline A-7. Therefore, according to both the Directors and Lafarge, there is no need for the Tribunal to grant Leave to Appeal because in their view the decision of Director Low to rely upon, and for Lafarge to comply with, these three regulatory requirements is neither unreasonable, nor likely to lead to significant environmental harm.

Response Reference: Lafarge Response, Vol. 1, page 25, para. 87; page 30, paras. 107-108; Directors' Response, page 58, paras. 254-257.

100. However, for the reasons set out above by the Applicants, reliance on these regulatory requirements is misplaced, even if these requirements were to be complied with by Lafarge. The record set out above (Part II.B.2.a.i-iii) shows that each of these regulatory requirements contains substantive gaps and deficiencies well known to Director Low and that should have been well known to Lafarge. Accordingly, it was incumbent on Director Low, if he was going to issue an air approval to Lafarge, to impose additional site-specific obligations on the company in order to make up for the recognized gaps and deficiencies in each of the three regulatory requirements. Unfortunately, Director Low, in issuing the section 9 approval to Lafarge, failed to fill these gaps or correct these deficiencies. Moreover, given the nature and extent of these

gaps and deficiencies, the decision of Director Low, in the circumstances of this case, appears both unreasonable and could result in significant environmental harm, for the reasons set out above.

101. The Tribunal, otherwise constituted, has stated that:

"I do not agree that 'significant harm' under Part II of the [EBR] is synonymous with a level or concentration of contamination exceeding a numerical limit in a regulation. In my view, it is open to leave applicants to show that the potential harm from smaller amounts of contaminant is significant; for example, by evidence that emissions are capable of causing adverse effects at a level that complies with the numerical standards. However, in the absence of such evidence, compliance with the numerical standard may be assumed to be sufficient to eliminate the possibility of harm."

Book of References for Leave to Appeal Application: **Tab 40**, *Residents Against Company Pollution Inc.*, *Re* (1996), 20 C.E.L.R. (N.S.) 97, 112, para. 43 (Ont. Environmental App. Bd.).

- 102. In the instant case, the Applicants have demonstrated that the ECO has expressed serious reservations about the O. Reg. 419/05 and O. Reg. 194/05 regulatory regimes in the various respects noted above. These problems were well known to the Directors and should have been well known to Lafarge. Furthermore, the Applicants in this Reply have raised concerns with the adequacy of Guideline A-7, which concerns should have been well known to the Directors and Lafarge before they incorporated it into the section 9 approval. Accordingly, in the circumstances the Applicants submit that it was incumbent on the Directors to impose additional obligations on Lafarge if they were going to issue the section 9 approval.
- 103. The Tribunal, otherwise constituted, also has held that there is a close relationship between the "unreasonable" and "significant harm" branches of the *EBR* leave test:

"While the EBR does not explicitly deal with the relationship between these two dimensions, there is a strong presumption – inherent in the Preamble and Part I of the Act – that the two aspects of the test are related. The reasonableness of the Director's decision depends on whether it "could result in significant harm to the environment". And any decision which could result in significant harm to the environment would be an unreasonable decision."

Book of References for Leave to Appeal Application: **Tab 38**, *Hannah v. Ontario* [1998] O.E.A.B. (Sept. 16, 1998).

104. The Applicants say the nexus between the "unreasonable" and "significant harm to the environment" branches of the *EBR* leave test is particularly strong in the context of this case as it relates to the section 9 approval.

b. Contrary to Responses of Lafarge and Directors Potential for Significant Environmental Harm Exists Where Issuance of Section 9 Certificate of Approval May Risk Violation of Ontario Air Pollution Control Regulations

105. Both Lafarge and the Directors point to the section 9 Certificate of Approval issued to Lafarge as a further measure whereby compliance with regulations, which would include O. Reg. 194/05 and its requirement for reductions in NOx and SO2 over time, will be assured. Therefore, according to both the Directors and Lafarge, there is no need for the Tribunal to grant Leave to Appeal because in their view the decision to rely upon, and for Lafarge to comply with, the section 9 approval is neither unreasonable, nor likely to lead to significant environmental harm.

Response Reference: Lafarge Response, Vol. 1, page 30, para. 108; Directors' Response, page 33, para. 135; page 58, paras. 254-257; and Directors' Documents - Vol. 1, **Tab 3**, Affidavit of Richard Lalonde, page 15, para. 39 (referring to Applicants' Book of References for Leave to Appeal Application: **Tab 22**, Ontario Ministry of the Environment, Summary of Public Comments Received Relating to *EBR* Registry Numbers IA03E1902 and IA04E0464, December 21, 2006, page 16).

106. However, as noted above (Part II.B.2.b) the Applicants submit that just the opposite may occur. The record shows that both Lafarge and Director Low recognize that emissions of at least SO2 from the cement manufacturing facility at Bath may increase, not decrease, over time, as a direct result of the issuance of the section 9 approval to Lafarge to burn alternative fuels.

Book of References for Leave to Appeal Application: **Tab 47**, Memorandum dated November 3, 2004 to Dave Bell, MOE Project Officer from Eric Loi, MOE Air Policy and Climate Change Branch.

107. Accordingly, the Applicants submit that the issuance of the section 9 Certificate of Approval appears per se unreasonable, unlawful, and could lead to significant environmental harm to the extent it may cause Lafarge to not be in compliance with its SO2 emission reduction obligations under O. Reg. 194/05.

c. Contrary to the Responses of Lafarge and Directors Issuance of Section 39 Certificate of Approval Failed to Consider Significant Environmental Harm Posed by CKD Landfill

108. In relation to the Applicants' numerous concerns about disposing waste-derived CKD into the existing on-site landfill, the Response of the Directors acknowledges that 2005 inspections by the MOE revealed "potential impacts to the shallow groundwater in the area of the landfill." Thereafter, the MOE required Lafarge to submit a new CKD management plan, which was prepared and submitted to MOE before the Directors issued their approvals allowing Lafarge to burn tires, plastics and other wastes at the Bath facility. According to the MOE, this proposed management plan remains "under review" although it was submitted almost one year ago. In the circumstances, the Applicants draw no comfort from the Directors' simplistic response that if and when the CKD

management plan is approved, the Applicants can (again) apply to the Tribunal for leave to appeal under the *EBR*.

