

ENVIRONMENTAL REVIEW TRIBUNAL

IN THE MATTER OF Part XIII of the *Environmental Protection Act*, R.S.O. 1990, c. E.19 as amended;

-and-

IN THE MATTER OF sections 38 to 48 of the *Environmental Bill of Rights*, S.O. 1993, c. 28;

-and-

IN THE MATTER OF appeals 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, against 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 appeals 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, against 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.

NOTICE OF APPEAL

TAKE NOTICE that pursuant to sections 139, 142 and 145.2 of the *Environmental Protection Act*, R.S.O. 1990, c. E.19 (“*EPA*”), and pursuant to the decision of the Environmental Review Tribunal (“*Tribunal*”) dated April 4, 2007 granting leave to appeal to 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 (the “*Appellants*”), the *Appellants* require a hearing before the *Tribunal* in respect of the issuance by the Directors, Ministry of the Environment (“*MOE*”), of the following two approvals:

- (1) Amended Certificate of Approval No. 3479-6RKVHX, dated December 21, 2006, issued under section 9 of the *EPA* to Lafarge Canada Inc., for the burning of 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 (appended to this Notice); and

- (2) Provisional Certificate of Approval No. 8901-6R8HYF, dated December 21, 2006, issued under section 39 of the *EPA* 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 (appended to this Notice).

AND FURTHER TAKE NOTICE that the Appellants hereby appeal both approvals in their entirety and respectfully request that the Tribunal grant:

- (a) An Order revoking Amended Certificate of Approval No. 3479-6RKVHX, dated December 21, 2006, issued under section 9 of the *EPA* to Lafarge Canada Inc., for the burning of 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 [hereinafter “section 9 Certificate of Approval (air)”];
- (b) An Order revoking Provisional Certificate of Approval No. 8901-6R8HYF, dated December 21, 2006, issued under section 39 of the *EPA* 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 [hereinafter “section 39 Certificate of Approval (waste disposal site)”];
- (c) In the alternative to (a) and/or (b), an Order requiring the Directors to impose further and better terms and conditions in respect of each of the aforesaid Certificates of Approval as may be advised by the Appellants and as may be specified by the Tribunal; and
- (d) Such further or other Orders as Appellants' counsel may advise and this Tribunal permit

AND FURTHER TAKE NOTICE that the grounds for the Orders requested by the Appellants are as follows:

- (1) The aforesaid Certificates of Approval:
- a. Were issued without the Directors considering, applying, or promoting an ecosystem approach, the precautionary principle, or resource conservation measures mandated by the MOE's Statement of Environmental Values (“SEV”) issued under the *Environmental Bill of Rights* (“EBR”);

- b. Were issued without due consideration by the Directors of adequate information on local airshed and watershed conditions;
 - c. Were issued without due consideration by the Directors of the common law rights of landowners in the area;
 - d. Constitute discrimination against the community of Bath wherein the cement manufacturing facility is located;
 - e. Were issued despite the lack of operational experience by the Certificate-holder, Lafarge Canada Inc. (“Lafarge”), with waste incineration in Ontario, and the lack of MOE monitoring experience with tire-burning facilities in Ontario;
 - f. Were issued without due consideration by the Directors of the existing air quality and water quality conditions in the area that may already be at risk of significant environmental harm including from, but not limited to, Lafarge's use, incineration, and disposal of fly ash, bottom ash or both, and that may be exacerbated by the impact of Lafarge’s burning of alternative fuels;
 - g. Do not contain effective or adequate terms and conditions to ensure the prevention, reduction, mitigation or monitoring of direct, indirect and cumulative impacts upon the environment or human health that may be caused by Lafarge's on-site activities during the demonstration (test-burn) period authorized by the Certificates of Approval, or thereafter during permanent operation pursuant to the Certificates of Approval; and
 - h. Improperly and prematurely permit the on-site disposal of cement kiln dust (“CKD”) generated by the burning of alternative fuels although Lafarge's on-site landfill currently has significant operational problems, lacks both an approved long-term management plan and adequate engineered works to contain or treat CKD leachate, and creates serious risk of groundwater and surface water contamination.
- (2) The aforesaid Certificates of Approval are not consistent with the purposes and objectives of the *EPA* and *EBR*, and the burning of alternative fuels at the Bath cement manufacturing facility may create a nuisance, is not in the public interest, and may result in a hazard to the health and safety of local residents.
- (3) Sections 1, 3, 6, 9, 14, 27, 39 and Part XIII of the *EPA*, and sections 1, 2, 11, and 38 to 48 of the *EBR*; and
- (4) Such further or other grounds as Appellants' counsel may advise and this Tribunal permit.

