#### ENVIRONMENTAL AND LANDS TRIBUNAL ONTARIO LOCAL PLANNING APPEAL TRIBUNAL

**PROCEEDING COMMENCED UNDER** subsection 34(11) of the *Planning Act*, R.S.O. 1990, c. P. 13, as amended

Applicant and Appellant:	Colacem Canada Inc.
Subject:	Application to amend Zoning By-law No. 2000-75 – Refusal of Application by Township of Champlain
Existing Zoning:	Rural Zone (RU)
Proposed Zoning:	Industrial Heavy – Special Zone (MG-3) and Industrial Heavy –
	Special Exemption Zone (MG-4)
Purpose:	To permit a cement plant and accessory structure
Property Address/Description:	Lot 217, Plan M-100, County Highway No. 17
Municipality:	Township of Champlain
Municipal File No.:	Z-7-2016
LPAT Case No.:	PL170192
LPAT File No.:	PL170192
LPAT Case Name:	Colacem Canada Inc. v. Champlain (Township)

**PROCEEDING COMMENCED UNDER** subsection 17(36) of the *Planning Act,* R.S.O. 1990, c. P. 13, as amended

Appellant :Action ChamplainSubject:Proposed Official Plan Amendment No. 30Property Address/Description :Lot 217, Plan M-100, County Highway No. 17Municipality:Township of ChamplainLPAT Case No. :PL170756LPAT File No. :PL170756LPAT Case Name :Action Champlain v. Prescott and Russell (United Counties)

# WITNESS STATEMENT OF Alain Bernard

(May 31, 2018)

# I. INTRODUCTION

I am the Commercial and Operations/Production Manager at Colacem Canada Inc. I was born in Rockland, Ontario in 1958 and have spent the vast majority of my career in the L'Orignal quarry, in the asphalt, agricultural lime, concrete and more recently in the cement industry. I started working on an asphalt plant during summer school holidays in 1974 and after I graduated high school in 1976, started working as a plant operator for a local asphalt, quarry and construction company. In 1988, I joined Bertrand Construction and was tasked to set up an asphalt plant at one of the then-existing two quarries: the l'Orignal quarry.

In 2004, Bertrand became the primary supplier of limestone to a cement plant owned by Ciment Cemco, located in the province of Québec. After both Ciment Cemco and the Bertrand were purchased by Colacem in 2007 and 2008, respectively, Bertrand continued to supply Colacem. Bertrand remains to this day the primary supplier of limestone to that facility, although the former Ciment Cemco facility has since been sold by Colacem.

I have thus touched upon every aspect of this Company, until this day where I serve as the commercial, operational and production manager. In my evidence, I will provide background evidence with respect to the existing quarry and Colacem's proposal for a new cement plant adjacent to the quarry.

# II. COLACEM CANADA

Colacem Canada has been in operation in Canada since 2007, but builds on about 60 years of experience from its parent company and shareholder, Colacem S.p.A., which is based in Italy. Colacem S.p.A.'s core business is in the production and marketing of cement and concrete all over the world, using the most advanced production technology available.

The Colacem group currently operates 14 production facilities located around the world, including in Italy, in Spain, in Tunisia, in Republic Dominican, in Jamaica, in Albania, in Haiti and up to recently, Canada. As a member of the Colacem Group, Colacem Canada benefits from the organization, technical innovation, design, implementation and management procedures of these production facilities. I will review some of these state of the art facilities which evidence Colacem's experience in a wide array of matters considered in the present appeal, and I will illustrate how Colacem has applied landscaping and buffering to its other sites in relation to other uses.

In addition to its experience worldwide, Colacem Canada also operated the previous Cemco plant in the province of Québec, from its purchase in 2007 to its sale in 2018. Colacem developed a strong reputation in the industry, including within the Canadian Cement Association, for its standards of operations and for the quality of its cement (both production methods and finished product). I was involved, at the time, with supplying the Ciment Cemco facility with limestone from the l'Orignal quarry.

# III. THE EXISTING QUARRY

Colacem's proposed project is immediately adjacent to a quarry where Colacem (and its predecessors) have conducted extraction activities since the 1960's.

The l'Orignal quarry's licensed area is 117 hectares, with an extraction limit of 3,000,000 tons/year. The quarry has approximately 130,000,000 tons of good quality limestone remaining, and produces about 600,000 tons of crushed stone per year. In addition to supplying the Cemco plant, the quarry provides raw materials and finished products to local and foreign contractors, municipalities, regional and provincial governments, industries and to local residents. End-use of the quarry materials include driveways, parking and road works. The quarry also provides agricultural lime to distributors of farming products and filler to a local manufacturing plant. The quarry

employs 21 employees, including 11 Colacem truck drivers and 4 loader operators. It also employs a number of sub-contractors for maintenance and in-house personnel, such as supervisors, mechanics, environmental, health and safety officers and the administration team.