Response Reference: Directors' Documents - Vol. 1, **Tab 2**, Affidavit of Ranjani Munasinghe, pages 3, 5, para. 11-12, 22.

109. The Response of the Directors further suggests that the Applicants' concerns about current and future groundwater and surface water impacts "do not relate to the disposal of CKD at the Lafarge landfill." To the contrary, the Applicants submit that their concerns are plainly and obviously related to the proposal to dispose large quantities of waste-derived CKD of unknown quality at a highly problematic landfill. Indeed, the linkage between waste-burning and CKD disposal is clearly recognized on the face of the section 39 approval, which purports to allow the disposal of the new CKD at the landfill, subject only to minimalist testing requirements (Condition 47).

Response Reference: Directors' Documents - Vol. I, **Tab 2**, Affidavit of Ranjani Munasinghe, page 4, para. 19.

110. The Response of Lafarge also confirms several of the Applicants' concerns about the current and future impacts of the on-site landfill, particularly if waste-derived CKD starts to be disposed on-site. In particular, the affidavit filed by Lafarge's hydrogeological consultant Frank Barone confirms that: (a) the proposed CKD management plan for the "new" portion of the landfill remains unapproved at the present time; (b) the "closed" portion of the landfill is unlined and underlain by a relatively thin layer of silt/clay overburden; (c) there have been leachate migration problems from the "closed" portion of the landfill; (d) the need for additional remedial measures is "under consideration" by Lafarge; (e) surface water sampling in Bath Creek have detected contaminant levels at or above Provincial Water Quality Objectives for certain parameters; and (f) there are currently no monitoring wells within the CKD fill area that can collect/analyze raw CKD leachate.

Response Reference: Lafarge Response, Vol. 3, **Tab 4**, Affidavit of Frank Barone, January 31, 2007, pages 3-4, 6, 8, para. 6, 9,15, 16, 20.

- 111. The Applicants' hydrogeologist Wilf Ruland has reviewed the Barone affidavit, and Mr. Ruland has concluded that:
 - the on-site landfill should <u>not</u> be receiving any new waste streams resulting from the burning of tires and other municipal waste at the Bath facility;
 - Lafarge has engaged in "freestyle landfilling" in the "new" portion of the landfill in the absence of an MOE-approved CKD management plan;
 - the Barone affidavit describes leachate containment and treatment measures which are not actually reflected in the CKD management plan that was submitted to the MOE in 2006;
 - to date Lafarge has failed to sample or analyze raw CKD leachate in either the "closed" or "new" portions of the landfill;

- potential changes to CKD leachate quality due to disposal of waste-derived CKD was not addressed in the proposed management plan, and could pose significant operational implications for the on-site landfill;
- the "closed" portion of the landfill is "one of the most problematic landfills" encountered by Mr. Ruland in his lengthy career, and it does not inspire any confidence in the future operation and monitoring of the "new" landfill if it starts to receive waste-derived CKD;
- there is considerable professional disagreement between Mr. Ruland and Mr. Barone in relation to surface water impacts, monitoring efficacy, human exposure routes, leachate plume migration, and long-term/post-closure leachate management; and
- the approval by the Directors of waste-derived CKD disposal at the on-site landfill is "irresponsible", and Condition 47 of the section 39 approval is "inadequate to protect human health and the natural environment from the potential impacts of landfilling the CKD resulting from the burning of alternative fuels."

Reply Reference: Tab 26, Opinion Letter of Wilf Ruland, dated February 7, 2007.

112. In summary, in order to properly assess the overall risks and impacts of the alternative fuels project, it is necessary for the Tribunal to consider Lafarge's proposed "cradle to grave" management of the CKD that will result from burning tires, plastics and other municipal wastes at the Bath facility. At the present time, Lafarge (with the approval of the Directors) intends to place this new form of CKD at its on-site landfill, which: (a) is already regarded as problematic by the MOE and Mr. Ruland; (b) is likely causing groundwater and surface water impacts; and (c) currently lacks an approved management plan for the new fill area. In the circumstances, the Applicants submit that the Directors' decision to permit the disposal of this new CKD at the on-site landfill pursuant to Condition 47 of the section 39 approval is premature, legally dubious, clearly unreasonable, and could result in significant environmental harm.

d. Contrary to Responses of Lafarge and Directors Issuance of Section 39 Certificate of Approval Failed to Take Into Account Past Conduct of Lafarge Cement Plant Operations

113. The affidavit filed in these proceedings by Lafarge representative Robert Cumming states that Lafarge is "committed to sustainable development," and has an unspecified "strategy" for "environmental protection and the conservation of natural resources and energy". The affidavit also describes various environmental initiatives undertaken, and recognition received, by Lafarge, such as ISO 14001 certification, "Global 100" listing, and various habitat awards. These statements are replicated in the Lafarge Response.

Response Reference: Lafarge Response, Vol. 2, **Tab 2**, Affidavit of Robert Cumming, page 2, para.3; pages 7-8, paras. 9 to 13; Lafarge Response, Vol. 1, pages 6-7, paras. 8-10.

