

SIERRA LEGAL DEFENCE FUND

March 31, 2006

Sent via Fax to (416) 314-8452

Application Processor
Environmental Assessment and Approvals Branch
Ministry of the Environment
2 St. Clair Ave., Floor 12A
Toronto, Ontario, M4V 1L5

Dear Application Processor:

**RE: Lafarge Canada Environmental Bill of Rights Registry Proposals
IA03E1902 (Waste) and IA04E0466 (Air) - Tire and waste burning at an
Ontario cement plant**

Please find attached Sierra Legal Defence Fund's (Sierra Legal) submissions regarding a proposal by Lafarge Canada to burn tires, animal meal, plastics, shredded tires, solid shredded materials and pelletized municipal waste in its cement facility at Bath, Ontario.

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A local citizen's group - the Loyalist Environmental Coalition - in the area of the Lafarge Canada facility at Bath has retained Sierra Legal in this matter. The Toronto Environmental Alliance, Sierra Club of Canada, Ontario Chapter and Sierra Club Atlantic Chapter, Iroquois Group of Central New York also support our submissions.

Sierra Legal, on behalf of our client, respectfully requests that should the Ontario Minister of the Environment proceed to consider the proposal, that an independent environmental assessment and a public hearing be required given the likelihood of significant public health and environmental impacts both at the local and regional levels. As it is the first application of this nature in Ontario, it deserves a thorough public policy review.

Also, given the close proximity of the Lafarge Canada cement plant in Bath to the United States border, and the predominant wind directions, we anticipate that the proposal, if approved, would result in significant transboundary environmental impacts. In light of the federal government's responsibilities under the *Canada - US Air Quality Agreement* and *Canadian Environmental Assessment Act* we are forwarding a copy of our submission to the Honourable Rona Ambrose, Minister of the Environment for Canada, as well as Mr. Eliot Spitzer, the New York State Attorney General.

If you have any questions or comments regarding our submission, please do not hesitate to contact the undersigned.

Sincerely,
Sierra Legal Defence Fund
Per:

Christine Elwell, B.A., LL.B., LL.M.
Staff Lawyer

Elaine MacDonald, P.Eng., Ph.D.
Senior Staff Scientist

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cc. Mr. Gord Miller, Environmental Commissioner of Ontario
The Honourable Dalton McGuinty, Premier of Ontario
The Honourable Rona Ambrose, Minister of the Environment for
Canada
The Honourable Peter MacKay, Minister of Foreign Affairs
Mr. Eliot Spitzer, New York State Attorney General

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To: Application Processor
Environmental Assessment and Approvals Branch
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Phone: 416-314-8225, Fax 416-314-8452

March 30, 2006

Dear Application Processor:

Sierra Legal Defence Fund (Sierra Legal) is a registered charity funded by public donations and foundation grants. We provide free legal and scientific services to environmental groups and concerned citizens in Canada and file these submissions on the above noted matter.

Summary of Submissions

We make submissions that a full, independent and public environmental assessment is required for this proposal to burn used or scrap tires and municipal waste, including plastics, animal bone meal. Lafarge Canada anticipates the importing of used tires from Ontario, Quebec and eight Great Lakes states to fuel a cement kiln 24 hours per day, 7 days a week, 365 days per year. Our request for an environmental assessment is based on the likely and significant local, regional and transboundary human health and environmental impacts related to this precedent setting and controversial so-called "alternative fuel" source.

In this submission, Sierra Legal represents a local citizen's group, the Loyalist Environmental Coalition, joined by environmental groups on both sides of the border. Despite numerous requests from the public and local township council, the Ontario Minister of Environment has refused an environmental assessment and a public hearing.

Yet the burning of used tires for fuel is at best controversial and at worse, contrary to alternative legislative schemes development in Ontario to manage the diversion of designated waste, that includes used tires. Instead of being a waste to burn, used tires are a valuable resource material estimated to contribute \$13 million to the Ontario economy. Since this is the first application in Ontario to burn tires as fuel, together with other municipal waste, a rigorous and public assessment of the proposal is urgently required.

A review of available scientific evidence indicates when Lafarge Canada's St. Constant cement plant in Quebec began burning used tires as fuel, a substantial increase in the release of toxic air pollutants resulted. Emissions of cadmium, chromium, copper, lead, dioxins and furans, manganese, nickel, iron, aluminium and zinc were all up significantly.

We are unable to determine at this point whether the Lafarge Canada Bath facility would exceed its regulatory limits without a full and public environmental assessment. The company has not provided any modeling data based on the use of this type of fuel. It is important to note that this facility dates back to 1974 and the continuous emissions monitors only test for SO₂ and Nox, not the range of toxic pollutants identified above. It was certainly

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not designed to burn this type of fuel. But we know that the experience elsewhere has resulted in significant increased loading of toxic contaminants to the land, water and air.

Given this expected environmental and public health outcome and that there is already a concentration of major air pollutants in the vicinity of the Lafarge Canada Bath cement plant, a cumulative impact assessment is needed to analyze the added potential adverse effects on land, water and air quality represented by the Lafarge Canada proposal

To summarize, we submit that the Lafarge request for an approval to discharge to air pursuant to section 9 of the *Ontario Environmental Protection Act* (EPA) and for an approval of a waste disposal site pursuant to EPA s. 27 requires completing the following environmental notice, planning and decision-making processes:

A consideration of how, if at all, the Lafarge Canada proposal is consistent with the *Ontario Waste Diversion Act* that specifies programs for designated wastes such as used tires shall not promote the burning of such waste;

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F U N D

A consideration of how, if at all, the Lafarge Canada proposal is consistent with the new *Environmental Protection Act Regulation 419* that prohibits the burning of waste or fuel in any fuel burning equipment or incinerator that was not specifically “designed” for that purpose;

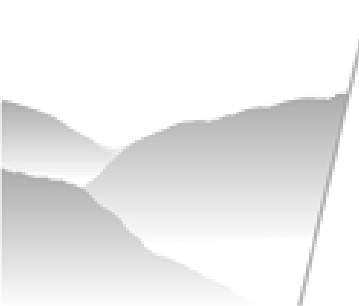
An individual environmental assessment as required to fulfill the purpose of the *Ontario Environmental Assessment Act*;

An environmental assessment and prior notification of likely transboundary air pollution by the Canadian federal government as lawfully required under the *Canada-United States Air Quality Agreement*;

A mandatory public hearing as required under the *Ontario Environmental Protection Act*; and

In the alternative, a public hearing as required under the *Ontario Environmental Bill of Rights*.

In short, should the Ministry of the Environment approve the proponent’s request to introduce even more potential for toxic releases to the air, water and land, when the safety of current operations is already in doubt would be, in our respectful submission, a reckless disregard for the health and safety of both the Lafarge Canada workers, as well as, the broader community. Should the Ministry proceed with considering the proposal, a full and public environmental assessment is urgently required either under Ontario’s environmental law or, alternatively under the *Canadian Environmental Assessment Act*.



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Introduction

A local citizen's group –the Loyalists Environmental Coalition - in the area of the Lafarge Canada facility at Bath, Ontario, has retained Sierra Legal in this matter. The Loyalists Environmental Coalition was established in 2003 for the purpose of obtaining a full and public environmental assessment of the Lafarge Canada proposal to burn used or used tires and other potentially toxic materials at its cement kiln as an “alternative fuel” source. The Toronto Environmental Alliance, Sludge Watch, Sierra Club of Canada, Ontario Chapter and Sierra Club Atlantic Chapter, Iroquois Group of Central New York ¹also support these submissions.

It is our opinion that despite the Minister's decision, without reasons, in November 2005 to deny the many requests made, including those of the public and of the Loyalist Township, to subject a prior Lafarge Canada Bath facility proposal to an environmental assessment and public hearing, such a process is nevertheless required given the scientific factors and legislative mandates reviewed below.