AND FURTHER TAKE NOTICE that the facts that the Appellants rely upon in relation to the above-noted grounds of appeal include, but are not necessarily limited to, the following:

Background

1. Lafarge has operated a cement manufacturing facility near Bath, Ontario since 1973. The company produces Portland cement, which consists primarily of calcium silicates, aluminates, and alumino-ferrites, and is the main ingredient in concrete.
2. In December 2003, Lafarge applied under Part V of the *EPA* for a Certificate of Approval to operate a waste disposal site at the facility, and in February 2004 under section 9 of the *EPA* for a comprehensive Certificate of Approval (Air) to replace its existing air certificates of approval for all sources of air emissions at the plant.
3. An application to use alternative fuels was part of the section 9 application, and consisted of a proposal by Lafarge to discharge emissions into the air from the use of solid non-hazardous waste materials, including tires, animal meal, plastics, shredded tires, solid shredded materials, and pelletized municipal waste as alternatives to primary fuels (coal, coke, natural gas, and bunker C oil) currently used at its cement kiln.
4. Under the proposal, alternative fuels would provide up to 30% of the kiln's input heat value up to a maximum feed rate of less than 100 tonnes per day. Lafarge proposed to operate the facility 24 hours per day, seven days a week, 365 days a year. The annual quantity of alternative fuels to be burned at the facility would be up to 36,500 tonnes.
5. The purpose of the waste disposal site in the Part V application was to accept, process, and incinerate the alternative fuels.
6. On December 21, 2006, the Directors issued an amended Certificate of Approval (air) and a provisional Certificate of Approval (waste disposal site) to Lafarge.

Grounds (1)a and (1)b: Failure to Apply MOE SEV and Consider Local Airshed and Watershed Conditions

7. In respect of Grounds (1)a and (1)b, the MOE SEV states that MOE will adopt an ecosystem approach to environmental protection and resource management, and that in making decisions MOE will consider cumulative effects on the environment.
8. Notwithstanding the stipulation in the MOE SEV that one of the key features of an ecosystem approach is measurement of cumulative effects, the Director

- responsible for issuing the section 9 Certificate of Approval (air) limited himself to considering whether there would be compliance with regulatory standards, such as O. Reg. 419/05, O. Reg. 194/05, and Guideline A-7, the last modified in part and incorporated by reference into the Certificate.
9. The Directors have acknowledged that they did not (1) consider whether the activity proposed by Lafarge might cause detrimental effects upon ecosystems, either alone or in combination with other actions or background conditions; and (2) measure baseline conditions of air or water quality or consider the question of cumulative impacts.
 10. The MOE has also previously acknowledged that O. Reg. 419/05 does not explicitly deal with background concentrations, cumulative or synergistic effects, persistence and bioaccumulation of contaminants. Due to these limitations, O. Reg. 419/05 constitutes a “floor”, and it is open to the Director to supplement the regulation by imposing more stringent site-specific requirements as conditions of approval in particular cases. However, the Director generally failed or refused to do so in relation to the section 9 Certificate of Approval (air) issued to Lafarge.
 11. Because O. Reg. 419/05 is based on a point of impingement (“POI”) approach, the MOE cannot directly assess or control annual loadings of contaminants pursuant to this regulation. For some types of persistent contaminants that accumulate in the environment, including substances emitted by the Lafarge cement plant at Bath, the quantum of annual loading to the environment is significant and poses risks to ecosystem health and public safety.
 12. Even on its own terms as a regulation based on the POI approach, MOE has acknowledged that O. Reg. 419/05 is overdue for revision of standards for certain “high priority” contaminants, including those known to be emitted by the Lafarge cement plant at Bath. As of December 21, 2006, the date of the decisions of the Directors issuing the Certificates of Approval to Lafarge, standards for these “high priority” contaminants still had not been issued by MOE.
 13. O. Reg. 194/05 establishes emission reductions for two contaminants emitted by Lafarge, nitrogen oxides and sulphur dioxide, in conjunction with emission trading to achieve those reductions over time. However, this regulation also is not consistent with the MOE SEV from either a precautionary or ecosystem approach because it does not require significant reductions in either contaminant over the next ten years, nor does it control cumulative emissions or effects within particular ecosystems or airsheds.
 14. Guideline A-7, to the extent it results in the acquisition of useful data on stack concentrations, may allow annual emission loads of contaminants to be calculated. However, as incorporated by reference into the Lafarge air Certificate of Approval, Guideline A-7 does not control annual loadings of contaminants to the ecosystem.