- 114. The Applicants presume that these statements are intended, at least in part, to persuade the Tribunal not to grant leave to appeal because Lafarge appears to be a good corporate citizen. In any event, the Applicants note that the Cumming affidavit and Lafarge Response both fail to report that, in fact, Lafarge has been convicted for various environmental offences in Ontario and elsewhere across Canada. Accordingly, the Applicants submit that the Tribunal should give little or no weight to self-serving statements in the Cumming affidavit and the Lafarge Response regarding the corporate character of Lafarge.
- 115. In relation to the Bath facility, for example, Lafarge has been convicted under the *EPA* for depositing waste upon a portion of the Lafarge property that was not licenced as a waste disposal site. The Court described the area in question as a "boneyard", which the Court found was "a mess, the barrels were uncovered, some leaking, some bulging, haphazardly piled, some on skids, some on the ground itself subject to random staining" during the MOE's initial inspection. The Court further observed that Lafarge was engaged in "an element of environmental roulette in that the company lagged in its responsibility to move out the material hoping that the Ministry would not execute a warrant." In the middle of trial, Lafarge entered a guilty plea, and the Court, after considering various mitigating and aggravating factors (including Lafarge's "previous environmental record" in 1985 and 1987), imposed a \$65,000 fine against Lafarge. In imposing the fine, the Court concluded:

"In another age, regrettably, before the environment was the concern it is today, much of the heavy industry in this province located itself of necessity beside large bodies of water. Today's environmental responsibilities demand that there must be heightened sensitivity to potential disaster when storage sites such as these are in close proximity to the water. The stewardship of the environment is a responsibility of the corporation that utilizes that environment."

Reply Reference: Tab 27, Reasons for Judgment of Ormston Prov. Div. J. (December 14, 1992).

116. The above-noted conviction and sentence against Lafarge relates to a continuing offence under section 40 of the *EPA*, which prohibits the deposit of waste upon lands not licenced as a waste disposal site. Significantly, section 27 of the *EPA* also prohibits the use, operation, establishment, or expansion of a waste disposal site without a certificate of approval. However, Lafarge's on-site CKD landfill has been in continuous operation since 1973, but it only received a certificate of approval (No.A710137) from the MOE in 1998. The reasons for the MOE's forbearance are unknown. In any event, it further appears that since 2003, Lafarge has extended disposal operations into the northern (or "new") portion of the landfill without the benefit of an approved CKD management plan for those lands.

Response Reference: Lafarge Response, Vol. 3, **Tab 4**, Affidavit of Frank Barone, pages 2-3, para. 3 and 5.

117. The Response of the Directors reports that an MOE inspection of the CKD landfill in 2005 identified "potential impacts to the shallow groundwater in the area of the landfill." Thereafter, "Lafarge was required, pursuant to its Certificate of Approval for the on-site landfill, to submit a CKD management plan" to the MOE. This proposed plan was submitted by Lafarge in March 2006. However, the Response of the Directors provides no indication when – or if – the proposed plan will be approved as submitted by Lafarge. In the meantime, CKD continues to be landfilled in the northern portion of Lafarge's on-site landfill.

Response Reference: Directors' Response, pages 53-54, para. 233-237.

- 118. Other environmental convictions have been recorded against Lafarge in other Canadian jurisdictions, such as:
 - 1993 conviction under British Columbia's *Waste Management Act* for failing to abide by permit conditions requiring pollution control works to be maintained in good working order (\$85,000 fine imposed); and
 - 1998 convictions under the federal *Fisheries Act* for depositing deleterious substances into water frequented by fish (total \$6,000 in fines plus payment of \$154,000 to the Minister of Fisheries and Oceans).

Reply Reference: **Tab 28**, Reasons for Sentence by the Hon. Judge S.E. Giroday (January 4, 1994); **Tab 29**, Order of the Hon. Judge Howard (September 4, 1998).

- 119. In making these submissions, the Applicants do not take the position that Lafarge's history of environmental non-compliance was so extensive that the Directors ought not have issued any approvals to Lafarge. However, the Applicants submit that this history of non-compliance should have been expressly considered by the Directors, and should have resulted in further and better conditions to safeguard the environment and local health and safety. However, there is no evidence on the record that the above-noted convictions were known to, or considered by, the Directors, and the Applicants submit that the approvals are inadequate for the purposes of monitoring and inspection to ensure compliance with regulatory standards during the alternative fuels project.
- 120. For example, Conditions 48 and 49 of the section 39 approval merely require Lafarge to have a "trained person" in attendance at the site to inspect operations and to ensure compliance with legal requirements. The section 9 approval does not contain any "trained person" conditions at all. In any event, Lafarge has presumably had "trained persons" at the Bath facility at all material times, but this arrangement clearly did not prevent the commission of the *EPA* offence, as described above. For these and other reasons, the Applicants submit that Conditions 48 and 49 of the section 39 approval are wholly inadequate to ensure compliance with all applicable legal requirements during the alternative fuels project.

Book of References for Leave to Appeal Application: **Tab 5**, Ontario Ministry of the Environment, Provisional Certificate of Approval (Waste Disposal Site) Number 8901-6R8HYF, issued to Lafarge Canada Inc., Bath Cement Plant, December 21, 2006, Conditions 48 and 49.

121. Accordingly, instead of imposing Conditions 48 and 49, the Applicants submit that it would have been far more preferable, prudent, and effective for Directors Low and Gebrezghi to impose conditions requiring Lafarge to pay for the presence and on-site activities of an inspector employed by the MOE, not Lafarge. Over the years, such conditions have been imposed in relation to other significant waste disposal sites, such as the recently approved expansion of the Warwick Landfill Site. Among other things, Conditions 18 to 20 of the Warwick approval require the private proponent to fund the activities of an "environmental inspector" who is employed by the MOE, and who is required to conduct a prescribed schedule of on-site inspections, depending upon the waste volume received at the landfill.

Reply Reference: **Tab 30**, Ontario Ministry of the Environment, Notice of Approval to Proceed with the Undertaking: Warwick Landfill Expansion (January 15, 2007), Conditions 18 to 20.