1) General Comments

1.1) Description of the Project

Lafarge Canada's revised application is for approval to operate a waste disposal site, to discharge to air, and to allow the acceptance, processing and use as an alternative fuel various types of solid waste materials, including used or scrap tires, plastics, animal bone meal and pelletized non-hazardous municipal waste, at the existing Bath cement plant, to partially replace the use of coal and petroleum coke.

The waste materials would be utilized at a maximum rate of 100 tonnes per day. The proposal is to allow a maximum of 400 tonnes of animal bone meal, plastics, biomass, and shredded tires and up to 40 trailers containing scrap tires to be stored at the site at any one time. The total site area is approximately 1088.5 hectares and this facility will operate 24 hours per day, seven days a week, 365 days per year.

According to Lafarge Canada: “The overall objective of this proposal is to reduce the consumption of non-renewable resources through the safe and environmentally responsible use of alternative fuels in an energy recovery process.”

As this is the first application of this nature in the Province of Ontario² it deserves rigorous public scrutiny to determine whether, in fact, this is a “safe and an environmentally responsible use of alternative fuels” as the company claims.

¹ <http://newyork.sierraclub.org/iroquois/index.htm>

² While Essroc Canada Inc. of Picton, Ontario did seek and was granted approval to use waste tires for fuel in a cement manufacturing facility, that application predates the 2002 *Ontario Waste Diversion Act* and *Environmental Protection Act Regulation 419*, did not attract any public comments, was limited to waste tires and not a mixture of materials.

1.2) Scrap Tires as Fuel “Controversial” says All-Party Legislative Committee

The Select Committee on Alternative Fuel Sources, an all-party Committee of the Ontario Legislature, was appointed on June 28, 2001 with a broad mandate “to investigate, report and recommend ways of supporting the development and application of environmentally sustainable alternatives to our existing fossil [carbon-based] fuel sources.”³ The Committee canvassed a broad range of alternative fuel and energy sources with potential application within Ontario and made 141 recommendations. But none were made on generating energy from waste, as there was no consensus on this controversial source of alternative fuel.

The Committee recognized that generating energy from waste is a complex and “much debated issue”, and fundamentally supported the principles of the ‘3Rs’ (reduce, reuse, and recycle) as the basis for waste management in Ontario. The Committee observed: “It should be expressly stated that no materials used in existing or potential recycling streams should be considered in energy-from-waste projects in Ontario”(emphasis added).⁴ The Committee did hear from the cement industry regarding the viability of using scrap tires to fuel cement kilns. But the Committee emphasized that “such applications may be assessed in Ontario in an environmentally responsible manner...”.

Even an All-Party Legislative Committee recognized that there is “much debate” around this “alternative fuel” source and emphasized the need to assess any applications in an environmentally responsible manner. It is submitted that assessing the environmental and public health impacts of the Lafarge Canada proposal without a full and independent environmental assessment would be anything but an assessment in an “environmentally responsible manner”.

2) Burning Tires for Energy Contrary to Ontario Waste Diversion Act

Following the Alternative Fuels Report, the Ontario government created a complete legislative scheme for the future management of waste in Ontario. The 2002 *Ontario Waste Diversion Act* (WDA) was established to develop and operate waste diversion programs for designated wastes.⁵ Used tires were designated by regulation as a “designated waste” under the WDA.⁶ The WDA clearly specifies that a waste diversion program for a designated waste shall not promote, inter alia, the burning of designated waste.⁷

³ The Select Committee on Alternative Fuel Sources, Final Report, see http://www.owa.ca/Alt_Fuels_Report.pdf

⁴ Ibid., p. 39.

⁵ *Ontario Waste Diversion Act*, S.O. 2002, Chap. 6, s.2: “The purpose of this Act is to promote the reduction, reuse and recycling of waste and to provide for the development, implementation and operation of waste diversion programs”.

⁶ *Used Tires* under the *Waste Diversion Act*, Ontario Regulation 84/03, s.1: “In this Regulation, “tire” includes a part of a tire; “used tires” means waste that consists of any of the following materials, or any combination of them: (a) used tires that have not been refurbished for road use, (b) tires that, for any reason, are not suitable for their intended purpose. And see s. 2: Used tires are prescribed as a designated waste for the purposes of the Act”.

⁷ *Waste Diversion Act*, s. 25(2): “A waste diversion program developed under this Act for a designated waste shall not promote any of the following: 1. The burning of the designated waste.”

Stakeholders active in the Waste Diversion Ontario process developed a proposed tire stewardship plan consistent with the requirements of the WDA, entitled the Ontario Tire Recycling and Economic Development plan (OnTRED). The program plan is designed to not only improve the already successful rate of 87% recovery and recycling of tires generated annually in Ontario, but also to create financial incentives for the use of collected tires in recycling applications such as the manufacture of rubberized asphalt and automotive components.⁸

Given this complete legislative scheme, and the promising OnTRED plan, it is submitted that the use of used or scrap tires for the purpose of burning this material as an “alternative fuel” is contrary to the purpose and spirit of the WDA and regulation there under. If the Ministry of Environment approves the Lafarge Canada proposal to burn used tires as fuel, the Ministry risks judicial review for having committed an error of law and/or jurisdiction if it fails to account for this alternative legislative mandate.

3) Proposal Contrary to New Ontario Regulation 419/05

It is also our submission that the proposal to burn tires, plastics, municipal waste pellets, solid shredded materials with biomass characteristics and animal meal violates section 36 of *Ontario Regulation 419/05* under the *Environmental Protection Act*, that specifically prohibits the burning of waste or fuel in any fuel burning equipment or incinerator for which it was not designed:

Fuel or waste for fuel-burning equipment, etc.

36. (1) *No person shall burn or permit to be burned in any fuel burning equipment or incinerator any fuel or waste except the fuel or waste for the burning of which the equipment or incinerator was designed.*

(2) *No person shall burn or permit to be burned in any fuel burning equipment or incinerator any fuel or waste at a greater rate than that rate for which the equipment or incinerator was designed.*

A cement kiln would be considered “fuel burning equipment” according to the definition in section 1.1 of Ontario Regulation 419/05 (copied below) because a kiln is designed to burn fuel and does not contain an internal combustion engine.

“fuel burning equipment” includes equipment designed to burn fuel but does not include an internal combustion engine;

2. The landfilling of the designated waste. 3. The application of the designated waste to land. 4. Any activity prescribed by the regulations” (emphasis added).

⁸ See 2005 Ontario Tire Recycling and Economic Development (OnTRED) Plan, wherein real economic and environmentally sound uses of scrap tires are contemplated such as for rubberized asphalt pavement and crumb rubber for the manufacture of new tires, adding approximately \$13 million to the Ontario economy, p.6, <http://www.productstewardship.org/ontredplan.pdf>

Although Lafarge Canada contends that the kiln is “capable”⁹ of burning alternative fuels, such an assertion does not mean that the kiln was “designed” to burn waste as ‘alternative fuels’ as required under O. Reg. 419/05 s.36. Capable simply means ‘able’; for that matter a wood fireplace lit by a match is capable of burning waste as ‘alternative fuel’ but would not have been “designed” to do so.

The term “design” is defined in the Canadian Oxford Dictionary as, “*a preliminary sketch for the making or production of a building, machine, garment, etc*”. Thus unless the designers of the Lafarge Bath cement kiln had stipulated the use of, “*pelletized municipal waste, tires, plastic, animal meal and solid shredded materials and by-products with biomass characteristics,*” as fuel for the kiln back in the mid 1970s when the kiln was designed and built, which we doubt is the case, this proposal, if approved, would violate Ontario Regulation 419/05.

To summarize this part, the burning of used or scrap tires for fuel would undermine a complete and alternative legislative scheme to promote the recycling of used tires and, would offend new Ontario Regulation 419//05 because Lafarge Canada’s cement kiln was not designed to burn tires in any event. In short, our submission is that the Ministry of Environment would offend its own legislation if it were to approve the Lafarge Canada’s proposal.

