St. Marys Cement Inc. (Canada)

ALCF ECA Amendment Application for St. Marys Cement

November 2026

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ECA Application Form

Ontario

Ministry of the Environment, Conservation and Parks

Environmental Compliance Approval Application

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Ontario

Ministry of the Environment, Conservation and Parks

Environmental Compliance Approval Application

General Information and Instructions

General Information

Information requested in this form is collected under the authority of the *Environmental Protection Act* (EPA), *Ontario Water Resources Act* (OWRA) and Environmental Bill of Rights (EBR), and will be used to evaluate applications for Environmental Compliance Approvals (ECAs) issued under Part II.1 of the EPA. This application form should not be used for mobile PCB destruction facilities.

For all questions related to preparing or submitting this form or about the Ministry of the Environment, Conservation and Parks collection of information related to this form, contact the ministry at enviropermissions@ontario.ca or at (Toll-free) 1-800-461-6290 (GTA) 416-314-8001.

The Ministry offers environmental permissions services online, and we strongly encourage online submissions for ECA applications. You can apply, track application progress and complete payments online. For more information on setting up an account so that you can apply online please visit: https://www.ontario.ca/page/environmental-compliance-approval.

Instructions for submitting your ECA application:

1. Applicants are responsible for ensuring that they complete the most recent application form (available in PDF format) available at https://www.ontario.ca/page/environmental-compliance-approval. For information about required supporting documentation and technical requirements, you may contact the Client Services and Permissions Branch (the address and phone number are provided in the General Information on this page). As well, you can get this information from your local District Office of the Ministry of the Environment, Conservation and Parks, and online at the link above.
2. A complete application consists of:
   - a completed and signed application form;
   - all required supporting documents and technical requirements identified in:
     i. this form,
     ii. Ministry guidance, the Applications for Environmental Compliance Approvals regulation (Ontario Regulation 255/11),
     iii. and payment of the application fee (in Canadian funds) by certified cheque or money order made payable to the Minister of Finance, or credit card payment (for payments up to $10,000).

     The Ministry may return or refuse incomplete applications to the applicant. The Director may require additional information of any application initially accepted as complete.
3. How to submit:
   - No payment required – email the application form and supporting documents to ECA.Submission@ontario.ca
   - Payment required – see Section 8 for instructions

   Do not mail a paper copy of the application submission to our branch
4. For Waste Disposal Sites the applicant must also send a copy of the application without the fee to the Clerk's office of the local municipality (both upper and lower tier) in which the facility/proposed facility is located unless the application is for a revocation or an amendment that is environmentally insignificant or the applicant is a municipality. **Do not** send any payment information to the municipality.

Information contained in this application form (excluding Section 8, payment information) is not considered confidential and will be made available to the public upon request. Information submitted as supporting information may be claimed as confidential under Section 6.10 of this application form but will be subject to the *Freedom of Information and Protection of Privacy Act* (FIPPA) and the *Environmental Bill of Rights* (EBR). If you do not claim confidentiality at the time of submitting the information, the Ministry may make the information available to the public without further notice to the applicant.

It is an offence under the EPA and OWRA to provide false or misleading information in this application and/or accompanying documents.

Complete the sections as shown below.

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- Section 1: Applicant Information
- Section 2: Project Information
- Section 3: Regulatory Requirements
- Section 4: Site Information
- Section 5: Facility Information
- Section 6: Supporting Documentation and Technical Requirements
- Section 7: Authorization
- Section 8: Payment Information

Fields marked with an asterisk (*) are mandatory.

1. Applicant Information

1.1 Applicant Information

Show Information

Applicant Type *

☑ Corporation ☐ Individual ☐ Federal Government ☐ Municipal Government

☐ Partnership ☐ Provincial Government ☐ Sole Proprietor

☐ Other (specify)

Applicant Name (Legal name of individual or organization as evidenced by legal documents) * Show Information

St. Marys Cement Inc. (Canada)

☑ Select if Business Name same as Applicant Name

Business Name *

St. Marys Cement Inc. (Canada)

Business Number	Business Website Address
885656942	https://www.stmaryscement.com/

Primary North American Industry Classification System (NAICS) Code * Show Information

327310

Other NAICS Code

327320 −

Add NAICS Code

Separate list attached?

☐ Yes ☑ No

Business Activity Description

Portland cement manufacturing

✔ Completion Status (1.1 Applicant Information)

1.2 Applicant Physical Address

Show Information

Address Type? *

☑ Civic Address ☐ Survey Address

Civic Address

Unit Number	Street Number	Street Name
	55	Industrial St

Survey Address

Enter Lot and Concession or Part and Reference Plan

Lot	Concession	Part	Reference Plan

Municipality/Unorganized Township *		County/District		
Toronto				
Province/State *		Country *		Postal/Zip Code *
Ontario		Canada		M4G 3W9
Telephone Number * [redacted] ext.	Fax Number	Mobile Number	Email Address *	
			ruben.plaza@vcimentos.com	

Geo Reference Show Information

Description of location	Map Datum	Zone	Accuracy Estimate	Geo-Referencing Method	UTM Easting	UTM Northing
Southwest corner of property	NAD83	17	+/- 30 m	Google Earth	632,579.00	4,840,878.00
Physical location of front door or main entrance	NAD83	17	+/- 30 m	Google Earth	632,625.00	4,840,902.00

✔ Completion Status (1.2 Applicant Physical Address)

1.3 Applicant Mailing Address Show Information

☑ Select if same as Physical Address

Unit Number	Street Number *	Street Name *	
	55	Industrial St	
Delivery Designator	Delivery Identifier	Postal Station	
Municipality/Unorganized Township *		County/District	
Toronto			
Province/State *		Country *	Postal/Zip Code *
Ontario		Canada	M4G 3W9
Telephone Number * [redacted] ext.	Fax Number	Mobile Number	Email Address *
			ruben.plaza@vcimentos.com

✔ Completion Status (1.3 Applicant Mailing Address)

Fields marked with an asterisk (*) are mandatory.

2. Project Information

2.1 Project Name and Description

Project Name * Show Information

ALCF ECA Amendment Application for St. Marys Cement Bowmanville Plant

Project Description Executive Summary * Show Information

St. Marys Cement Inc. (Canada) (St. Marys Cement), a subsidiary of Votorantim Cimentos North America (VCNA), is proposing to amend Environmental Compliance Approval (ECA) No. 0550-CEAHMA issued on September 19, 2022 under Part II.1 of the Ontario Environmental Protection Act for its Bowmanville Cement Plant located at 410 Bowmanville Avenue, Bowmanville, Ontario, L1C 7B5 to increase its use of Alternative Low-Carbon Fuels (ALCFs).