122. The Applicants are aware that the Warwick conditions were imposed under the *EAA* rather than the EPA, and the Applicants do not hold out the particular wording of the Warwick conditions as a model to be followed slavishly in this case. However, the Applicants submit that there is no reason in law or in principle why MOE on-site inspection conditions cannot be imposed under Part V of the *EPA* in order to better ensure protection of the natural environment. In the circumstances of this case (i.e. the experimental nature of the alternative fuels project, Lafarge's environmental track record, etc.), the Applicants submit that the issuance of the section 9 and 39 approvals without appropriate MOE on-site inspection conditions is another indicator that the decisions of the Directors were unreasonable and could result in significant environmental harm.

e. Response of Lafarge is Neither Persuasive Nor Relevant on Alleged Lack of Health Risks From Alternative Fuels Proposal

- 123. Exhibit O to the affidavit of Robert Cumming contains what purports to be a "detailed" Human Health Risk Assessment ("HHRA") prepared for Lafarge by Cantox Environmental. The Applicants submit that the Tribunal should give no weight to the HHRA for the following reasons:
 - the HHRA is dated January 2007 and therefore did not form part of the supporting documentation submitted to the MOE by Lafarge in relation to its EPA applications;
 - the HHRA was not considered or relied upon by the Directors when they decided to issue the section 9 and 39 approvals;
 - the HHRA has not been peer reviewed by independent third parties, nor has it been made available for public review and comment until Lafarge filed it as part of its response to the Application for Leave to Appeal three days ago;

- the authors of the HHRA are not identified in the report, nor have they signed the report, thereby making it impossible to ascertain whether the HHRA was prepared by duly qualified and experienced toxicologists;
- the HHRA is heavily reliant upon emissions data supplied by another Lafarge consultant, and is therefore plagued by the same limitations, deficiencies and data gaps found within that information base;
- the HHRA indicates, without further elaboration, that it relies upon the unproven assurance from Lafarge that with the exception of NO_x, emissions from the kiln are not "expected" to vary materially with the use of alternative fuels;
- the HHRA does not attempt to identify or analyze the human health impacts of contaminants associated with the alternative fuels that Lafarge proposes to burn at the Bath facility;
- the HHRA is confined to kiln stack related emissions, and therefore does not identify or analyze the human health impacts of fugitive emissions from the Bath facility;
- the HHRA does not identify or analyze the human health impacts of waterborne contaminants emanating from the on-site CKD landfill;
- no baseline data has been gathered in the HHRA, and no cumulative effects analysis has been conducted in relation to other known local sources of airborne contaminants:
- no off-site air, soil, dust or other testing was undertaken by the HHRA authors to verify the predicted concentrations of the contaminants of concern at points of impingement;
- the HHRA fails to assess or quantify the presence of vulnerable "receptors" living near the Bath facility (i.e. children, seniors, persons with asthma, immunosupressed persons, etc.);
- the HHRA fails to gather health outcome data on existing community health conditions that may be aggravated or materially affected by emissions from the Bath facility during the alternative fuels project; and
- the HHRA omits or excludes major pathways for human exposure to airborne contaminants emitted from the Bath facility (i.e. ingesting water, or consuming fish, waterfowl or wildlife species, containing contaminants that have been aerially deposited into the aquatic or terrestrial environment).

Response Reference: Lafarge Response, Vol. 2, **Tab 2**, **Exhibit O** to Affidavit of Robert Cumming, A Human Health Risk Assessment of Kiln Stack Related Emissions from the Lafarge Cement Plant located in Bath Ontario (Cantox, January 2007).

124. For the foregoing reasons, the Applicants submit that the HHRA is essentially incomplete, inadequate and irrelevant for the purposes of assessing the human health impacts of all aspects of the proposed alternative fuels project. In addition, the HHRA is based primarily on predicted exposures and hypothetical receptors, rather than actual exposures and real people currently residing in the vicinity of the Bath facility. Thus, the HHRA cannot be relied upon to conclude that the alternative fuels project will not pose risks to human health. Accordingly, the Tribunal should disregard the HHRA in its entirety.

f. Responses of Lafarge and Directors Are Not Persuasive on Other Indicia of Significant Environmental Harm Identified by Applicants Regarding Decisions of Directors

i. Existing Air and Water Quality Conditions

125. The Response of the Directors contends that the Applicants are wrong to suggest that there already is significant air and water pollution in the Bath area that must be considered before determining emission standards for the Lafarge proposal.

Response Reference: Directors' Response, page 34, para. 143.

Reference: Leave to Appeal Application, pages 37-38, paras. 91-95.

126. The Response of Lafarge states that the Applicants are wrong to focus on the closed Lafarge landfill (as opposed to the new landfill) and the potential for contamination by cement kiln dust ("CKD").

Response Reference: Lafarge Response, Vol. 1, pages 28-29, paras. 99-102.

- 127. The Applicants submit that in addition to the reasons provided in the Leave to Appeal Application and supporting material there may now be a further and greater reason to be concerned about the existing Lafarge operation as a prelude to considering potential new impacts from the alternative fuels proposal.
- 128. The concern arises in first instance from the Responses of Lafarge and the Directors about what they say are the characteristics of, and raw material inputs with respect to, the existing Lafarge operation. The affidavit of Richard Lalonde for the Directors and the affidavit of Robert Cumming for Lafarge both characterize the raw material inputs in the process of cement making as including: limestone/gymsum (calcium carbonate), sand (silica), aluminum oxide (alumina), and iron (iron oxide). Traditional solid fuels used are identified by both the Lalonde and Cumming affidavits as including coal and petroleum coke with natural gas used to fire kiln start-up. The

resulting product from the kiln is an intermediate product known as clinker, which at the processing stage may be mixed with other materials, such as gypsum, to produce cement. No other raw materials are mentioned in either affidavit.

Response Reference: Lafarge Response, Vol. 2, **Tab 2**, Affidavit of Robert Cumming, pages 35-40, paras. 113-126; Directors' Documents - Vol. 1, **Tab 3**, Affidavit of Richard Lalonde, pages 11-13, paras. 24-30.