4) An Individual Environmental Assessment is Required

Should the Ministry proceed in the consideration of the proposal, it is our submission that the completion of an individual environmental assessment under the *Ontario Environmental Assessment Act* (EAA) is required in order to fulfill the purpose of the EAA.¹⁰ While the Lafarge proposal has not been designated under the EAA, it is a commercial proposal as outlined in s.3 (b), that has not been exempted from the applicability of the Act by the application of a regulation, for example, under Ontario Regulation 116/01 as an Electricity Project.¹¹

Ontario’s decision to provide environmental assessments for, inter alia, commercial proposals reflects a commendable commitment to the proper consideration of all impacts and alternatives at the earliest planning stages.

A proper environmental assessment, as opposed to the highly general description of the proposal contained in the EBR notice, would identify a number of important considerations. An individual environmental assessment would allow both the Ministry, the Loyalist township and the public to ascertain the true nature, scope and environmental

⁹ Page 10 of the document from Lafarge North America titled Design and Operating Manual. Bath Plant Alternative Fuel Management System dated January 2006 states that the kiln burner is, “capable of burning coke, coal, natural gas, and alternative fuels.” The same page states that, “the burner pipe is rated for natural gas or coal of 500,000,000 BTU/hr.

¹⁰ *Ontario Environmental Assessment Act*, R.S.O. 1990, Chap. E.18, S. 2. “Purpose of Act – The purpose of this Act is the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment”.

¹¹ *Ibid.*, s.3 (b), “This Act applies to...(b) major commercial or business enterprises or activities or proposals, plans or programs in respect of major commercial or business enterprises or activities of a person or persons, other than a person referred to in clause (a), designated by the regulations;” see http://www.e-laws.gov.on.ca/DBLaws/Statutes/English/90e18_e.htm, and see O.R. 116/01 *Electricity Project* http://www.e-laws.gov.on.ca/DBLaws/Regs/English/010116_e.htm

and human health impacts of the materials to be burned, as well as, the technical and human resources capacity of the facility to manage not only daily operations but also under upset conditions and in emergencies.

We understand from the Loyalist Environmental Coalition that currently this facility, built in 1974 already suffers from upset conditions several times a month, often on weekends and at night. We also understand from documentation provided by Lafarge Canada that the continuous emissions monitoring system at the Bath facility only regularly tests for SO₂ and NO_x, not the range of toxic contaminants emitted from its St. Constant plant in Quebec that does burn tires for fuel.¹²

4.1) Current Toxic and other Contaminants by LaFarge Canada and others

We set out below our evidence on the likely and significant human health and environmental impacts related to the Lafarge Canada Bath facility proposal that are relevant to all of our submissions outlined below.

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The most recent information available on emissions¹³ from the Lafarge Canada cement plant in Bath reports that the toxic air pollutants hexachlorobenzene and mercury are emitted from the stack(s) in addition to hundreds of tonnes of smog producing criteria air contaminants such as oxides of nitrogen (NO_x), sulphur dioxide (SO₂), particulate matter (including PM_{2.5} and PM₁₀), volatile organic compounds (VOCs) and Carbon Monoxide (CO).

In addition to the present day Lafarge Canada air emissions, there are numerous other facilities in the area which are major air polluters including the OPG Lennox Generating Station, the Essroc Canada Inc. cement plant, the Kosa Canada Company (plastics manufacturing plant), Strathcona Paper manufacture plant and the Bombardier Transportation plant, to name a few. Given the concentration of major air polluters in the vicinity of the Lafarge Bath cement plant, a cumulative impact assessment is needed to analyze the added adverse effects on land, water and air quality represented by Lafarge's proposal to burn 'alternative fuels'.

A point of impingement (POI) assessment for particulate matter (PM) done in 2004 under the old modelling regime of Ontario Regulation 346 found that the plant is causing concentrations of 73 ug/m³ at the property line and 66 ug/m³ off property.¹⁴ The POI standard for PM is 100 ug/m³.

It is our understanding that neighbours have complained of dust from the Lafarge cement kiln. Lafarge tested the dust and found that 20% of the dust composition was coal and

¹² Lafarge Design and Operating Manual, 2006, s. 2.2.2.3. Stack & CEM System.

¹³ National Pollutant Release Inventory 2004 Facility and Substance Information for Lafarge Canada Inc. Bath Ontario Cement Plant. Available at <http://www.ec.gc.ca/pdb/querysite/facility_substance_summary_e.cfm?opt_npri_id=0000005850&opt_report_year=2004>

¹⁴ Information contained in the materials available for review pursuant to the proposal at the Ministry of Environment Assessment and Approvals Branch.

coke (fuels used by Lafarge), indicating that the plant is a significant source of this pollution and is impinging on neighbouring properties.¹⁵

Therefore, while not in exceedence of the POI standards, complaints have occurred and the question arises as to whether the use of the proposed alternative fuels will contribute additional PM and other pollutants leading to non-compliance with the POI standards and further negative impacts on its neighbours.

4.2) Likely Increase in Toxic Air Pollutants - Comparison to the Lafarge St. Constant Quebec Cement Plant

A two page submission by Lafarge Canada entitled *Bath Permit (V) C of A Permit Application Impact of Alternative Fuels on Kiln Emission* dated February 2003 appears to be the only document contained within the files which were available for public review that address the impact alternative fuels could have on kiln emissions. The submission is vague at best and estimates the impact of burning waste based on what is described as: “chiefly Lafarge’s practical experience using alternative fuels at numerous plants worldwide.” Lafarge concluded that no significant change to the emissions of metals, except zinc, and no significant change for dioxins and furans are predicted. No calculations, testing, monitoring or science is given to substantiate the claims made in the document, nor does Lafarge cite which kilns were examined in the analysis that lead to these conclusions.

A similar comparison we made with the Lafarge cement kiln in St. Constant Quebec (the closest Lafarge facility which utilizes tires as fuel) drew a very different prediction. We found that many of the kiln emissions increased significantly when the St. Constant Quebec plant started to burn tires as fuel, thus we find Lafarge’s findings unsubstantiated, contradicting other public information.

The St. Constant, Quebec Lafarge cement plant burns tires for a portion of it fuel needs. To the best of our knowledge, the plant started to use tires as a fuel about five years ago.¹⁶ To examine the impact of burning tires on stack air pollutant emissions at that plant, we looked at the publicly available Environment Canada National Pollutant Release Inventory (NPRI) stack emissions data.

Annual reported totals of stack pollutants from the St. Constant Lafarge cement plant between the years 2000 to 2004 (2004 is the most recently available data) increased substantially for many toxic air pollutants after the plant started to utilize tires (see Figures 1 and 2 below). Emissions of cadmium, chromium, copper, lead, dioxins and furans (PCDD/F), manganese, nickel and zinc all increased appreciably. Although it is reported in the scientific literature that burning tires may reduce oxides of nitrogen from stack emissions at cement plants, the NPRI data was not sufficient to determine whether that occurred at the St. Constant Quebec cement plant. With respect to other air pollutants, the data is either inconsistent (no trend) or insufficient (not enough years of data) to determine how tire burning affected stack emissions.

¹⁵ Power point presentation from Lafarge contained in the materials available for review pursuant to the proposal at the Ministry of Environment Assessment and Approvals Branch.

¹⁶ When asked when the St. Constant Quebec plant started to burn tires a representative of Lafarge told us “about five years ago” when asked at a meeting last October 20, 2005 at the Sierra Legal offices.