I will review pictures of the l'Orignal quarry and surrounding area, including the quarry's depth, building and machinery. The quarry is licensed to operate 2 meters above sea level, which is about 50 meters below grade. The quarry is currently operating at 41 meters in one part of the quarry. Buildings and machinery on site include a portable crushing spread, a primary and secondary crusher, a primary and secondary screen, a power generator, a loader, a number of conveyors, up to 3 trucks, a 6,000 Bradley mill with control room, a storage silo, a covered agricultural lime shed, a store storage building, a worker's locker room / storage building, a scale / concrete batching / lunch room building, two truck scales, a ready-mix concrete plant with feed and reserve bins (not in use) and a crusher spare parts building.

The quarry was also further improved in 1988 by a 5,000 pounds asphalt batch plant with a batching / electrical room building. Both the quarry and the asphalt plant already operate in accordance with permits issued by the Ontario Ministry of Environment, which include a permit to take water, a certificate of approval to discharge water, a certificate of approval for the asphalt plant and a licence to operate a class A quarry. These facilities have always operated in conformity with or above applicable regulations and to my knowledge have never been subject to a stop-order for non-compliance. The quarry and the plant have always been an integral part of this region's economy and are deep-rooted in the community.

# IV. COLACEM'S PROPOSED CEMENT PLANT

Many of the plants run by Colacem around the world operate where the raw materials are located: this is a usual industry practice which is logical, more secure and more friendly to the environment. This is why in this case, Colacem considered it would be much better to have the cement factory located next to the quarry instead of trucking the limestone out to the Ciment Cemco facility.

# A. Proposed Site

The proposed site is on a 56 hectare lot north of County Highway 17, which is approximately 5 km west of L'Orignal. To the west, the proposed site is adjacent to the quarry owned and operated by Colacem, and to the north to other lands owned by Colacem. I will review a proposed 3-D modelling of the plant with various views from the north (from the Ottawa River), the northeast, the southwest, the east, and the south (from Highway 17). I will also review recent adjustments to the proposed facilities made by Colacem to minimize the impact of its activities on neighbouring properties, including a 50 meter displacement to the north of the heavy industrial facilities, a 20 meter displacement to the north of the electrical substation and a 35 meter displacement of other plant facilities, including a warehouse and workshops. To that end, I will compare the original plan with the revised site plan.

The proposed plant will occupy 39.9 hectares, and the remaining land to the south will be used as a buffer to the plant's activities. The facility will be comprised of 52 buildings and structures including material storage, hoppers, conveyors, crushing and grinding systems, raw mill, preheater, rotary kiln, cooler and cooling tower, cement mill and administrative offices. Crushing and grinding systems, as well as the kiln, will be located as far from the road as is possible, minimizing noise impact.

# B. Cement Production

The l'Orignal plant will have a capacity of 3,000 tons of clinker per day, with an estimated production of 1.16 M tons of cement per year. Production shall be destined to the Canadian and U.S. market; Colacem Canada having already been issued with all the due authorizations to operate with its products in some northern States of the United States.

I will briefly summarize the cement production process and will identify the l'Orignal proposed buildings where each component of said process will be produced. However, I did not participate in the conception of the plant, and it is understood that I will not be the plant director once it is in operation, assuming the necessary planning and environmental approvals are obtained. Colacem will hire experienced operators and engineers to that end. However, I can generally describe how the plant will operate as follows:

- 1. First, limestone (sourced from the adjacent quarry) and silica sand (sourced from quarries situated within 100 km) are blended with additional minerals into a finely ground powder;
- 2. Then, the finely ground powder is heated in a kiln producing a molten product called clinker; and
- 3. Finally, the clinker is mixed with additional materials, depending on the type of cement being made, then ground to a fine powder. These materials include iron mill scale, which could be sourced from the lvaco plant, silica fume and fly ash which are transported by truck to the site, and bauxite and gypsum, which are transported by ship and then trucked to the site.

The plant is anticipated to produce four types of Portland cement: general use (GU) cement, general use limestone (GUL) cement, high early strength (HE) cement, and blended general use silica fume (GUbSF) cement. The facility will be able to produce low alkali cement, which is more durable and as such is preferred for projects such as road construction. Currently, there are no cement producers in Ontario manufacturing this type of cement.

All raw materials (except the fuel, for security reasons) will be stored in closed storage units to preserve their integrity and minimize impacts to the environment.

The cement plant will utilize the most advanced production technology available to achieve efficient energy consumption and minimize impact on surrounding ecosystems. This is in Colacem's interests: with increased competition in the global markets for the production of cement, highly efficient plants are a necessity to reduce to a maximum possible degree, both the loss of energy and the loss of finished product.