129. However, there would appear to be more to the process than that described above. A January 26, 2007 report prepared by the Ontario Clean Air Alliance ("OCAA") suggests that in 2005 the Ontario Power Generation site at Nanticoke sent 44,797 kg of fly ash and bottom ash for disposal or management to the Lafarge cement plant at Bath. In the fly/bottom ash sent to the Bath plant the following quantities of pollutants were included: arsenic (327 kg), cadmium (7 kg), chromium (2,434 kg), and mercury (4.6 kg). The OCAA analysis was based on a review of 2005 National Pollutant Release Inventory ("NPRI") data.

Reply Reference: **Tab 31**, Ontario Clean Air Alliance, Ontario Power Generation - Ontario's Pollution Giant, January 26, 2007, pages 1, 27, 28, 30.

- 130. Accordingly, the following questions arise: "What does Lafarge do with the fly ash and/or bottom ash that it receives from Nanticoke? Does Lafarge receive fly ash/bottom ash from other sources? If so, from whom and in what quantities? Has the company done a mass balance with respect to the metals contained in the fly ash/bottom ash to determine where all these toxic substances end up? There would appear to be only four end points: (1) in the cement product, (2) in the CKD landfill, (3) in the stack gases, (4) in the fugitive emissions. A fifth option would be several, or all of (1)-(4).
- 131. The Applicants submit that information concerning off-site fly ash/bottom ash quantities, constituent metal concentrations, and destinations in conjunction with what Lafarge itself produces might be the sort of information that decision-makers should have on hand before they entertain new proposals for such facilities. In the absence of a mass balance determination, the above conclusions of Lafarge and the Directors would appear to be premature. The Applicants say that this existing situation raises a further concern about the potential for significant environmental harm in conjunction with the alternative fuels proposal.

ii. Inadequacy of Future Emission Predictions by Lafarge

132. The Response of Lafarge states that stack kiln emissions from the Bath cement plant will not increase as a result of the burning of alternative fuels. For this proposition they rely on the affidavit of Dr. John Richards. Lafarge also proffers the affidavit of Mr. Mike Lepage who relies on the affidavit of Richards with respect to the same proposition.

Response Reference: Lafarge Response, Vol. 1, page 11, paras. 26, 29; Lafarge Response, Vol. 3, **Tab 6**, Affidavit of John Richards, January 29, 2007; **Tab 5**, Affidavit of Mike Lepage, January 31, 2007, pages 4-5, para. 9.

133. The Applicants note, however, that the affidavit of Richards restricts itself to reviewing information with respect to the burning of tire derived fuel ("TDF") because as he indicates "most of the air emission studies relating to alternative fuels have focused on TDF." The Richards affidavit does not address the suite of other alternative fuels Lafarge proposes to burn pursuant to the section 9 approval (e.g. shredded solid waste, meat and bone meal, pelletized municipal waste) except to say that TDF data is equally applicable to other forms of alternative fuels.

Response Reference: Lafarge Response, Vol. 3, **Tab 6**, Affidavit of John Richards, January 29, 2007, pages 5-11, 15-17.

134. The Applicants submit that concluding without studying hardly constitutes evidence, let alone what the Lafarge Response characterizes as "extensive and uncontroverted [evidence]."

Response Reference: Lafarge Response, Vol. 1, page 11, para. 26.

135. Moreover, the Tribunal has before it a substantial report prepared for the Applicants by Dr. Neil Carman that addresses much of the same literature as Dr. Richards and that comes to contrary conclusions about the potential significance of the emissions from the Lafarge proposal. In the circumstances, the Applicants submit that the issue of significant environmental harm has not been laid to rest by the Lafarge evidence.

Book of References for Leave to Appeal Application: Tab 29, Carman Report.

iii. Inadequacy of Approval Conditions

136. The Response of the Directors states that the conditions in the section 9 and 39 approvals are some of the "most stringent and comprehensive ever included in certificates of this nature." Similarly, the Directors further suggest that the "number and stringency of conditions...is much greater than the norm." However, no comparative benchmarks or objective criteria are offered by the Directors to substantiate this claim. Moreover, even if it is true that the Lafarge conditions are stronger than previous MOE efforts in approving waste incineration projects, the Applicants derive no comfort because the Lafarge conditions still remain inadequate to protect the environment and local health for the reasons stated in the Application for Leave to Appeal and in this Reply.

Response Reference: Directors' Response, page 40, para. 174.

137. The Response of the Directors also disagrees with the Applicants' suggestion that many of the conditions of approval can be fairly characterized as "boilerplate" or "general housekeeping". Later, however, the Response of the Directors describes a number of conditions as "standard" and "consistent with Ministry practice". Leaving aside this internal inconsistency within the Directors' Response, the Applicants submit there is little or no evidence that would allow the Tribunal to accept the Directors' unduly

optimistic claim that their handiwork is "more than adequate to ensure that the environment and the public are protected."

Response Reference: Directors' Response, page 41, para. 176; page 50, para. 219; page 55, para. 241-42; page 56, para. 248; page 57, para. 251-253.

138. In relation to both approvals, the Response of the Directors further suggests that the Certificates of Approval "are much narrower in scope than had been originally requested by Lafarge." Even if this claim is true, the Applicants submit that nothing turns on this point. The mere fact that Lafarge did not get everything it had hoped for does not prevent the Tribunal from finding that the approvals were nevertheless unreasonable and could result in significant environmental harm.

Response Reference: Directors' Response, page 2, para. 6; page 9, para. 31.

139. The Response of the Directors also contends that "abundant safeguards" have been entrenched within the conditions of the section 9 and 39 approvals. The Applicants strongly contest the Directors' claim, and submit that a careful perusal of the conditions does not support the Directors' position. In fact, both approvals lack clear expiry dates, and do not contain any built-in or automatic mechanism for periodic, formal review of the approvals (or conditions therein) by MOE officials. Thus, it appears that the collection and burning of alternative fuels can continue in perpetuity at the Bath facility, provided that the current set of rudimentary (and inadequate) conditions of approval are complied with by Lafarge to the satisfaction of the MOE.

Response Reference: Directors' Response, page 2, para. 6.