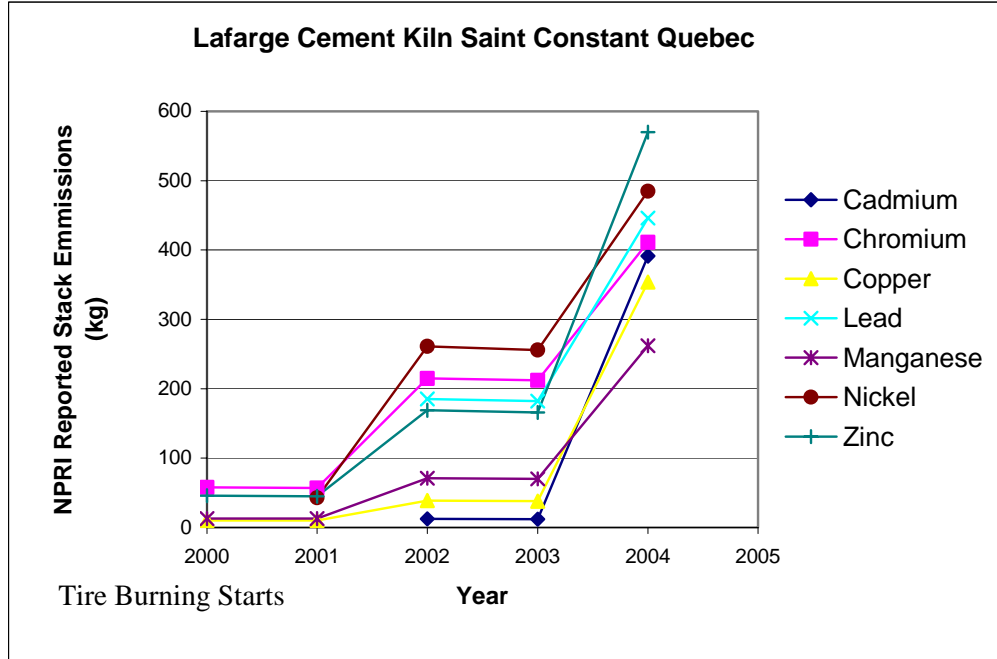


Figure 1 – Stack Emissions St. Constant Quebec Lafarge Cement Kiln

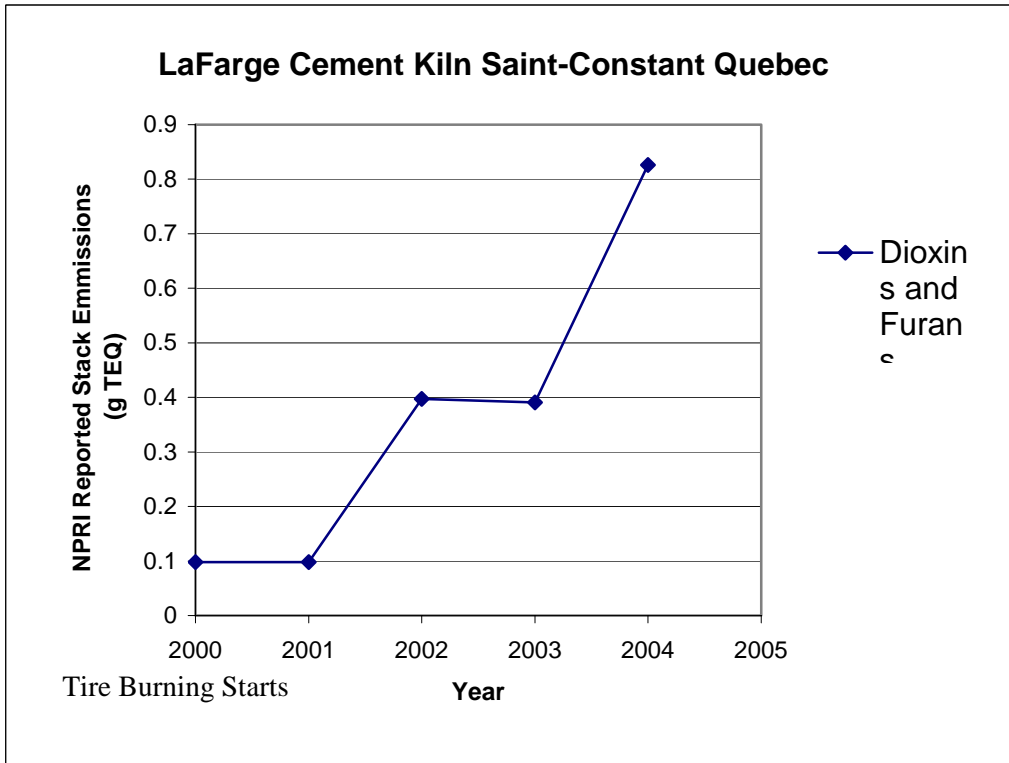


Figure 2 – Dioxin and Furan Stack Emissions St. Constant Quebec Lafarge Cement Kiln

4.3) Studies Find Increase in Toxic Pollutants with use of Tires as Fuel

Dames & Moore (a large engineering consulting company) studied the use of tires as fuel in 1997 for the California government.¹⁷ The study looked at stack emissions from tire fuel in 28 facilities, 15 of which were cement kilns. In terms of the cement plants, the report found that emission varied widely but, on average, comparing the use of tires to ‘no-tires’ as fuel, the study found that:

- 56% of carcinogenic pollutant measurements increased,
- 56% of criteria pollutant measurements decreased,
- dioxin and furan measurements increased slightly,
- 56% of metal (26 different metals) measurements were up, and
- 71 % of PAHs (polycyclic aromatic hydrocarbons) measurements increased.

Another study tested stack emissions from a cement plant in Quebec¹⁸ that went from utilising just coal, to coal and tires.¹⁹ The study found that PM, SO₂ and CO emissions were up slightly while NO_x was down slightly. But even more concerning was the finding that iron, aluminium, zinc, lead, chromium and manganese were all up significantly. In fact, the study found that, “the amount of metals coming from all the stacks increased by 82%.”

In a study on the release of persistent organic pollutants (POPs), the World Business Council for Sustainable Development²⁰ (WBCSD) found that, “*compared against burning of coal only, the use of substitute fuels resulted in an **increase** in dioxin emissions, from a very low base of 0.002-0.006 ng I-TEQ/m³ to 0.05 ng I-TEQ/m³ for solvents and to 0.08 ng I-TEQ/m³ in the case of used tyres.*”

The WBCSD report also found dioxin formation is closely tied to the raw materials used, including fuels: “*the raw materials themselves can have a considerable influence on the emissions and the presence of high levels of organic matter in the raw materials has been associated with elevated emissions of PCDD/F.*”

In the case of Lafarge’s current proposal, there is insufficient information to determine the effects of increase in organic matter of the fuel without a proper and full environmental assessment. Certainly organic matter is a concern given the proposal includes animal bone meal, by-products with biomass characteristics and pelletized municipal waste.

According to the Rubber Manufactures Association, a tire is composed of: synthetic rubber, natural rubber, sulphur and sulphur compounds, silica, phenolic resin, various oils - aromatic, naphthenic and paraffinic, fabrics such as polyester and nylon, petroleum waxes, various pigments such as zinc oxide, titanium dioxide, carbon black, fatty acids,

¹⁷ Dames & Moore. 1997. Analysis of Emissions Test Results and Residual By-products from Facilities using Tires as Fuel Supplement.

<http://www.ciwm.ca.gov/publications/default.asp?pubid=1135>

¹⁸ It is unknown if this is the St.Constant Lafarge plant as the study does not give the plant location.

¹⁹ Carrasco et al.,2002.Gaseous Contaminant Emissions as Affected by Burning Scrap Tires in Cement Manufacturing. J. Environ. Qual. 31:1484-1490.

²⁰ World Business Council for Sustainable Development. Cement Sustainability Initiative. 2006. Formation and Release of POPs in the Cement Industry 2nd edition. Available at <http://www.wbcscement.org/pdf/formation_release_pops_second_edition.pdf>.

other “inert” materials and steel wire.²¹ Natural rubber makes up only about 14% of a passenger tire and 27% of a truck tire, while 27% of the composition of a passenger tire and 14% of the composition of truck tire are synthetic rubbers.²² According to the International Institute for Synthetic Rubber Product Producers Styrene-Butadiene and Polybutadiene are the most common types of synthetic rubber used in tires.²³ Tires are composed of complex mixtures of components that must be assessed in terms of how they may influence air pollutant emissions upon incineration. For example, the U.S. EPA has classified 1,3-butadiene (a component of synthetic rubber used in tires) as a group B2: probable human carcinogen²⁴ and 1,3-butadiene is listed under the *Canadian Environmental Protection Act* as a toxic substance.²⁵

The concern raised by the WBCSD that elevated emissions of dioxins are related to the raw materials used is further exasperated by the fact that the proponents seeks to import used tires from at least eight U.S. jurisdictions as well as Quebec, all with varying standards regarding the content of tires.