The proposed ALCF ECA Amendment Application will seek approval to increase the maximum ALCF use from 400 tonnes per day to 800 tonnes per day and to incorporate planned modifications associated with ALCF ancillary equipment. These modifications include upgrades to the calciner to accommodate increased ALCF use and a process improvement to increase combustion residence time. The calciner modifications will support increased ALCF usage and further displacement of conventional fuels currently used at the Facility. In addition, the proposed ECA Application incorporates modifications that are not related to ALCFs, including main kiln stack modification and addition of Finish Mill #4 which were assessed as part of the limited operational flexibility process. The proposed modifications are assessed in the Emission Summary and Dispersion Modelling (ESDM) Report and Acoustic Assessment Report (AAR) which support the proposed ALCF ECA Amendment Application.

As part of the proposed ALCF ECA Amendment Application, St. Marys Cement will request the approved list of ALCF baskets and materials on the ECA to be:
•Material that is biomass fuel derived from harvested plant and forest sources, end of life agricultural sources, Woodwaste or Agricultural Waste, and includes but is not limited to sawdust, wood chips, wood, miscanthus grass, millet, sorghum, hemp, switch grass, and maize;
•Material that is comprised of non-recyclable plastics, including but not limited to manufacturing rejects, material resource recovery facility rejects, nylon (including but not limited to tire fluff), plastics bags and packaging;
•Material that is comprised of construction, renovation & demolition waste, including but not limited to scrap wood, treated lumber, carpets, textiles, sawdust, nylon, floor laminates and asphalt shingles;
•Material that is comprised of non-recyclable paper fiber/wood/plastic composites, including but not limited to single-serve coffee pods, printed papers, paper towels, rejects and trimmings from paper recycling facilities such as ragger tails (residue including plastic trimmings, staples, paper fibre and metal wire), end rolls and cores; and
•Material that is comprised of rubber (non-tire derived), including but not limited to shredded conveyor belts.

The proposed ALCF ECA Amendment Application includes the Carbon Dioxide Emission Intensity Report which assesses the carbon dioxide emission intensities of the ALCFs used and proposed to be used at the Facility in accordance with O. Reg. 79/15.

The following supplemental documents are also included in the proposed ALCF ECA Amendment Application: Traffic Technical Memorandum (i.e., Brief), Air Quality Study, and ALCF Testing and Handling Manual.

In accordance with O. Reg. 79/15, the proposed ALCF ECA Amendment Application included consultation and engagement activities consisting of notification and an online commenting period. Recognizing the importance of maintaining transparent communication with Indigenous communities, local stakeholders, municipal representatives, and neighbouring residents, St. Marys Cement chose to undertake a voluntary engagement event in the form of a Public Information Session which exceeds the minimum regulatory requirements and facilitates meaningful dialogue regarding the proposed changes and its potential environmental effects.

The proposed ALCF ECA Amendment Application is supported by technical documentation that demonstrates the proposed changes can be implemented in a manner that remains protective of human health and the environment and satisfy the requirements of O. Reg. 79/15 and O. Reg. 419/05.

Supplemental Application Information (select information button for required information for this field) * Show Information

N/A

✔ Completion Status (2.1 Project Name and Description)

2.2 Application Type Show Information

Type *

- ☐ New ECA
- ☑ Technical Amendment to existing ECA (including extending the cessation or expiry date of an existing ECA that is not expired)
- ☐ Revocation of existing ECA
- ☐ Administrative amendment to existing ECA
- ☐ Application for renewal of operational flexibility or limited operational flexibility
- ☐ Consolidation of existing ECAs

Is this application for the addition of a new project type to the site or a new municipal waste category/class code to the waste management systems or a new sewage facility type?

☐ Yes ☑ No

Is this application for Transfer of Review? *

☐ Yes ☑ No

✔ Completion Status (2.2 Application Type)

2.3 Project Type Show Information Show Information

Project Type (Select all that apply) *	Operational Flexibility?	Pilot Project?
☑ Air - Stationary	☑	☐
☐ Air - Mobile	☐	☐
☑ Noise	☑	☐
☐ Vibration	☐	☐
☐ Waste Disposal Site - Landfill site	N/A	☐
☐ Waste Disposal Site - Transfer site	☐	☐
☐ Waste Disposal Site - Processing site	☐	☐
☐ Waste Disposal Site - Composting site	☐	☐
☐ Waste Disposal Site - Thermal Treatment site	☐	☐
☐ Waste Disposal Site - Hauled Sewage Disposal Site	N/A	☐
☐ Waste Disposal Site - Processed Organic Waste (Biosolids) Land Application Site	N/A	☐
☐ Sewage - Industrial	☐	☐
☐ Sewage - Municipal Treatment Plant	☐	☐
☐ Sewage - Consolidated Linear Environmental Compliance Approval (CLI-ECA)	☐	☐
☐ Sewage - Private	☐	☐
☐ Waste Management System - General Waste Management System	N/A	☐
☐ Waste Management System - Hauled Sewage (Septage)	N/A	☐
☐ Waste Management System - Processed Organic Waste for transport to an agricultural or non-agricultural site for storage or land application	N/A	☐
☐ Waste Management System - Mobile Waste Processing	N/A	☐
☐ Cleanup of contaminated sites - Mobile	N/A	☐
☐ Cleanup of contaminated sites - Site specific	N/A	☐

✔ Completion Status (2.3 Project Type)

2.4 Approval Information Show Information

Reason for Application / Application initiated by *

- ☑ Applicant
- ☐ Condition of existing approval
- ☐ Inspection Report (attach copy)
- ☐ ECA Review Notice from Director (EPA s20.4)
- ☐ CLI-ECA Amendment
- ☐ Other (specify) _____
- ☐ S. 20.18 Order (attach copy)
- ☐ Provincial Officer Order (attach copy)
- ☐ Extend the cessation date or expiry date of an existing ECA
- ☐ ECA Review Required by Regulation (EPA s20.4)

Current Environmental Compliance Approvals that may be changed or amended by this application: ☐ N/A

Environmental Compliance Approval Number *	Date of Issuance (yyyy/mm/dd) *	Cessation/Expiry Date (yyyy/mm/dd)	
0550-CEAHMA	2022/09/22	2031/03/31	−

Add Row

Separate list attached?