(A) Section 9 Certificate of Approval

140. In relation to Condition 4 (continuous emissions monitoring - "CEM") in the section 9 approval, the Directors admit that (1) O. Reg. 419/05 does not include standards for PM10 or PM2.5, and (2) MOE does not have guidelines for PM10 or PM2.5. Therefore, the Directors suggest that Total Suspended Particulate ("TSP") is an adequate substitute for CEM purposes.

Response Reference: Directors' Response, page 41, para. 178.

- 141. The Applicants submit that just because MOE has neither standards nor guidelines for PM10 and PM2.5 does not mean that Condition 4 could not impose CEM requirements with respect to them. The Carman report identified the feasibility of doing so. Moreover, Lafarge already reports releases from the Bath plant of TSP, PM10, and PM2.5 under the NPRI program to Environment Canada. The Applicants submit the Response of the Directors is not persuasive on this point.
- 142. Also in relation to Condition 4, the Response of the Directors argued that because of low POI concentrations measured for dioxins and furans in comparison to the

prescribed limit it was not deemed necessary to include further monitoring requirements for dioxins and furans.

Response Reference: Directors' Response, page 42, paras. 181-185.

- 143. The Applicants submit that both Environment Canada and the ECO, as set out above, have expressly criticized continued MOE reliance on the POI approach. Moreover, the ECO noted in 2006 that dioxins and furans are on the 2004 MOE list of un-finalized standards that are known to be emitted, or to have been emitted, by Lafarge at its Bath cement manufacturing facility. The Applicants submit that in the circumstances prudence would dictate applying CEM requirements in Condition 4 to these highly toxic substances.
- 144. With respect to other substances that the Applicants in their Leave to Appeal Application suggested should be subject to the Condition 4 CEM requirements, the Directors respond that because emissions of these other substances are less than 1% of their POI limits CEM requirements for them also are not warranted.

Response Reference: Directors' Response, page 43, para. 187.

- 145. For the same reasons noted immediately above, namely the dubiousness of continued reliance on the POI approach, the Applicants repeat that prudence would dictate applying CEM requirements in Condition 4 to these toxic substances as well.
- 146. The Response of the Directors also rejects the observation of Dr. Carman that the opacity monitoring required by Condition 4 cannot be accurately used to calculate actual PM10, or particulate emissions. The Directors say that opacity can be so used and refer to Guideline A-7 in support of that view.

Response Reference: Directors' Response, page 43, para. 189.

147. The Applicants submit that: (1) Guideline A-7 is not even a regulation so it is hardly binding on Lafarge unless incorporated by reference into an approval as has been done here, but even so it hardly binds the Tribunal in the face of better evidence to the contrary, and (2) Dr. Carman has provided a reply to the Response material of the Directors noting again, in even greater detail, the problems inherent in relying on opacity in these circumstances. The Applicants submit that the better view is that of Dr. Carman.

Reply Reference: Tab 12, Reply of Dr. Neil Carman, February 7, 2007.

148. In relation to Conditions 6-7 (Source Testing - Baseline Emissions Monitoring and Reporting) in the section 9 approval, the Directors state that the list of test contaminants is extensive and more inclusive than that required of other cement companies in Ontario.

Response Reference: Directors' Response, page 44, paras. 191-192.

- 149. The Applicants submit that the list may be "extensive" but according to Dr. McCarry's report the list is still deficient. That such lists may be even less inclusive at other cement facilities in Ontario is not relevant to evaluating the adequacy of Conditions 6-7 in the context of the Lafarge approval.
- 150. In relation to Condition 10 (Alternative Fuel Demonstration Period) in the section 9 approval, the Directors state that the demonstration period is more frequent than that recommended by Dr. Carman.

Response Reference: Directors' Response, pages 44-45, paras. 193-197.

151. In his latest reply report, Dr. Carman extensively reviews problems with condition 10 and the affidavit of Lalonde in support thereof. The Applicants state that the better view regarding the adequacy of Condition 10 is that of Dr. Carman.

Reply Reference: Tab 12, Reply of Dr. Neil Carman, February 7, 2007.

152. In relation to Conditions 11-12 (Alternative Fuel - Demonstration Period Source Testing and Reporting) in the section 9 approval, the Directors state that the list of test contaminants is extensive and more inclusive than that required of other cement companies in Ontario.

Response Reference: Directors' Response, page 44, paras. 191-192.

- 153. The Applicants submit that the list may be "extensive" but according to Dr. McCarry's report the list is still deficient. That such lists may be even less inclusive at other cement facilities in Ontario is not relevant to evaluating the adequacy of Conditions 11-12 in the context of the Lafarge approval.
- 154. In relation to Conditions 21-22 (Fugitive Dust Control) in the section 9 approval, the Directors state that fugitive dust emissions are not likely to result from the use of alternative fuels. The Directors again rely on the original report of Lafarge consultants for this view.

Response Reference: Directors' Response, pages 45-46, paras. 198-201.

155. The Applicants submit that the Response of the Directors adds nothing new in defense of what was already viewed by Dr. McCarry as inadequate. The Applicants state that the better view regarding the adequacy of Conditions 21-22 is that of Dr. McCarry. Furthermore, Dr. McCarry has provided a further review of material provided by the Respondents and finds no reason to change his views.

Reply Reference: **Tab 21**, Report of Dr. Brian McCarry, dated February 2007.

156. In relation to Condition 26 (Upset Conditions and Equipment Malfunctions Response Procedure) in the section 9 approval, the Directors rely on Condition 2.1 as well as Condition 26 in support for their view that these conditions provide "ample

protection to the public and environment." The Directors also state that the Lafarge approval is the only one to require such conditions of a cement company in Ontario.

Response Reference: Directors' Response, pages 46-47, paras. 202-206.

157. The Applicants submit that the Response of the Directors adds virtually nothing new in defense of what was already viewed by Dr. Carman as inadequate. The Applicants submit that Condition 2.1 contains merely a single sentence requiring Lafarge to specify "procedures to prevent, monitor, report to the Ministry and respond to Upset Conditions and Equipment Malfunctions." The teeth of the section 9 approval, such as they are with respect to upset conditions, are contained in Condition 26, which Dr. Carman extensively critiqued the adequacy of in his original report.