4.4) National Obligation to “Virtually Eliminate” POPs

Dioxins and furans, a known by-product of burning tires for fuel, are persistent organic pollutants (POPs). Dioxins and furans are one of the most toxic environmental contaminants known to humankind. Environment Canada has listed Dioxins and furans as Track 1 toxic substances that must be virtually eliminated because they are persistent, bioaccumulative and anthropogenic.

Dioxins and furans are listed as Track 1 substances under the *Toxic Substances Management Policy* of the Federal Government and in the complementary *Policy for the Management of Toxic Substances* of the Canadian Council of Ministers of the Environment (CCME) because they: “pose an unreasonable and otherwise unmanageable risk to the environment and human health”.²⁶ Instead of creating even more POPs, the objective for persistent toxic substances is their virtual elimination. Indeed, Canada ratified the *Stockholm Convention on Persistent Organic Pollutants* in 2001, which seeks the continuing minimization, and, where feasible, ultimate elimination of the releases of intentional and unintentionally produced POPs.²⁷ If Canada is to continue its efforts to

²¹ <http://www.rma.org/scrap_tires/scrap_tire_markets/scrap_tire_characteristics/#anchor135840>

²² Ibid

²³ Available at <http://www.iisrp.com/WebPolymers/00Rubber_Intro.pdf>

²⁴ Available at <<http://www.epa.gov/iris/subst/0139.htm>>

²⁵ Available at <http://www.ec.gc.ca/CEPARRegistry/subs_list/Toxicupdate.cfm>

²⁶ 1998 CCME POLICY STATEMENT FOR THE MANAGEMENT OF TOXIC SUBSTANCES, para 5, *Track 1, Virtual Elimination*: “All Track 1 substances under this Policy are considered to pose an unreasonable and otherwise unmanageable risk to the environment and human health and require a Canada-wide approach, with the objective of virtual elimination...Canada wide control strategies including, for example, provisions for pollution prevention planning, bans and phase-outs, will be developed and then implemented consistent with the Sub-agreement on Standards”. http://www.ccme.ca/assets/pdf/toxics_policy_e.pdf

²⁷ *Stockholm Convention on Persistent Organic Pollutants*, Article 3, Measures to reduce or eliminate releases from intentional production and use and Article 6, Measures to reduce or eliminate releases from stockpiles and wastes...(d) Take appropriate measures so that such wastes, including products and articles upon becoming wastes, are:.. (ii) Disposed of in such a way that the persistent organic pollutant content is destroyed or irreversibly transformed so that they do not exhibit the characteristics of persistent organic pollutants or otherwise disposed of in an

comply with the Convention and to ensure other countries reduce their own emissions of POPs, it must set an example by doing so within Canada.

4.5) Lack of National Standards for Cement Kilns

Despite Canada's progress in managing POPs more generally, other countries have approached the issue of used tires as an "alternative fuel" with great caution, developing comprehensive national standards and protocols for cement kilns.²⁸ For example, emissions standards for cement kilns were adopted in the US²⁹, which are now being tightened,³⁰ similarly Mexico has standards³¹; however Canada has no enforceable emissions standards for the cement industry. Environment Canada developed in 1998 a *National Emissions Guidelines for Cement Kilns* which sets a NO_x limit of 2.3 kg/t clinker (monthly average) for large new cement plants of capacity greater than 1,500 tonnes per day built after January 1, 1998. Unfortunately, however, it does not apply to kilns like the Lafarge Bath kiln, which was built in the 1970s even though these older facilities likely need the most assistance to achieve best practices.

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Furthermore, the proposal to incinerate such a diverse mixture of waste in the Lafarge Bath cement kiln is unprecedented in North America.³² While there are cement kilns in North America that burn one or two wastes as alternative fuels, such as tires or plastics, no kiln could be found that utilized as many different waste materials or as diverse a mixture of materials as is being proposed by Lafarge Canada for the Bath cement kiln. In addition, no precedent has been cited of a cement kiln burning municipal waste pellets.

Given that the Lafarge Canada proposal is unprecedented and is being considered in a regulatory vacuum, it is necessary to conduct a thorough analysis of the environmental and human health impacts through an individual and public environmental assessment.

4.6) EPA Finds Burning Tires in Poor Combustor is Like an Open Tire Fire

It is widely recognized that fires at tire dumps present a great human health and environmental risk; open burning of tires results in the uncontrolled release of toxic air pollutants. Moreover, the US EPA found that a combustor that is not well designed to use

environmentally sound manner when destruction or irreversible transformation does not represent the environmentally preferable option or the persistent organic pollutant content is low, taking into account international rules, standards, and guidelines, including those that may be developed pursuant to paragraph 2, and relevant global and regional regimes governing the management of hazardous wastes; <http://www.pops.int/documents/signature/signstatus.htm> (emphasis added). Implemented into Canadian law by virtue of, inter alia, Part V. *Canadian Environmental Protection Act*, <http://laws.justice.gc.ca/en/C-15.31/174585.html>

²⁸ United Kingdom. Environment Agency. Pollution Prevention and Control Regulations. Substitute Fuel Protocol for use in Cement and Lime Kilns.

²⁹ US EPA. National Emission Standards For Hazardous Air Pollutants: Portland Cement Manufacturing Industry.

³⁰ Available at < http://www.epa.gov/ttncaaa1/t3/fact_sheets/portland_propamend_fs.pdf>.

³¹ Jacott. M., et al., 2003. Prepared for the Commission for Environmental Cooperation. Energy Use in the Cement Industry in North America: Emissions, Waste Generation and Pollution Control.

Available at < <http://www.texascenter.org/publications/cement.pdf>> Accessed on March 9th, 2006.

³² Table 3 prepared by Conestoga Rovers and Associates on behalf of Lafarge included in documents available for public review at MOE offices pursuant to EBR posting.

tire derived fuel or a combustor with poor combustion characteristics could present a similar risk as an open tire fire:

“Very little data exist for devices that are not well-designed and use scrap tires for fuel. These sources include fireplaces, wood stoves, small kilns, small incinerators, or any device with poor combustion characteristics. Air emissions from these types of devices are likely between that of open burning and a combustor. However, there is serious concern that the emissions are much more similar to those of an open tire fire than a combustor” (emphasis added).³³

As indicated above, local citizens have observed that the Lafarge cement plant in Bath is prone to several upset conditions per month during which “out of the ordinary” heavy plumes of air pollutants are seen emanating from the plant’s smokestack. These frequent upset conditions indicate that the Lafarge Bath cement plant operates frequently under “poor combustion characteristics.”

4.7) Human Health Impacts Related to Tire Burning as an Alternative Fuel

The possible implications of the Lafarge Canada proposal are significant and widespread: from possible increased discharges of toxic air pollutants related to the materials that would be incinerated, to increased risks of spills and discharges due to the greater use of truck transportation and additional on-site storage of materials. Only an independent environmental assessment will allow for a full analysis of the environmental and human health implications of the proposal. The following information highlights some of the publicly available evidence that supports the need for a full examination of this proposal through an environmental assessment.