☐ Yes ☑ No

Other proposed Environmental Compliance Approvals related to this project: ☑ N/A

Project Type	Ministry Reference Number (if applicable)	Have Submitted	Have not Submitted
		☐	☐

Separate list attached?

☐ Yes ☐ No

✔ Completion Status (2.4 Approval Information)

2.5 Other Approval/Permits for Facility **Show Information**

List all other instruments (approvals or permits) issued by the Ministry of the Environment, Conservation and Parks or applied for under the *Environmental Protection Act*, *Environmental Assessment Act*, *Ontario Water Resources Act* and *Safe Drinking Water Act, 2002* and any Environmental Activity and Sector Registrations that are relevant to this application. ☐ N/A

Instrument Type	Instrument Number/ Application Reference Number	Approval or Application Date (yyyy/mm/dd)	Cessation/Expiry Date (yyyy/mm/dd)	
ECA-INDUSTRIAL SEWAGE WORKS	9451-CVFPU5	2024/10/23		−
ECA-MUNICIPAL AND PRIVATE SEWA	7217-4PMJDL	2019/09/23		−
				−
				−

Add Row

Separate list attached?

☐ Yes ☑ No

List all other instruments (approvals or permits) issued by an agency, municipality or another ministry that are relevant to this application. ☑ N/A

Issuing Agency	Approval or Permit Name	Approval or Permit Number	Issued Date (yyyy/mm/dd)

Separate list attached?

☐ Yes ☐ No

✔ Completion Status (2.5 Other Approval/Permits for Facility)

2.6 Technical Contacts **Show Information**

Technical Contact 1

Area of Responsibility (Select all that apply) *

☑ Air ☐ Noise/Vibration ☐ Sewage ☐ Waste

Name of Technical Contact

Last Name *	First Name *
Liubansky	Kate

Company *
WSP Canada Inc.

Address Information **Show Information**

☐ Select if same as Applicant Mailing Address

Civic Address

Unit Number	Street Number *	Street Name *
	50	Vogell Road

Delivery Designator	Delivery Identifier	Postal Station

Municipality/Unorganized Township *	County/District
Richmond Hill	

Province/State *	Country *	Postal/Zip Code *
Ontario	Canada	L4B 3K6

Telephone Number *	Fax Number	Mobile Number	Email Address *
[redacted] ext.			kate.liubansky@wsp.com

Remove Contact

Technical Contact 2

Area of Responsibility (Select all that apply) *

☑ Air ☐ Noise/Vibration ☐ Sewage ☐ Waste

Name of Technical Contact

Last Name *	First Name *
Song	Xiaoxi

Company *
Ramboll

Address Information Show Information

☐ Select if same as Applicant Mailing Address

Civic Address

Unit Number	Street Number *	Street Name *
	123	Commerce Valley Drive East

Delivery Designator	Delivery Identifier	Postal Station

Municipality/Unorganized Township *	County/District
Markham	

Province/State *	Country *	Postal/Zip Code *
Ontario	Canada	L3T 7W8

Telephone Number *	Fax Number	Mobile Number	Email Address *
[redacted] ext.			wsong@ramboll.com

Remove Contact

Technical Contact 3

Area of Responsibility (Select all that apply) *

☐ Air ☑ Noise/Vibration ☐ Sewage ☐ Waste

Name of Technical Contact

Last Name *	First Name *
Cai	Harry Ao

Company *
HGC Noise Vibration Acoustics

Address Information Show Information

☐ Select if same as Applicant Mailing Address

Civic Address

Unit Number	Street Number *	Street Name *
203	2000	Argentia Road

Delivery Designator	Delivery Identifier	Postal Station

Municipality/Unorganized Township *	County/District
Mississauga	

Province/State *	Country *	Postal/Zip Code *
Ontario	Canada	L5N 1P7

Telephone Number *	Fax Number	Mobile Number	Email Address *
[redacted] ext. [redacted]			hcai@hgcacoustics.com

Remove Contact

Add Contact

✔ Completion Status (2.6 Technical Contacts)

Fields marked with an asterisk (*) are mandatory.

3. Regulatory Requirements

3.1 Environmental Bill of Rights (EBR) Requirements Show Information

Is this an application for a classified instrument identified in Section 5 of O. Reg. 681/94, under the Environmental Bill of Rights, 1993 (EBR)? *

☑ Yes ☐ No

If yes, an exception to the requirement to post a proposal notice on the Environmental Registry may apply. These exceptions are set out in the EBR. If you believe an exception may apply to your proposal, please identify which circumstance may be applicable and provide the appropriate supporting information. The information you provide is for background purposes; the Ministry will evaluate the information and determine whether an exception does in fact apply.

☐ This proposal has been considered in a substantially equivalent process of public participation. (EBR, 1993, s.30.). Please provide a description of any processes of public participation that you engaged in, that were substantially equivalent to the process required under the EBR, in respect of the environmentally significant aspects of the ECA application, including:

- The type of public participation
- How, where and when the process of public participation was conducted
- The number of participants
- The type of comments received
- Actions you took as a result of the comments
- Whether ministry staff were involved in the process

Please also include documentation verifying the process of public participation.

Was the public participation process carried out in fulfillment of the requirements related to an approval under the *Planning Act*?

☐ Yes ☐ No

If yes, was the *Planning Act* approval related to a plan of subdivision?

☐ Yes ☐ No

☐ This proposal is for an emergency situation. (EBR, 1993, s. 29.). Please provide details about why a delay that would result from posting a proposal for the ECA on the Environmental Registry would result in (a) danger to the health or safety of any person; (b) harm or serious risk of harm to the environment; or (c) injury or damage or serious risk of injury or damage to any property

☐ This proposal is for an amendment to or revocation of an existing Environmental Compliance Approval that is not environmentally significant. (EBR, 1993, s. 22 (3).) Please provide details about why the effect of the amendment or revocation on the environment is insignificant.

☐ This proposal has been subject to or exempted from Environmental Assessment Act (EAA) Requirements or considered in a decision of a tribunal. (EBR, 1993, s. 32.) Please provide a description of why the ECA would be a step toward implementing an undertaking or other project that is (a) subject to, or exempted from, a decision made under the EAA; or (b) approved by a decision made by a tribunal after affording an opportunity for public participation.