(B) Section 39 Certificate of Approval

158. In relation to the section 39 approval, the Directors state that Conditions 1 and 26(a), when read together, impose restrictions on the types of alternative fuels that may be utilized at the Bath facility. As noted in the Application for Leave to Appeal, the Applicants are fully cognizant that these two conditions should be read together. In addition, the Applicants agree that the two conditions represent an attempt by the MOE to place limits on the types of alternative fuels that may be collected and burned by Lafarge. However, the Applicants do not agree that that this MOE attempt is as successful or effective as claimed by the Directors, and the Applicants remain concerned about the inherent vagueness and excessive flexibility built into the two conditions, as described in the Application for Leave to Appeal. In this regard, it appears that the Directors have either misunderstood or misstated the nature of the Applicants' concerns.

Response Reference: Directors' Response, page 47, para. 208.

159. Similarly, the Response of the Directors claims that "the Applicants are mistaken that there is no limitation on Lafarge burning recyclable materials." Again, it appears that the Directors have misunderstood or misstated the nature of the Applicants' concerns. In the Application for Leave to Appeal, the Applicants acknowledged that the section 39 approval attempted to place certain restrictions on the burning of recyclable materials. The Applicants' concern, however, is twofold: (a) there is nothing in the section 39 approval that absolutely prohibits the burning of recyclable materials; and (b) the so-called "restrictions" are easily circumvented and provide no realistic deterrent to burning recyclable materials. In the Applicants' view, there is nothing in the Response of the Directors or Lafarge that persuasively refutes these two fundamental concerns.

Response Reference: Directors' Response, page 48, para. 209.

160. The foregoing concerns are abundantly apparent in the treatment of whole and part used tires and waste plastics under the section 39 approval. For example, Condition 45 clearly allows all County residents to drop off used tires for free at the Bath facility, even if the tires are otherwise recyclable. In addition, Condition 36 merely provides that

Lafarge shall "restrict" (not "prevent", "prohibit" or "avoid") the use of recyclable used tires and waste plastics, and shall follow the "methodology" prescribed by the 2006 Design and Operations Manual. Similarly, Condition 65(c) merely requires Lafarge to report upon its efforts to "restrict" the receipt and use of recyclable materials as alternative fuels in accordance with the Manual's methodology.

- 161. Unfortunately, the Manual's methodology is not really a "methodology" at all; instead, it is a collection of ambiguous statements that simply require Lafarge to "target" non-recyclable tires and plastics, and to report annually on whether Lafarge was "successful" in meeting this target. However, like the section 39 approval, there is nothing in the Manual that actually prohibits the burning of recyclable materials. Furthermore, the Manual, like the section 39 approval, fails to prescribe any meaningful consequences where Lafarge commences (or escalates) the burning of recyclable tires or plastics. In the circumstances, the Applicants submit that if the Directors truly intended to keep recyclable materials from being burned at the Bath facility, then they should have imposed a clear, unequivocal, and enforceable prohibition against burning recyclable materials in the section 9 and 39 approvals.
- 162. Moreover, a close reading of the Manual "methodology" confirms that Lafarge clearly intends to target materials that are capable of being recycled, but are deemed (presumably by Lafarge and/or its suppliers) to be "surplus" or "excess" to current markets. This approach, of course, begs the threshold question of whether, from an energy and resource conservation perspective, it is environmentally preferable to burn these materials now (and lose these materials forever), as opposed to saving them for recycling purposes later when markets and/or recycling capacity become available.
- 163. This question, in turn, raises a larger public policy question about the trade-offs being implicitly proposed by Lafarge (and approved by the Directors) does it make environmental sense to permit the burning of alternative fuels (including recyclable materials) in order to achieve potential decreases in certain greenhouse gas emissions, but at the same time continue (or potentially increase) emissions of other airborne or waterborne contaminants of concern at the local level? For the purposes of determining whether leave to appeal should be granted in this case, it is not necessary for the Tribunal to answer these overarching policy questions. However, the Applicants respectfully submit that the Tribunal should be mindful of these underlying "big picture" considerations as it adjudicates the factual and legal issues in dispute in this case.
- 164. In relation to pelletized wastes, the Response of the Directors claims that the Applicants' concern is that there is no "clear limitation" on the amount of such wastes that may be burned at the site. Again, it appears that the Directors have misunderstood or misstated the Applicants' concern in this regard. As noted in the Application for Leave to Appeal, the Applicants acknowledge that Condition 27(b) imposes a daily limit of 1.25 tonnes of pelletized waste, but the primary concern was how this limit was going to be implemented and monitored at the Bath facility.

Response Reference: Directors' Response, page 51, para. 221.

165. The 1.25 tonne/day limit itself appears to have been strategically selected by MOE and/or Lafarge to avoid triggering the mandatory public hearing required under section 30 of the EPA. This concern was outlined in LOW's original submission on the proposed section 9 and 39 approvals, as LOW quoted from Lafarge correspondence to MOE in which Lafarge indicated it wanted to somehow keep the pellet usage under the section 30 hearing trigger (i.e. waste of 1500 persons).

Book of References for Leave to Appeal Application, **Tab 7**, Lake Ontario Waterkeeper and Gord Downie, Submissions to the Ontario Ministry of the Environment on Applications for Approval, Air and Waste Disposal Site, Lafarge Canada Inc., EBR Registry # IA04E0466 (Air) and # IA03E1902 (Waste Disposal), March 21, 2006, page 5.