Dr. Swartz of the University of California in Davis, a professor of environmental science and policy, analysed the results of tire burns at four cement kilns in California and concluded based on his findings that, “*an increase in the use of waste tires as fuel will be damaging to the public's health and well being.*”³⁴

Dr. Swartz based his conclusion on the following findings from a report he wrote to the California government:

*Dioxins and furans showed increases of between 53% and 100% in four tests; polycyclic aromatic hydrocarbons (PAHs) increased in three tests (between 296% and 2230%) but decreased by 68% in a fourth test; lead emissions increased in three tests, by 59%, 388%, and 475%, respectively, and decreased in one test, by 94%; hexavalent chromium increased in one test by 727%, and decreased in two tests by 36% and 87%, respectively.*³⁵

Dr. Goddard-Hill the Acting Medical Officer of Health for Hastings-Price Edward Health Unit, near Bath, raised similar concerns in a letter to the then Minister of the Environment

³³ US Environmental Protection Agency. 1997. Air Emissions from Scrap Tire Combustion. Office of Air Quality Planning and Standards. EPA-600/R-97-115.

³⁴ Dr. Swartz. Professor of Environmental Science and Policy, University of California at Davis. January 21, 1998. Letter sent to the California Integrated Waste Management Board. Available at < http://www.portaec.net/local/tireburning/dr_schwartz.html >

³⁵ Ibid

Hon. Leona Dombrowsky.³⁶ Dr. Goddard-Hill equates the proposal to burn tires at Lafarge to one: “in the category of hazardous waste incineration” because synthetic rubber tires are made of toxic chemicals not found in coal or natural rubber. Dr. Goddard-Hill points out that there are already two other hazardous waste incinerators in the region: Essroc Cement Kiln and the Normapac Steam Reformer raising the issue of cumulative impacts on air quality.

While Dr. Goddard-Hill raises many other important points in his letter, he closes his comments regarding the proposal to dispose of tires in a cement kiln at the Lafarge cement plant in Bath by stating that, “*a comprehensive and aware approach needs to be taken in the oversight of chemical discharges into the air and elsewhere from hazardous waste facilities for the protection of the public health and safety.*” In our opinion, such an approach must be pursued through a comprehensive environmental assessment and public hearing.

4.8) Failure to conserve energy and natural resources

Recycling used or scrap tires into useful products has been shown to have significant natural resource and energy conservation benefits over burning them. Consider the energy balances for production of tires, recycling scrap tires and incinerating scrap as provided in the table below:

Table 1: Specific energy values. Sources: W. Dierks: Incorporating the Use of Recycled Rubber, Robert Snyder: Scrap Tire Disposal and Reuse, compilation by Kurt Reschner³⁷.

Energy needed to manufacture a tire	32,0	kWh/kg
Energy needed to produce tire rubber compound	25,0	kWh/kg
Thermal energy released when incinerating scrap tires	9,0	kWh/kg
Energy consumed in the process of grinding scrap tires into crumb rubber (0.5 to 1,5 mm)	1,2	kWh/kg

Reschner summarizes the table by noting that, “*As shown in the table above, it takes 3–4 times as much energy to produce tire rubber, compared to the energy recovered by ‘thermal recycling’.* Consequently, the use of recycled tire rubber for its originally intended (or related) purpose makes by far more sense than incineration, both environmentally and economically.”

It is submitted that the failure to address recycling as an scrap tire management alternative abrogates the Ministry’s responsibility under s.2³⁸ of the Environmental Bill of Rights, 1993 and offends the legislative scheme under the WDA above.

³⁶ Available at <<http://eloerg.tripod.com/waupoos/id19.html>>

³⁷ <http://www.entire-engineering.de/str/en.html>

³⁸ Purposes of Act, s. 2. (1) The purposes of this Act are, (a) to protect, conserve and, where reasonable, restore the integrity of the environment by the means provided in this Act; (b) to provide sustainability of the environment by the means provided in this Act; and (c) to protect the right to a healthful environment by the means provided in this Act. 1993, c. 28, s. 2 (1).

4.9) Unknown Impacts of Burning Waste Pellets, Plastic, Shredded Materials and Animal Meal

The EBR posting provides little information in terms of what exactly the above materials are and no information on what are the expected impacts of burning such materials in the cement kiln on land, water and air pollutant emissions.

An environmental assessment and public hearing will allow for complete analysis of the impact on air emissions and local and regional air quality, due to the burning of animal meal, plastics, shredded material with biomass characteristics and pelletized municipal waste. Of particular concern is the use of chlorinated waste such as plastics, which present a greater risk for dioxin and furan formation. Further, the impact of burning waste containing unknown constituents at unknown concentrations such as pelletized municipal waste cannot possibly be assessed without a proper environmental assessment.

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Furthermore, the pelletizing factory operation has not yet been approved and therefore remains largely untested.³⁹ The pelletizing operation, which would supply the pellets, is located in Vaughan and the pellets would be manufactured from municipal waste collected in the city of Vaughan, for now.

4.10) Effects due to Truck Traffic and on Site Storage of Waste Materials

It is our understanding the proposal would result in a substantial increase in truck traffic in and out of Bath where the facility is located. The proposal would allow the facility to operate 24 hours per day, seven days a week, 365 days per year. Yet, the proposal gives no mention of trucking routes and the readiness of police and fire departments to handle the additional traffic and likely increase in accidents. Materials available at the MOE offices for review indicate an additional four trucks per day will travel through Bath carrying tires alone. Furthermore, no alternative route is available other than to travel directly through Bath. A public environmental assessment could include an analysis of the impacts of increased truck traffic on the local population and environment, as well as, alternate routes.

Furthermore, the proposal would require storage of alternative fuel materials on site to: “a maximum of 400 tonnes of animal meal, plastics, biomass, and shredded tires and up to 40 trailers.” On-site storage of these materials will result in fugitive emission. Proposed changes to the site use regarding waste storage will increase the risk of incidents such as spills (to air, land and water), fires and traffic accidents at the site and on-travel routes to and from the site. Only an environmental assessment will allow for a full analysis of these and other potential effects, alternatives, mitigation and emergency planning.

(2) The purposes set out in subsection (1) include the following: 1. The prevention, reduction and elimination of the use, generation and release of pollutants that are an unreasonable threat to the integrity of the environment. 2. The protection and conservation of biological, ecological and genetic diversity. 3. The protection and conservation of natural resources, including plant life, animal life and ecological systems. 4. The encouragement of the wise management of our natural resources, including plant life, animal life and ecological systems. 5. The identification, protection and conservation of ecologically sensitive areas or processes. 1993, c. 28, s. 2 (2).

³⁹ Email correspondence March 22, 2006 from Tim Edwards, Senior Review Engineer. MOE.

4.11) Compounding Current water quality Compliance Concerns

Of additional concern is the impact the proposal would have on surface water quality. The proposal would require the storage of waste for use as “alternative fuels” on the site as described above. The EBR posting does not describe any requirements to contain or treat the leachate that may be generated or other contamination and impacts that may result from the storage of waste on the site. In 2002, the Lafarge Bath plant had compliance problems related to surface water discharges.⁴⁰ Using the site to store and process waste for use as fuel would likely increase various constituents of the wastewater generated at the site possibly resulting in even more wastewater-related violations and possible detrimental impacts on the quality of the receiving water.

In short, for the Ministry of the Environment to approve the proponent’s requests to introduce even more potential for toxic releases to the air, water and land when the safety of current operations is already in doubt would be, in our respectful opinion, a reckless disregard for the health and safety of both the Lafarge workers as well as the broader community. To ensure the purposes of the EAA, and to promote compliance with the *Stockholm Convention on POPs*, an individual environmental assessment is required for this proposal given the significant evidence we outlined above.