☑ Check here if you do not believe any of the above circumstances apply to your proposal.

✔ Completion Status (3.1 Environmental Bill of Rights (EBR) Requirements)

3.2 *Environmental Assessment Act* (EAA) Requirements Show Information

Is the proposed undertaking/project subject to the requirements of the EAA? *

☐ Yes ☑ No

If yes, please select one of the following:

☐ The proposed undertaking has fulfilled the requirements of the EAA through the completion of a Class EA process

Name of Class EA _____

Schedule/Group/Category (if applicable) _____

If applicable, please submit a copy of the proof of completion (for example, Notice of Completion).

Was a section 16 order (previously named a Part II Order), under the EAA requested, considered (e.g. Notice of Proposed Order and/or made on/for the undertaking?

☐ Yes ☐ No

If yes, please submit a copy of the relevant documentation.

☐ The proposed project has fulfilled all of the requirements for the EAA through:

Select all that apply:

☐ completion of an Environmental Screening Process pursuant to Part IV of O. Reg. 50/24 under the EAA

☐ completion of an Environmental Screening Process pursuant to Part II of O. Reg. 50/24 under the EAA

Was the project subject of an elevation request(s)?

☐ Yes ☐ No

If yes, please submit a copy of the Minister's decision letter. If an appeal was made to the Minister's decision, please also submit a copy of the Minister's decision letter.

☐ completion of a Transit and Rail Project Assessment Process pursuant to O. Reg. 231/08 of the EAA

Was the project subject of an objection(s)?

☐ Yes ☐ No

If yes, please submit a copy of the Minister's decision letter.

☐ The proposed undertaking/project has fulfilled the requirements of the EAA through the completion of a Comprehensive Environmental Assessment.
Please submit a copy of the signed Notice of Approval.

Was the undertaking/project exempted from the requirements of the EAA? *

☐ Yes ☐ No

The proposed undertaking has fulfilled the requirements of the EAA through an exemption provided under:

Select one of the following

☐ Section _____ of Ontario Regulation No. 51/24 _____ or

☐ Declaration/Exemption Order Number _____

If Regulation, Declaration Order or Exemption Order does not refer directly to this undertaking, please provide supporting documentation to explain why it applies to this facility

✔ Completion Status (3.2 *Environmental Assessment Act* (EAA) Requirements)

3.3 Consultation/Notification Show Information

Indigenous Consultation:

Is the proposed project/activity on Crown land or does/would it alter access to Crown land? *	☐ Yes ☑ No
Is the proposed project/activity in an open or forested area where hunting, trapping or plant gathering could occur? *	☐ Yes ☑ No
Does the proposed project/activity involve the clearing of forested land? *	☐ Yes ☑ No
Could the proposed project/activity impact a water body (e.g., direct discharge) or alter access to a water body? *	☐ Yes ☑ No

Could the proposed project/activity impact cultural heritage or archaeological resources, or access to them? * ☐ Yes ☑ No

Is the proposed project/activity adjacent or close to a First Nation Reserve? * ☐ Yes ☑ No

Is the applicant aware of any concerns from Indigenous communities about this proposed project/activity? * ☐ Yes ☑ No

Were there conditions placed, or direction provided, in another (or previous) permit or approval for consultation in relation to this project/activity? * ☐ Yes ☑ No

Based on the online Guide to Applying for an Environmental Compliance Approval, or direction provided by the Ministry or another agency, are Indigenous consultation activities likely required as part of this application process? * ☑ Yes ☐ No

If Yes to the question above, please describe the consultation/notification activities undertaken for this application or as part of another process (e.g., EAA) in relation to the proposed project/activity, including a summary of the notification/ consultation, First Nation and Métis communities contacted (and list of communities if provided or confirmed as part of another process, e.g. EAA), key issues raised and how they were addressed, any changes to the project as a result of these activities, and any planned consultation/notification activities in the future.

St. Marys Cement considers the identification and early engagement of Indigenous communities a critical component of project planning and delivery. St. Marys Cement is committed to participate in meaningful discussion and information sharing with Indigenous communities to continue to build relationships, to improve the project through consideration of their input, and to satisfy the requirements for Indigenous engagement in accordance with the amendment application process outlined in O. Reg. 79/15.

St. Marys Cement sought input from the Ministry on the Indigenous communities identified for engagement and notification. The following communities were included on the contact list:

- Alderville First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Mississaugas of Scugog Island First Nation
- Kawartha Nishnawbe

These Indigenous communities were included in the email contact list for the Notice of Intention to Apply under Ontario Regulation 79/15. Details of engagement and correspondence with Indigenous communities will be provided in the Consultation Report.

Please attach supporting documents (e.g., record of consultation, delegation letter and/or direction provided by the Crown, materials provided to communities, meeting notes and agendas, correspondence with communities as appropriate).

If the applicant has determined that consultation with First Nation and Métis communities is not likely required for the proposed project/activity, please provide a rationale why:

Other Consultation/Notification: Show Information

Has the applicant had a ministry pre-application consultation in relation to the proposed project? *

☑ Yes ☐ No

If this application is for a waste disposal site (including for a Hauled Sewage Disposal Site), have the neighbour notification requirements been completed? *

☐ Yes ☐ No

If yes, please attach a Public Consultation/Notification Report that includes the notice and list of recipients.

If no, please select the reason for not undertaking neighbour notification: *

☐ Application is for an administrative amendment

☐ other , please explain

Are there any other consultation/notification activities that have been undertaken to fulfill requirements by other legislation or through voluntary efforts? *

☑ Yes ☐ No

If yes, please:

1. describe the consultation/notification activities below; and
2. attach documents describing each of these consultation\notification activities, any changes to the project as a result of these activities and any planned consultation/notification activities in the future.

In support of the proposed ALCF ECA Amendment Application, St. Marys Cement will hold a voluntary Public Information Session on November 25, 2026. The purpose of the Public Information Session is to provide information about the proposed ALCF ECA Amendment Application, review project information, obtain public feedback, and answer questions. Members of the public are invited to attend at any time during the Public Information Session hours identified in the Notice of Intention to Apply under Ontario Regulation 79/15. Members of the Project Team will be available throughout the evening to answer questions and receive comments.