15. The MOE SEV also states that MOE will exercise (1) a precautionary approach in its decision-making; and (2) caution in favour of the environment, especially where there is uncertainty about the risk presented by particular pollutants.
16. However, on the very same date that the Director issued the Certificates of Approval to Lafarge to incinerate tires and other alternative fuels, the MOE also admitted that it had no experience monitoring the environmental performance of facilities that incinerate tires and that the Lafarge approval constituted a “pilot project.”
17. The application of the precautionary approach contained in the MOE SEV calls upon the Directors to consider incineration of alternative fuels, including tires, to be as hazardous as it could possibly be, and to place the onus of establishing the absence of environmental harm upon the source of the risk, in this case Lafarge. However, the Directors instead approved the Certificates of Approval in the face of considerable uncertainty about environmental risk, and for the purpose of investigating whether the risk would materialize. This “wait-and-see” approach is not consistent with the precautionary principle.
18. The MOE SEV further states that MOE will promote and encourage the use of the 3Rs – reduction, reuse, and recycling – to divert materials from disposal. However, the terms and conditions of the Certificates of Approval do not prohibit Lafarge from burning recyclable used tires. No methodology is outlined in the Certificates of Approval or the Design and Operations Manual for ensuring that Lafarge will neither accept, nor burn, recyclable tires in its kiln.

Ground (1)c: Failure to Consider Common Law Rights of Landowners

19. In respect of Ground (1)c, the Certificates of Approval authorize activities that have the potential to infringe upon common law rights. To the extent that the courts might defer to the Directors in their assessment of environmental dangers posed by the burning of alternative fuels at the Lafarge cement manufacturing facility at Bath, the effect of the Certificates is to diminish the status or viability of common law rights that might otherwise be invoked to protect the environment.
20. In the instant case, the Directors declined to consider and weigh the common law rights of landowners in the area or the potential consequences of the Certificates of Approval upon them.

Ground (1)d: Discrimination

21. In respect of Ground (1)d, on the very same date that the Directors issued the Certificates of Approval to Lafarge to incinerate tires and other alternative fuels,

MOE also released a “Notice of Proposal for Regulation” to ban the burning of tires in Ontario. By its terms, the proposed ban would not apply to Lafarge.

22. MOE also admitted in: (1) the Notice that it had no experience monitoring the environmental performance of facilities that incinerate tires; and (2) a news release issued the same day that the Lafarge approval constituted a “pilot project.”
23. The combination of the Certificates of Approval, the Notice of the proposed regulation, and the news release confirms that the Certificates expose the residents of Bath to the effects and risks of a process that will not be permitted anywhere else in Ontario.

Ground (1)e: Lack of Experience

24. In respect of Ground (1)e, the Appellants rely on the facts stated above regarding the lack of experience respectively of Lafarge and MOE concerning the burning of, and monitoring with respect to, alternative fuels in Ontario.