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5) The Canadian Federal Government Lawfully Required by the *Canada-United States Air Quality Agreement* to ensure an Environmental Assessment and Prior Notification of likely Transboundary Air Pollution

In addition to our submissions related to Ontario environmental law, we also rely upon the *Canada-United States Air Quality Agreement* signed by Canada and the United States in Ottawa, Ontario on March 13, 1991 to address transboundary air pollution.⁴¹ The objective of the Parties is to control transboundary air pollution between the two countries.⁴² This objective is made operational, in part, by Article V wherein the Parties agree to undertake environmental impact assessment, prior notification, and, as appropriate, mitigation measures.⁴³ Canada and the U.S. committed to notify each other concerning proposals that could cause significant transboundary air pollution. Since 1994

⁴⁰ Available at < <http://www.ene.gov.on.ca/envision/compliance/compliance.htm>>

⁴¹ See <http://www.ec.gc.ca/cleanair-airpur/> 1991 *Canada-United States Air Quality Agreement*.

⁴² ““Transboundary air pollution” means air pollution whose physical origin is situated wholly or in part with the area under jurisdiction of one Party and which has adverse effects, other than effects of a global nature, in the area under the jurisdiction of the other Party;” and “Air Pollution” means the introduction by man, directly or indirectly, of substances into the air resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems and materials property and impair or interfere with amenities and other legitimate uses of the environment, and “air pollutants” shall be construed accordingly”., see Article 1 Definitions.

⁴³ “Article V, Assessment, Notification, and Mitigation, 1. Each Party shall, as appropriate and as required by its laws, regulations and policies, assess those proposed actions, activities and projects within the area under its jurisdiction that, if carried out, would be likely to cause significant transboundary air pollution, including consideration of appropriate mitigation measures. 2. Each Party shall notify the other Party concerning a proposed action, activity or project subject to assessment under paragraph 1 as early as practicable in advance of a decision concerning such action, activity or project and shall consult with the other Party at its request in accordance with Article XI... 5. Each Party shall, as appropriate, take measures to avoid or mitigate the potential risk posed by actions, activities or projects that would be likely to cause or may be causing significant transboundary air pollution...”.

the Parties have been notifying each other of pollution sources within 100 kilometres (km) or 62 miles of the border.

Canadian assessment and prior notification obligations under the *Canada-US Air Quality Agreement* are made effective in domestic law. Under the *Canadian Environmental Assessment Act*, even where a proposed project is not subject to section 5 requiring a federal authority to perform an assessment, it is submitted that this legislation is still applicable for the purposes of the Lafarge applications. Because the project “may cause significant adverse environmental effects” of a transboundary nature, the Act directs that the Federal Minister of Environment and Minister of Foreign Affairs may refer the project to a review panel for an assessment of the environmental effects of the project outside Canada.⁴⁴

The scope of the environmental assessment is quite comprehensive including: a consideration of the need for and alternatives to the project, as well as, the environmental effects of the technical design, malfunctions or accidents, cumulative effects, taking into account public comments at a public hearing⁴⁵ and based on the precautionary principle.⁴⁶

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The Lafarge Canada facility at Bath Ontario is within 100 kilometres of the United States border (as shown on the map below), with prevailing northwesterly winds in the winter blowing emission directly into United States; the border is about 30 kilometres away. The proposed project is likely to cause significant transboundary effects, requiring an environmental assessment and prior notification of the project before approved.

⁴⁴ *Canadian Environmental Assessment Act*, 1992, Chap. C-15, International Environmental Effects, s.47 (1) “Where no power, duty or function referred to in section 5 is to be exercised or performed by a federal authority in relation to a project that is to be carried out in Canada or on federal lands and the Minister is of the opinion that the project may cause significant adverse environmental effects occurring both outside Canada and outside those federal lands, the Minister and the Minister of Foreign Affairs may refer the project to a mediator or a review panel in accordance with section 29 for an assessment of the environmental effects of the project occurring both outside Canada and outside federal lands.” <http://laws.justice.gc.ca/en/C-15.2/index.html>

⁴⁵ See Section 43.

⁴⁶ Section 16. (1) “Every screening or comprehensive study of a project and every mediation or assessment by a review panel shall include a consideration of the following factors: (a) the environmental effects of the project, including the environmental effects of malfunctions or accidents that may occur in connection with the project and any cumulative environmental effects that are likely to result from the project in combination with other projects or activities that have been or will be carried out; (b) the significance of the effects referred to in paragraph (a); (c) comments from the public that are received in accordance with this Act and the regulations; (d) measures that are technically and economically feasible and that would mitigate any significant adverse environmental effects of the project; and (e) any other matter relevant to the screening, comprehensive study, mediation or assessment by a review panel, such as the need for the project and alternatives to the project, that the responsible authority or, except in the case of a screening, the Minister after consulting with the responsible authority, may require to be considered”.



The proponent can avoid a federal assessment and public hearing if it voluntarily agrees to participate in one at least as comprehensive as the federal process or, if the Ministry of Environment orders one, based on these submissions.⁴⁷

Our client has instructed us to pursue their rights under the *Canadian Environmental Assessment Act* should the Ontario Ministry of Environment deny their perfectly reasonable request to require that the proposed LaFarge Canada project be subject to an environmental assessment and a public hearing. We make the following submissions in the alternative.

6) Mandatory Hearing Required by the *Ontario Environmental Protection Act*

Lafarge Canada seeks approval to operate a waste disposal site at Bath, Ontario to facilitate the use of “alternative fuels” of certain non-hazardous solid waste materials, partially to replace the use of coal and petroleum coke. These materials include pelletized non-hazardous municipal waste. According to information obtained by the Ministry⁴⁸, we

⁴⁷ Section 47(2): “The Minister and the Minister of Foreign Affairs shall not refer a project to a mediator or a review panel pursuant to subsection (1) where the Minister and the governments of all interested provinces have agreed on another manner of conducting an assessment of the environmental effects of the project occurring both outside Canada and outside federal lands that (a) includes a consideration of the factors required to be considered under subsections 16(1) and (2); (b) includes an opportunity for the public to participate in the assessment; (c) includes a requirement that the report is to be submitted to the Minister at the end of the assessment; (d) includes a requirement that the report is to be published; and (e) meets any criteria established pursuant to paragraph 58(1)(h).”

⁴⁸ Tim Edwards, Senior Review Engineer – Waste Approvals, Ministry of the Environment. Sent via email to Elaine Mac Donald, March 22, 2006.

understand that the reference to pelletized municipal waste will not include sewage sludge pellets. If this is the case it must be clearly stated on Lafarge's certificate of approval.

In a revised application, Lafarge agreed to restrict its use of pelletized municipal waste to a maximum of 1.25 tonnes per day, in order to avoid a mandatory public hearing under the EPA.⁴⁹ Aside from commenting on the proponent's blatant manipulativenss, in our submission Lafarge Canada has misconstrued the legal requirements.

As we argue below, in order to trigger a mandatory public hearing the source of the municipal waste must be from a location with a population in excess of 1,500 people. This determination is not based on a comparison between the quantity of waste to be disposed and the quantity produced by a population of 1,500; but by a comparison between the trigger of 1,500 persons and the population size of the community from which the waste originates. The various factors and calculations used to account for material and moisture losses that occur during the manufacturing of the pelletized municipal waste in order to estimate the equivalent municipal solid waste tonnage represented by 1.25 tonnes of pellets are irrelevant.

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According to the MOE, the pelletized municipal waste would originate from a pelletizing factory in Vaughan in the Regional Municipality of York. The Dongara Pellet Factory proposal was posted on the Environmental Bill of Rights (EBR) registry in May of 2005 and as far as we know, has not yet been approved. The EBR proposal for the municipal waste-pelletizing factory explains that the municipal solid waste received by the facility would originate primarily from the city of Vaughan. According to the city of Vaughan's web site, the population of the city is 182,022 people.

The purpose of the *Ontario Environmental Protection Act* is to provide for the protection and conservation of the natural environment.⁵⁰ Since Lafarge Canada seeks approval pursuant to section 27 of the Act for a waste disposal site, then a public hearing is required pursuant to section 30(1) of the Act because the municipal waste is from the city of Vaughan with a population in excess of 1500 people.⁵¹ In our submission, the Lafarge application does not come within the provisions of section 32 where a public hearing is merely discretionary.⁵²

⁴⁹ Lafarge North American, Letter to David Bell (MOE) April 8, 2005: "Lafarge has learned from its discussions with your Ministry that if the amount of municipal waste incorporated into the fuel pellets exceeds the waste of 1500 persons, that a mandatory public hearing must be held under Section 30 of the EPA. Given these realities, Lafarge wishes to clarify its application to indicate that the amount of municipal waste integrated in the fuel pellets will be kept to less than the waste of 1500 persons. The details of how this can be ensured can be worked out at a later date".