St. Marys Cement will maintain the website where all material related to the ALCF ECA Amendment Application are posted.

✔ Completion Status (3.3 Consultation/Notification)

Fields marked with an asterisk (*) are mandatory.

4. Site Information

4.1 Site Address or Storage Location

Show Information

Will the vehicles or equipment be stored at more than one location?

☐ Yes ☐ No

(If yes, please enter all vehicle or equipment storage locations below and attach separate list, as necessary.)

☑ Select if same as Applicant Physical Address

Address Type? *

☑ Civic Address ☐ Survey Address

Primary Civic Address

Unit Number	Street Number	Street Name
	55	Industrial St

Additional Civic Addresses

Unit Number	Street Number	Street Name	
			−

Add Address

Separate list attached?

☐ Yes ☑ No

Primary Survey Address

Enter Lot and Concession or Part and Reference Plan

Lot	Concession	Part	Reference Plan

Additional Survey Address

Enter Lot and Concession or Part and Reference Plan

Lot	Concession	Part	Reference Plan

Separate list attached?

☐ Yes ☐ No

Municipality/Unorganized Township *	County/District	
Toronto		
Province/State *	**Country ***	**Postal/Zip Code ***
Ontario	Canada	M4G 3W9

Non-address Information (includes any additional information to clarify the physical location)

Geo Reference (required) Show Information

☐ Select if same as Applicant Physical Geo Reference

Description of location	Map Datum *	Zone *	Accuracy Estimate *	Geo-Referencing Method *	UTM Easting *	UTM Northing *
Southwest corner of property	NAD83	17	+/- 30m	Google Earth	684,686.00	4,860,281.00
Physical location of front door or main entrance	NAD83	17	+/- 30m	Google Earth	685,706.00	4,862,399.00

✔ Completion Status (4.1 Site Address or Storage Location)

4.2 Site or Storage Location Information

Show Information

Site Name *
St. Marys Cement Bowmanville Plant

Days and Hours of Operation *	Ministry of the Environment District Office *
24 hours/day, 7 days/week, and 12 months/year	York-Durham District Office

Is the site (property) that is the subject of this application owned by the applicant? *

☑ Yes ☐ No

If no, please include the owner's name, address and a signed document indicating that the applicant has the authority to install and operate the proposed activity, or store vehicles or equipment on the land.

Is the applicant the operating authority of the site that is the subject of this application? *

☑ Yes ☐ No

If no, please include the operating authority name, address and phone number.

Is the site located in an area of development control as defined by the *Niagara Escarpment Planning and Development Act* (NEPDA)? *

☐ Yes ☑ No

If yes, please attach a copy of the NEPDA permit for proposed activity.

Is the site within an area covered by the Oak Ridges Moraine Conservation Plan? *

☐ Yes ☑ No

If yes, please attach proof of municipal planning approval for the proposed activity/work (for example, zoning by-law, letter from municipality, etc.).

✔ Completion Status (4.2 Site or Storage Location Information)

4.3 Site Zoning and Classification ☐ N/A **Show Information**

Current Land Use *	Official Plan Designation *	Current Zoning (Please attach zoning map, if available.) *
Industrial	Industrial	Provided in ESDM Report

Adjacent Land Use (select all that apply) *

☑ Industrial ☑ Agricultural ☐ Commercial ☐ Recreational ☐ Residential

☑ Other (specify) Environmental Protection

Adjacent Land Zoning *
Industrial, Agricultural, Environmental Protection

Does the current zoning permit the proposed activity? *

☑ Yes ☐ No

Does the applicant have correspondence from the municipality to confirm that the current zoning of the property permits the proposed use? *

☐ Yes ☑ No If yes, please attach correspondence from the municipality.

Does the official plan designation support the proposed activity? *

☑ Yes ☐ No

✔ Completion Status (4.3 Site Zoning and Classification)

4.4 Point of Entry into Ontario ☐ N/A Show Information

(for waste management system vehicles that are stored at an address outside of Ontario)

City in closest proximity to the point of entry *

Description of Point of Entry *

✔ Completion Status (4.4 Point of Entry into Ontario)

4.5 Source Protection/Drinking Water Threats (sewage or waste disposal site applications only) ☐ N/A Show Information

Check the source protection area(s) where the activity is/will be located *

☐ Ausable Bayfield	☐ Cataraqui Region	☐ Catfish Creek
☐ Central Lake Ontario	☐ Credit Valley	☐ Crowe Valley
☐ Essex	☐ Ganaraska	☐ Grand River
☐ Grey Sauble	☐ Halton	☐ Hamilton
☐ Kawartha-Haliburton	☐ Kettle Creek	☐ Long Point
☐ Lakehead	☐ Lake Simcoe and Couchiching/Black River	☐ Lower Trent
☐ Lower Thames Valley	☐ Maitland Valley	☐ Mattagami
☐ Mississippi Valley	☐ Niagara	☐ North Bay Mattawa
☐ Northern Bruce Peninsula	☐ Nottawasaga Valley	☐ Rideau Valley
☐ Raisin Region	☐ South Nation	☐ Saugeen Valley
☐ Sault Ste. Marie	☐ Severn Sound	☐ Sudbury
☐ St. Clair Region	☐ Toronto and Region	☐ Otonabee-Peterborough
☐ Outside a source protection area	☐ Quinte	☐ Upper Thames River

Is the proposed activity located or planned to be located in a vulnerable area identified in a local assessment report source protection plan under the *Clean Water Act, 2006*? *

☐ Yes ☐ No

If yes, what is/are the vulnerable area(s)/zone(s)? *

☐ Wellhead Protection Areas ☐ Surface Water Intake Protection Zones ☐ Highly Vulnerable Aquifers

☐ Significant Groundwater Recharge Areas ☐ Issue Contributing Areas

Is the activity being applied for identified as a significant drinking water threat in the assessment report for the local source protection area? * Show Information

☐ Yes ☐ No

✔ Completion Status (4.5 Source Protection/Drinking Water Threats)

4.6 Receiver of Effluent Discharge (sewage applications only) ☐ N/A Show Information

Intermediate Receiver Name *

Watershed Name *

Type of Receiver *

☐ Surface Water ☐ Groundwater ☐ Other (specify) *

Has the facility received local Conservation Authority clearance? (for stormwater management facility discharging to the natural environment) *

☐ Yes ☐ No

If yes, please include a copy of the Conservation Authority clearance.