(i) Air

The proposed plant in l'Orignal includes a state of the art hybrid air filter to provide reliable dust control. This includes an electrostatic precipitator and bag filters, so that the dust – Colacem's finished product – gets reinserted into the production circuit. Other site design measures will include the use of shielding, the indoor transfer of materials and the installation of dust collectors and building orientation.

Colacem will also undertake to put in place a continuous ambient air monitoring equipment on the basis of applicable ministerial guidelines. This will provide reliable, real-time data on air emissions and on Colacem's conformity with applicable guidelines.

Golder has applied for an environmental compliance certificate which will be described in Golder's expert evidence, as will be all technical details on air issues.

#### (ii) Noise

Colacem has engaged noise and acoustic engineers to assess potential noise impacts and any mitigation measures required, and is proposing to install a noise barrier on the site as will be evidenced in the site plan.

Noise levels and mitigation measures in relation thereto will be described in Golder's expert evidence.

#### (iii) Water

An estimated 550 m<sup>3</sup>/day or 180,000 m<sup>3</sup>/year of water will be used to manufacture the cement. The water will be primarily sourced from the adjacent quarry, from sump water being pumped from the quarry pits. This will be an integrated circuit with no process water discharge from the plant. Excess water from the manufacturing process will rather be released as water vapour. A stormwater management pond will be installed on the property to collect surface drainage from the developed areas of the site and to monitor water quality and control discharge flow from the Charlebois municipal drain. Any run-off

water from the petcoke pile will be treated and used in the process, without any discharge in the Charlebois drain.

Golder has applied for an environmental compliance certificate for stormwater and has investigated groundwater and stormwater issues which will be described in Golder's expert evidence, as will be all technical details on water issues.

#### (iv) Combustion Process

The l'Orignal plant is designed with modern preheaters and precalciners, which utilize the most advanced technologies to reduce energy consumption. The height of the tower, in particular, is used to favorize heat recovery and lower emissions, which are circulated back into the cement production process. The kiln process efficiency, in which cement will be manufactured through a heating process, will mean that the stack emission will be minimal. Colacem will exclusively use petcoke as fuel and will not use any other inflammable material (such as tires).

#### (v) Traffic

Access to the facility will be provided via Highway 17. The combined fleet of trucks delivering raw material to the site and delivering the processed cement to third party users will generate an additional 55 trucks per hour (28 trucks entering and 28 trucks leaving the site). One new internal trucking route will be constructed between the adjacent quarry and the cement plant for the delivery of limestone. Colacem has also combined the site entrance for both the plant and the quarry following a request from the United Counties of Prescott and Russell. Finally, Colacem will implement administrative controls to mitigate truck traffic during the nighttime period, so as to minimize potential noise increases.

CIMA+ prepared a traffic analysis which will be addressed in further details by traffic experts, as will be all technical details on traffic, with the help of Golder.

#### (vi) Compliance and Monitoring

Colacem intends to hire specialists, experts and managers for the ongoing compliance of the proposed plant, including with the requirements of the Approvals issued by the MOECC. The current estimate is that the management team, supervised by the plant director and the environmental director, will be comprised of about 15 individuals from various training backgrounds, including engineering, chemistry and environmental management.

#### (vii) Landscaping

I will review the landscaping plan proposed by Colacem for the plant, which will be made on the basis of previous operations around the world. Landscaping will focus, in particular, on the tree line and appearance of the proposed plant from Highway 17, which is the viewpoint where most members of the community will see the facilities.

#### C. Consultation with the Community

Public consultation is an integral part of Colacem's approach to obtain the necessary permits and approvals to operate, all around the world. Since Colacem's application, Colacem has held numerous public meetings, open houses and consultations with the community. I will describe in particular how I met with a number of neighbours at their home and at Colacem's l'Orignal office to discuss their concerns, and how Colacem put together the open houses and, shortly, the theme meetings in the community.

Golder will also provide evidence on the consultation it undertook in relation to the planning and environmental approvals.

Colacem also undertook several technical studies, including land use compatibility, review of potential impact on agricultural operations, environmental impact assessment to assess potential ecological impacts, an archeological assessment of the property and a traffic impact study. These will be presented by Golder.

Colacem proposes a significant investment in the community, with capital costs to construct the project estimated at \$225 million and the employment of 200 people over a two year period. Once in operation, the local purchases are estimated to be \$5 to 6 million annually, and the project will create 125 direct employment opportunities and 175 indirect employment opportunities, including employment in specialized areas. With an average salary between 20\$ and 25\$/hr, the annual salary will range from \$40,000 to \$50,000; knowing that the median individual income in Champlain, according to the National Household Survey, is \$30,669 per year.

May 31, 2018 Alain Bernard