⁵⁰ *Environmental Protection Act* R.S.O. 1990, c.E.19, s.3 (1).

⁵¹ EPA, When Tribunal hearing required, s. 30(1) "Where the Director receives an application for a certificate of approval for the use, operation, establishment, alteration, enlargement or extension of a waste disposal site for the disposal of hauled liquid industrial waste or hazardous waste as designated in the regulations or any other waste that the Director ascertains, having regard to the nature and quantity of the waste, is the equivalent of the domestic waste of not less than 1,500 persons, the Director shall, before issuing or refusing to issue the certificate of approval, require the Tribunal, by a notice in writing, to hold a hearing." R.S.O. 1990, c. E.19, s. 30 (1); 2000, c. 26, Sched. F, s. 12 (12).

⁵² EPA, When Tribunal hearing discretionary, s. 32(1) " Where the Director receives an application for a certificate of approval for the use, operation, establishment, alteration, extension or

It must be recalled that the Ontario Court of Appeal in Banks. v. Northumberland (County) agreed with the Divisional Court’s opinion that in selecting the words “final disposal of waste at the site” in section 30 of the Act, the legislative scheme quite clearly recognized the greater environmental concerns and therefore the need to attract closer scrutiny through a public hearing process.⁵³ Indeed the Divisional Court continued: “if an exception is to be made to the general requirement for a hearing, then the onus is upon the Director and the County to show that the legislation clearly permits it”.⁵⁴

More specifically for our purposes, the Ontario Court – General Division in Tilbury East (Township) v. Chatham (City)⁵⁵ was required to interpret a similar provision under the EPA for an renewal or extension of a provisional certificate of approval to dispose of domestic waste from the County of Kent. The original certificate was issued before the Act was amended in 1972 that began to require a public hearing where the “nature and quantity of the waste is the equivalent of domestic waste of not less than 1,500 persons”. While the court found that the amendment did not apply retroactively and thus there was no requirement to hold a hearing for the renewal, the Court was quite clear that after the amendment, the simple question before the Court to trigger a hearing in the future was whether the County had “ at all relevant times a population in excess of 1,500 persons”.

The 1,500 person trigger is applied based on a comparison with the population of the community from which the waste originates, in this case Vaughan, and not a comparison the municipal waste tonnage represented by 1,500 persons. Therefore, it is submitted that should the Ministry proceed under the Environmental Protection Act, and then the Lafarge application is one requiring a mandatory public hearing pursuant to section 30 of the Act because the waste is from a location in excess of 1,500 persons.

In the alternative, given the likely significant environmental and public health effects of the proposal, the Lafarge Canada s. 27 application ought to be subject to a public hearing pursuant to section 32 of the Act as a matter of discretionary authority, to ensure that the purposes of the Act are observed.

7) Ontario Environmental Bill of Rights Requires a Public Hearing

Should the Ministry of Environment deny our clients reasonable request for an environmental assessment under the EAA, and for a public hearing under the EPA, it is our further alternative submission that the proposal requires a public hearing pursuant to the Ontario *Environmental Bill of Rights* (EBR). Part Two of the Bill sets out minimum levels of public participation that must be met before the Government of Ontario makes decisions on certain kinds of environmentally significant proposals for policies, Acts,

enlargement of, (a) a waste management system that does not include a waste disposal site referred to in section 30; or (b) a waste disposal site other than a waste disposal site referred to in section 30, the Director may, before issuing or refusing to issue the certificate of approval, require the Tribunal, by a notice in writing, to hold a hearing. R.S.O. 1990, c. E.19, s. 32 (1); 2000, c. 26, Sched. F, s. 12 (12).

⁵³ Banks v. Northumberland (County) 114 D.L.R. (4th) 360 at 367 (C.A.)

⁵⁴ Banks v. Northumberland (County) 11 C.E.L.R. 41, 64 O.A.C. 116, para. 12.

⁵⁵ Tilbury East (Township) v. Chatham (City) [1991] O.J. No. 1249 at 1250, respecting s. 31 of the EPA, 1971 as amended by EPA, 1972, s.33 a (1).

regulations and instruments, including section 9 and section 27 approvals under the EPA.⁵⁶

According to the Classification of Proposals for Instruments regulation made under the EBR, a proposal for approval under section 27 of the EPA respecting a waste disposal site is considered to be a Class II Proposal.⁵⁷ Class II proposals ensure that the Ministry provides enhanced public notice and participation, recognizing the additional level of risk and the extent of potential harm to the environment involved.⁵⁸

Consequently, it is submitted that in any event, and without prejudice to our submissions pursuant to the *Canadian Environmental Assessment Act* above, our client is entitled to enhanced public notice and participation, such as a public hearing, pursuant to the *Ontario Environmental Bill of Rights*.

Summary and Conclusion

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To conclude, the province of Ontario already has a complete and alternative legislative scheme to manage designated wastes such as used tires that promotes recycling and not the burning of these valuable materials. The 1974 Lafarge facility in Bath Ontario was certainly not “designed” to burn this type of waste and therefore the approval of the proposal would clearly offend both the Ontario 2002 *Waste Diversion Act*, as well as, the new *Ontario Regulation 419/05*.

Should the Ministry proceed notwithstanding this caution, it must be recalled that at the Lafarge Quebec facility where used tires are burned for fuel, there has been a significant increase in the emission of highly toxic pollutants. Given the frequent upset conditions observed at the old 1974 Bath facility, it is obviously ill equipped to manage, let alone monitor, the impacts related to this controversial scheme.

Moreover, given the likely and significant public health and environmental impacts related to this first application in Ontario to burn used tires and other wastes in a cement kiln, with local, regional and transboundary implications, a full and independent environmental

⁵⁶ Ontario Environmental Bill of Rights, 1993, S.O. 1993, c. 28, s.3 (1).

⁵⁷ Classification of Proposals for Instruments, O.Reg. 681/94, 1994, Part II Ministry of Environment, s.5 (6).

⁵⁸ *Environmental Bill of Rights*, s. 23(1) “A minister required to give notice under section 22 of a Class II proposal for an instrument shall consider allowing more than thirty days between giving the notice and the decision whether or not to implement the proposal in order to permit more informed public consultation on the proposal. (2) In considering how much time ought to be allowed under subsection (1), the minister shall consider the factors set out in subsection 8 (6). 24(1) A minister required to give notice under section 22 of a Class II proposal for an instrument shall also consider enhancing the right of members of the public to participate in decision-making on the proposal by providing for one or more of the following: 1. Opportunities for oral representations by members of the public to the minister or a person or body designated by the minister. 2. Public meetings. 3. Mediation among persons with different views on issues arising out of the proposal. 4. Any other process that would facilitate more informed public participation in decision-making on the proposal. (2) In exercising his or her discretion under subsection (1), the minister shall consider the factors set out in section 14. 25 (1) A minister required to give notice under section 22 of a Class II proposal for an instrument shall give additional public notice of the proposal in accordance with section 28.

assessment and public hearing is required either under Ontario environmental law or, in the alternative under the *Canadian Environmental Assessment Act*.

Indeed, it would be inappropriate to the proponent to manipulate its proposal in order to purposefully avoid the scrutiny that the legislature, as well as, Ontario courts has determined ought to be ensured. As the main institution in Ontario to protect the public interest in this regard, the Ministry of Environment ought to do the right thing and require a full environmental assessment and public hearing, should it decide to proceed with the proposal at all.

All of which is respectfully submitted,

Sierra Legal Defence Fund
Per:

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