Final Receivers ☐ N/A **Show Information**

If the proposed activity will discharge sewage to any of the following critical receivers, please identify the receiver(s): *

☐ Lake Simcoe ☐ Rideau River ☐ Detroit River

☐ Great Lakes ☐ Rouge River ☐ Bay of Quinte

☐ Other (specify) * _____

Is the receiver a Policy 2 receiver? *

☐ Yes ☐ No

Does the applicant have a Policy 2 deviation approval from the directors? *

☐ Yes ☐ No

If yes, please attach a copy of the Director's approval.

✔ Completion Status (4.6 Receiver of Effluent Discharge)

4.7 Site Physical and Distance Parameters (Hauled Sewage Disposal Site and Processed Organic Waste Land Application Site applications only) ☐ N/A **Show Information**

Total Site Area (hectares) *	Total Usable Area (hectares) *

Soil T-Time **Show Information**

What is the estimated soil T-time within the usable area of the site based on field percolation tests or equivalent method? (e.g. grain size analyses). Use the check boxes below for your answer (more than one box can be checked) and provide a copy of the soil evaluation/analysis along with this application. *

☐ T-time < 1 minute per cm ☐ T-time > 1 minute per cm and < 50 minutes per cm ☐ T-time > 50 minutes per cm

Soil Permeability **Show Information**

Provide an estimate of the soil permeability within the usable area of the site based on field percolation tests or equivalent method (e.g. grain size analyses). Use the check boxes below for your answer (more than one box can be checked) and provide a copy of the soil evaluation/ analysis along with this application. *

☐ Slow ☐ Moderate ☐ Moderately Rapid ☐ Rapid

Average Slope **Show Information**

Provide an estimate of the slope of the land within the usable area of the site. Use the check boxes below for your answer (more than one box can be checked). *

☐ 0-3% (Flat) ☐ 3-6% (Gentle Slope) ☐ 6-9% (Moderate Slope) ☐ >9% (Steep Slope)

Is the land within the usable area tile drained? * **Show Information**

☐ Yes ☐ No

Distance to Sensitive Features **Show Information**

Please identify whether the distance from the edge of any portion of the site where hauled sewage or processed organic waste will be spread/stored or where hauled sewage will otherwise be deposited (e.g. in a dewatering trench, lagoon, storage) or land applied is:

Within 30 metres of the closest public roadway? *

☐ Yes ☐ No

Within 200 metres of the closest surface water body? *

☐ Yes ☐ No

Within 90 metres of the closest house on-site? *

☐ Yes ☐ No ☐ N/A

Within 90 metres of the closest house off-site? *

☐ Yes ☐ No

Within 450 metres of the closest residential area (i.e. cluster of 3 or more houses)? *

☐ Yes ☐ No

Within 450 metres of the closest commercial, recreational or institutional use, and locations at which people regularly congregate? *

☐ Yes ☐ No

Distance to Local Treatment Facilities

Is there a private or municipal sewage treatment plant that accepts hauled sewage located within 50km of this site? *

☐ Yes ☐ No ☐ N/A

Is there any other type of private or municipal facility (e.g. biodigester) that accepts and treats hauled sewage located within 50km of this site? *

☐ Yes ☐ No ☐ N/A

✔ Completion Status (4.7 Site Physical and Distance Parameters)

Fields marked with an asterisk (*) are mandatory.

5. Facility Information

5.1 Air

Show Information

5.1.1 Summary of Equipment that Discharges Contaminants to the Air

Show Information

Select Type of Equipment *	Number of Pieces of Equipment *
☐ Combustion equipment that uses natural gas, propane, no. 2 oil, landfill gas or sewage treatment gas for fuel for the purpose of providing comfort heating or emergency power, producing hot water or steam, or heating material in a system that does not discharge to the atmosphere (Total Heat input of all units: ≤ 50,000,000 kJ/hr)	
☐ Storage tanks	N/A
☐ Welding operations that use a maximum of 10 kilograms of welding rod per hour	N/A
☐ Combustion equipment that uses waste-derived fuel for the purpose of providing comfort heating, burning ≤ 15 litres per hour	
☐ Heat cleaning ovens used for parts cleaning and associated parts washers or degreasing equipment, other than solvent degreasing equipment	
☐ Cooling towers	
☑ Equipment used to control emissions of contaminants, other than a fume incinerator	3
☐ Laboratory fume hoods	
☐ Paint spray booths and associated equipment that have a design capacity of up to 8 litres per hour of paint	
☐ Grain dryers	
☑ Any other equipment not listed above with a flow rate of less than or equal to 1.5 m^3/second	1
☑ Any other equipment not listed above with a flow rate of greater than 1.5 m^3/second	1
☐ Equipment that is subject to an Environmental Compliance Approval, and from which there is no proposed increase in the discharge of any contaminant that was previously reviewed by the Director.	N/A

✔ Completion Status (5.1.1 Summary of Equipment that Discharges Contaminants to the Air)

5.1.2 Emission Summary and Dispersion Modelling (ESDM) Report

Show Information

Is the review of an existing, approved ESDM required as part of this proposed application? *

☑ Yes ☐ No

If yes, identify the number of emission sources described in the existing ESDM Report that emit contaminants in common with the sources forming the subject of the application (if none, enter zero). *

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Have all of these emission sources been described in an ESDM Report that was previously reviewed as part of an application for an existing Environmental Compliance Approval? *

☑ Yes ☐ No

✔ Completion Status (5.1.2 ESDM Report)

5.1.3 O. Reg. 419/05 Requirements

Show Information

Does s. 20 (Schedule 3) of O. Reg. 419/05 apply to the facility? *

☑ Yes

☐ Does not apply. Please indicate reason * _____

Has an instrument under O. Reg. 419/05 been issued? *

☑ Yes ☐ No

If yes, what type(s) of instruments (including any notices, orders or approvals) has (have) been issued? (select all that apply) *

- ☐ ss. 4(2) Adjacent Properties
- ☑ ss. 7(1) Specified Dispersion Models
- ☐ ss. 8(2) Negligible Sources
- ☐ ss. 10(2) Operating Conditions
- ☐ ss. 11(2) Refined Emission Rates
- ☐ ss. 13.1 Value of Dispersion Modeling Parameters
- ☑ ss. 13(1) Meteorological Data
- ☐ ss. 14(6) Area of Modelling Coverage
- ☐ ss. 20(4) Speed-up Request
- ☐ ss. 20(5) Speed-up Order
- ☐ s. 35 Site-specific Standard
- ☐ ss. 35(14) Site-specific Standard Order
- ☐ ss. 39(3) Technical Standard Registration (Industry Standard)
- ☐ ss. 39(4) Technical Standard Registration (Equipment Standard)
- ☐ Other (list all that have been issued) * _____