Ground (1)f: Risk of Significant Environmental Harm

25. In respect of Ground (1)f, potentially hazardous emissions generated by Lafarge’s incineration of alternative fuels pursuant to the Certificates of Approval will be added to significant levels of contaminants already emitted and present in the Bath area.
26. The Certificates of Approval are inadequate to protect against potential adverse environmental and health effects in that the information base upon which the Certificates were approved:
 - lacked local baseline air or water quality data or information on background concentrations of contaminants ;
 - lacked information on potential human and ecological health impacts of current emissions from the Lafarge plant on the local area;
 - did not discuss or address potential health effects due to proposed emissions from the Lafarge facility;
 - did not address the additive, synergistic, cumulative, persistent, or bioaccumulative effects of airborne and/or waterborne contaminants on public health or the environment;
 - did not address the potential health effects of emission of products of incomplete combustion from the Lafarge facility;

- did not make reference to numerous stack test reports cited in the published literature and available at regulatory agencies that confirm the potential for significant emission of airborne contaminants from cement kilns burning tires; and
- did not make reference to reports that demonstrate that there is no scientific basis for concluding that burning waste tires in cement kilns is safe or appropriate.

27. By their own admission, the Directors did not:

- identify a baseline determination of air or water quality in the area of the Lafarge plant;
- take account of, or provide for, the monitoring of cumulative impacts in the region of the Lafarge plant; or
- require the development of an air monitoring network.

28. The kinds of contaminants to be emitted from the Lafarge plant from the use of traditional fuels, alternative fuels, fly ash and/or bottom ash, are potentially hazardous to the environment and human health. The toxicity of these contaminants and their impact depend upon their level of emission, concentration, and total loading in the environment. With some exceptions, such matters are generally not addressed by the existing regulatory standards relied upon by the Directors in issuing the Certificates of Approval.

Ground (1)g: Inadequate Terms and Conditions

29. In respect of Ground (1)g, the 27 terms and conditions in the section 9 Certificate of Approval (air) do not provide adequate measures during the demonstration (test-burn) period authorized by the Certificate, or during permanent operation pursuant to the Certificate, thereafter, concerning, but not limited to, such matters as:

- continuous emissions monitoring (condition 4);
- source testing – baseline emissions monitoring and reporting (conditions 6-7);
- alternative fuel – demonstration period (condition 10);
- alternative fuel – demonstration period source testing and reporting (conditions 11-12);
- fugitive dust control (conditions 21-22);

- upset conditions and equipment malfunction response procedures (conditions 2.1, 26, 27); and
 - various schedules to the Certificate.
30. The 68 terms and conditions in the section 39 Certificate of Approval (waste disposal site) do not contain adequate measures during the demonstration (test-burn) period authorized by the Certificate, or during permanent operation pursuant to the Certificate, thereafter, concerning, but not limited to, such matters as:
- definitions relating to alternative fuels (conditions 1, 26(a), 36);
 - design and operations manual (condition 4);
 - procedures manual (condition 23);
 - emissions monitoring (conditions 24-25);
 - tonnage limits (condition 27(a));
 - service area (condition 30);
 - cement kiln dust disposal (condition 47);
 - training plan (condition 52);
 - community liaison committee and public information meetings (conditions 54-55);
 - annual reports (condition 65); and
 - closure plan (condition 66).

Ground (1)h: Disposal of Alternative Fuels CKD at the On-Site Landfill

31. In respect of Ground (1)h, Lafarge's existing on-site CKD landfill is located in a risky hydrogeological setting and lacks appropriate engineered works to contain or treat CKD leachate, which ultimately discharges into the Bath Creek at the present time. Monitoring programs in the vicinity of the on-site landfill have detected exceedances of MOE "Reasonable Use" limits and Provincial Water Quality Objectives for various parameters.
32. While Lafarge has recently submitted a long-term management plan, it has not been approved by MOE to date. In addition, the proposed plan does not contain

effective measures to reduce the amount of CKD leachate discharging into Bath Creek, nor does the plan address Lafarge's proposed use of alternative fuels or its operational implications for CKD leachate composition and management.

Ground (2): Non-compliance with *EPA* and *EBR*

33. In respect of Ground (2), the Appellants plead and rely on the facts set out in the foregoing paragraphs.

DATED at Toronto, this 18th day of April, 2007.

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