166. In addition, MOE representative Tim Edwards has confirmed that Lafarge was requesting to use municipal waste pellets from a waste processing plant (i.e. Dongara) in Vaughan, and that the MOE had to assess whether the 1.25 tonne/day usage would trigger a section 30 hearing. Since the section 39 approval was issued to Lafarge without a hearing, it appears that the MOE's conclusion was that section 30 did not apply in this case. The Applicants do not necessarily agree with the MOE's conclusion as a matter of law, but submit that this question of statutory interpretation is best left to another forum, and further submit that the Tribunal does not have to determine, for the purposes of the leave application, whether a section 30 hearing should have been triggered.

Reply Reference: **Tab 32**, Email to Elaine MacDonald, Sierra Legal Defence Fund from Tim Edwards, Ontario Ministry of the Environment, March 22, 2006.

167. However, it remains questionable how firm or permanent the 1.25 tonne/day limit is going to be at the Bath facility. In particular, the MOE has recently proposed to pass a regulation under the *EPA* exempting all Dongara customers (such as Lafarge) from the mandatory hearing under section 30 of the *EPA*. LOW and other stakeholders have written to the MOE to oppose the proposed regulation due to the clear implications for the Lafarge proposal. If enacted, the regulation would allow Lafarge to apply to burn a much greater volume of pelletized waste without fear of triggering the mandatory public hearing under section 30. In the Applicants' view, the current 1.25 tonne/day figure is unlikely to remain fixed forever, and it can be reasonably anticipated that Lafarge will seek to dramatically increase this tonnage if the Dongara regulation is passed as proposed by the MOE.

Reply Reference: **Tab 33**, EBR Registry No. RA06E0016 (posted November 30, 2006); **Tab 34**, Submission to MOE by Lake Ontario Waterkeeper on Proposed *EPA* Regulation (January 12, 2007).

168. In summary, the Response of the Directors does not provide any persuasive reasons, evidence, or arguments that dispel the Applicants' concerns about the inadequacy of the section 39 approval conditions, particularly the conditions discussed above. In most instances, it appears that the Directors have misunderstood or misstated the Applicants' concerns, or have otherwise failed to provide any credible response to the Applicants' concerns. Accordingly, the Applicants reiterate their position that the

conditions in the section 39 approval are inadequate to protect the environment and local health.

III. CONCLUSIONS

- 169. The Responses of the Directors and Lafarge allege that the Applicants' case is based on "conjecture" and "speculation". As noted above, this claim is manifestly untrue, as the Applicants have adduced considerable documentary, technical, scientific and opinion evidence outlining the numerous problems with the Lafarge proposal and the substantive inadequacy of the section 9 and 39 approvals.
- 170. Moreover, the Directors and Lafarge fail to recognize that their case in support of the alternative fuels project can be fairly summarized as "conjecture" and "speculation" since it is largely premised on: (a) limited computer modeling (b) self-serving and unproven predictions about risks and impacts; (c) questionable assumptions; (d) flawed or incomplete data sets; and (e) debatable extrapolations from past practice at the Bath facility. The bottom line is that the alternative fuels project is an "experiment" in every sense of the word, and while the Directors and Lafarge have hypothesized that the project will be environmentally benign, these parties have failed to present any credible or empirical evidence that proves this hypothesis.
- 171. Similarly, the Directors and Lafarge have failed to substantiate or quantify their over-generalized assertions that burning alternative fuels (instead of fossil fuels) will confer various environmental and societal benefits. To the contrary, the available evidence suggests that the main (or sole) beneficiary will be Lafarge, which will be able to realize some cost savings if it is permitted to burn alternative fuels at the Bath facility. Moreover, from an energy input and emissions perspective (both airborne and waterborne), the Directors and Lafarge have failed to demonstrate that it is environmentally preferable to burn wastes rather than conventional fuels in a decades-old cement kiln, and have failed to justify that there is a demonstrable public need to burn tires and other municipal wastes at the Bath facility. In the circumstances, the Applicants submit that it is not in the public interest to permit a risk-laden undertaking such as the alternative fuels project to proceed in the absence of any persuasive evidence that the project is actually necessary, and in the absence of effective and enforceable conditions that fully safeguard the environment and local health.
- 172. The Responses of the Directors and Lafarge also make repeated references to what is permitted in other jurisdictions in terms of burning alternative fuels. Interestingly, these Responses make no reference to jurisdictions where tire-burning is not currently permitted or undertaken. In any event, the Applicants submit that what is or is not permitted in other jurisdictions is neither determinative nor persuasive in these proceedings. In the instant case, the fundamental question is whether it is environmentally appropriate, publicly acceptable, and technically sound to burn these wastes at this facility using this technology under these conditions of approval. For the reasons set out in the Application for Leave to Appeal and in this Reply, the Applicants submit that the answer is a firm and resounding "no".

173. Accordingly, the Applicants respectfully request that the Tribunal grant them leave at large to appeal both the section 9 and 39 approvals. Even though there are two separate approvals, they are inextricably linked and pertain to the same single project, *viz.*, collecting and burning tires and other municipal wastes as fuel at the Bath facility. Thus, the Tribunal should not treat or evaluate the two approvals individually, and should not attempt to sever off the approvals (or the individual conditions therein) for the purposes of applying the section 41 leave test. The Applicants submit that when considered concurrently, the section 9 and 39 approvals are deficient, unreasonable, and could result in significant environmental harm.

IV. ORDER REQUESTED

174. Arising from the foregoing, the Applicants respectfully repeat their request from their Leave to Appeal Application for an Order granting them leave to appeal the decisions of the Directors to issue the section 9 and 39 Certificates of Approval under the *EPA* to Lafarge. The Applicants also request leave to appeal these decisions in their entirety, including all general and special conditions contained in both approvals so that they may seek an Order from the Tribunal on the appeal revoking the decisions of the Directors to issue the Certificates of Approval.

ALL OF WHICH IS RESPECTFULLY SUBMITTED,

February 8, 2007	Robert V. Wright
	Solicitor for the Applicants Loyalist Environmental Coalition as represented by Martin J. Hauschild and William Kelley Hinemar
	Richard D. Lindgrer Solicitor for the Applicants Lake Ontario Waterkeeper and Gordon Downie

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