Is an instrument under O. Reg. 419/05 being requested as part of this application? *

☐ Yes ☑ No

If yes, what type(s) of notice, order or approval is (are) being requested? *

- ☐ ss. 7(1) Specified Dispersion Models
- ☐ ss. 8(2) Negligible Sources
- ☐ ss. 10(2) Operating Conditions
- ☐ ss. 11(2) Refined Emission Rates
- ☐ ss. 13(1) Meteorological Data
- ☐ ss. 14(6) Area of Modelling Coverage
- ☐ ss. 20(4) Speed-up Request
- ☐ s. 32 Request for a Site-specific Standard Order
- ☐ ss. 39(1)(a) Application for Technical Standard Registration (Industry Standard)
- ☐ ss. 39(1)(b) Application for Technical Standard Registration (Equipment Standard)
- ☐ Other (list all that have been issued) * _____

Please attach the form(s) requesting the notice(s) and/or order(s) and any additional supporting information.

Has an s. 30 Upper Risk Threshold (Schedule 6) been exceeded? *

☐ Yes ☑ No

If yes, please include additional supporting information.

Is the facility located in a multi-tenant building? *

☐ Yes ☑ No

If yes, additional information may be requested.

Are all of the contaminants to which the application relates represented in the Ministry of the Environment, Conservation and Parks publication titled "Summary of Standards and Guidelines to support Ontario Regulation 419: Air Pollution - Local Air Quality" or have they been screened out based on the publication titled "Jurisdictional Screening Level (JSL) List - A Screening Tool for Ontario Regulation 419"? *

☑ Yes ☐ No

(If no, please attach Supporting Information for a Maximum Ground Level Concentration Acceptability Request for Compounds with no Ministry POI Limit - Supplement to Application for Approval, EPA S. 9).

✔ Completion Status (5.1.3 O. Reg. 419/05 Requirements)

✔ Completion Status (5.1 Air)

5.2 Noise

5.2.1 Noise Assessment

Show Information

Has an Acoustic Assessment Report (AAR) been completed in relation to the proposed project/activity? *

☑ Yes ☐ No

If yes, please attach the Acoustic Assessment Report

Does the AAR show that applicable limits are met? *

☑ Yes ☐ No

If no, please attach the Acoustic Assessment Report including the Noise Abatement Action Plan

If no, is the application eligible for Primary or Secondary Noise Screening? *

☐ Yes ☐ No

Note that if the proposed activity is not eligible for either of the screenings, an AAR must be submitted.

If yes, is the proposed activity eligible for the Primary Noise Screening? *

☐ Yes ☐ No

If yes, is the actual separation distance between the facility and the nearest noise sensitive point of reception (POR) greater than the minimum required separation distance calculated from the Primary Noise Screening? *

☐ Yes ☐ No

If yes, please attach the Primary Noise Screening form and supporting documentation.
Note that if the Primary Noise Screening is not successful then the applicant may attempt to proceed with the Secondary Noise Screening.

If no, does the Secondary Noise Screening Form show that the applicable sound level limits are met? *

☐ Yes ☐ No

If yes, please attach the Secondary Noise Screening Form and supporting documentation.
Note that if meeting the applicable sound level limits cannot be demonstrated, then an AAR must be submitted.

✔ Completion Status (5.2.1 Noise Assessment)

5.2.2 Equipment Subject to Noise Review

In the appropriate category on the table, you must identify all equipment included in the Acoustic Assessment Report as a noise source. Equipment that has been previously review does not have to be included in the table, provided this application is not for a modification of the approval in which the equipment was previously reviewed.

The information provided here assists in calculating the fee.

Hide Information

Description *	Number of Pieces of Equipment *
☐ Arc Furnaces	
☐ Asphalt Plants	
☐ Blow-down Devices	
☐ Co-Generation Facilities	
☐ Crushing Operations	
☐ Flares	
☐ Gas Turbines	
☐ Pressure Blowers or Large Induced Draft Fans (flow rate > 47 m^3/second or static pressure > 1.25 kilopascals)	
☑ Any other equipment not listed above that has not previously been reviewed by the Director in connection with an application for an Environmental Compliance Approval with respect to the facility	2
☑ Any other equipment not listed above that is identical to equipment for which a noise assessment was previously reviewed by the Director in connection with an application for an Environmental Compliance Approval with respect to the facility	1

✔ Completion Status (5.2.2 Equipment Subject to Noise Review)

✔ Completion Status (5.2 Noise)

5.3 Sewage Works Show Information

5.4 Waste Disposal Site (Including a Hauled Sewage Disposal Site or a Processed Organic Waste (Biosolids) Land Application Site) Show Information

5.5 Waste Management Systems (Except Mobile Waste Processing) Show Information

5.6 Waste Management System - Mobile Waste Processing Show Information

5.7 Cleanup of Contaminated Sites Show Information

6. Supporting Documentation and Technical Requirements

6.1 General Show Information

Note**: Information contained in this application form (excluding Section 8, payment information) is not considered confidential and will be made available to the public upon request. If the applicant is of the view that any part of the supporting information to this application is confidential on the grounds that such information constitutes a trade secret or scientific, technical, commercial, financial or labour relations information, please make this known in the table below by selecting the appropriate checkbox and providing the explanation for confidentiality in Section 6.10. The Ministry may request a redacted copy of this document for public viewing. Although the applicant may identify the supporting information as confidential, the information is subject to the FIPPA and EBR. If you do not claim confidentiality at the time of submitting the information (i.e. select the appropriate checkbox in the table below), the Ministry may make the information available to the public without further notice to the applicant.

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Proof of legal name	Optional	☐ Yes ☑ No	Not Required	☐
Enhanced EBR description	N/A	☐ Yes ☐ No		☐
Provincial Officer Notice	N/A	☐ Yes ☐ No		☐
Inspection Report	N/A	☐ Yes ☐ No		☐
Detailed project and process description	Required	☑ Yes ☐ No		☐
Pre-application Consultation Record	Required	☑ Yes ☐ No		☐
Legal Survey(s)	N/A	☐ Yes ☐ No		☐
Site Plan(s)	Required	☑ Yes ☐ No		☐
Scaled area location plan(s) with geo-referencing points identified	Required	☑ Yes ☐ No		☐
Documentation in support of EBR Exception	Required	☐ Yes ☑ No	N/A	☐
Proof of Compliance with EAA Requirements	N/A	☐ Yes ☐ No		☐
Proof of Consultation/Notification	Required	☑ Yes ☐ No		☐
Financial Assurance Estimate	Optional	☐ Yes ☑ No	Not Required	☐
Name, address and consent of land/site owner for the installation and operation of the proposed activity or storage location of equipment or vehicle	N/A	☐ Yes ☐ No		☐
Name, address and phone number of the Operating Authority	N/A	☐ Yes ☐ No		☐
Copy of NEPDA Permit	N/A	☐ Yes ☐ No		☐
Copy/Proof of Municipal Planning Approval (ORMCA, general)	N/A	☐ Yes ☐ No		☐
Municipal Zoning Confirmation Letter	N/A	☐ Yes ☐ No		☐
Zoning map	Required	☑ Yes ☐ No		☐
Conservation Authority Clearance	N/A	☐ Yes ☐ No		☐
Director's approval for Policy 2 Deviation	N/A	☐ Yes ☐ No		☐
Application Fee	Required	☑ Yes ☐ No		☐

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Other (please describe)	Optional	☐ Yes ☐ No		☐

✔ Completion Status (6.1 General)

6.2 Air

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Emission Summary and Dispersion Modelling (ESDM) Report prepared in accordance with s. 22 and of O. Reg. 419/05 (including signed checklist)	Required	☑ Yes ☐ No		☑
Electronic copy of the Dispersion Modelling input and output files prepared in accordance with s. 26 of O. Reg. 419/05	Required	☐ Yes ☑ No	To be included in the submission of the ECA Application to the Ministry	☐
Supporting Information for a Maximum Ground Level Concentration Acceptability Request for Compounds with no Ministry POI Limit - Supplement to Application for Approval, EPA S. 9	N/A	☐ Yes ☐ No		☐
Copies of forms requesting O. Reg. 419/05 instruments and supporting documentation	N/A	☐ Yes ☐ No		☐
Other (please describe)	Optional	☐ Yes ☐ No		☐

✔ Completion Status (6.2 Air)

6.3 Noise and Vibration

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Primary Noise Screening	N/A	☐ Yes ☐ No		☐
Secondary Noise Screening	N/A	☐ Yes ☐ No		☐
Acoustic Assessment Report including signed checklist (AAR)	Required	☑ Yes ☐ No		☑
Vibration Assessment Report	N/A	☐ Yes ☐ No		☐
Noise Abatement Action Plan	N/A	☐ Yes ☐ No		☐
Other (please describe)	Optional	☐ Yes ☐ No		☐

✔ Completion Status (6.3 Noise and Vibration)

6.4 Sewage Works

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Signed Municipal Responsibility Agreement	N/A	☐ Yes ☐ No		☐
Detailed description of the proposed activities/works	N/A	☐ Yes ☐ No		☐
Notice of Completion for the Environmental Study Report (ESR)	Optional	☐ Yes ☑ No	Not Required	☐
Design Brief	N/A	☐ Yes ☐ No		☐
Preliminary Engineering Report	Optional	☐ Yes ☑ No	Not Required	☐
Final Plans	N/A	☐ Yes ☐ No		☐
Engineering Drawings and Specifications	N/A	☐ Yes ☐ No		☐
Sewage quantity and quality characteristics	N/A	☐ Yes ☐ No		☐
Stormwater Management Report	N/A	☐ Yes ☐ No		☐
Stormwater Management Plan	N/A	☐ Yes ☐ No		☐
Hydrogeological Assessment with proof of concurrence from the Ministry's Regional technical support section	N/A	☐ Yes ☐ No		☐
Environmental Impact Analysis	Optional	☐ Yes ☑ No	Not Required	☐
Final effluent criteria accepted with proof of concurrence from the Ministry's Regional Technical Support Section	N/A	☐ Yes ☐ No		☐
Sewage Works Operational Flexibility Requirements - Engineer's Report	N/A	☐ Yes ☐ No		☐
Sewage Works Operational Flexibility Requirements - Declarations	N/A	☐ Yes ☐ No		☐
Pipe Design Data Form	N/A	☐ Yes ☐ No		☐
Other (please describe)	Optional	☐ Yes ☐ No		☐

✔ Completion Status (6.4 Sewage)

6.5 Waste Disposal Sites

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Design and Operations Report	N/A	☐ Yes ☐ No		☐
Stormwater Management Report	Optional	☐ Yes ☐ No		☐
Hydrogeological Assessment with proof of concurrence from the Ministry's Regional technical support section	N/A	☐ Yes ☐ No		☐

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Assessment of Physical and Water Use Conditions	Optional	☐ Yes ☐ No		☐
Waste Operational Flexibility Requirements - Engineer's Report	N/A	☐ Yes ☐ No		☐
Waste Operational Flexibility Requirements - Declarations	N/A	☐ Yes ☐ No		☐
Copy of notification to adjacent landowners	N/A	☐ Yes ☐ No		☐
Other (please describe)	Optional	☐ Yes ☐ No		☐
Hauled Sewage Disposal Sites - Additional Supporting Documentation			**Show Information**	
Soil Evaluation / Analysis	N/A	☐ Yes ☐ No		☐
Local Groundwater Conditions Report (e.g. well water records, data to support inferred groundwater flow, groundwater monitoring data, hydrogeological assessment with proof of concurrence from the Ministry's regional technical support section)	N/A	☐ Yes ☐ No		☐
Surface Water Assessment Report (e.g. surface water monitoring data, description of aquatic habitat, surface water users, existing stressors, description of proposed measures to minimize risks)	N/A	☐ Yes ☐ No		☐
Map showing location of the site in relation to local features	N/A	☐ Yes ☐ No		☐
Processed Organic Waste (Biosolids) Land Application Sites - Additional Supporting Documentation			**Show Information**	
Soil Evaluation / Analysis	N/A	☐ Yes ☐ No		☐
Processed Organic Waste Analysis	N/A	☐ Yes ☐ No		☐
Overview of Beneficial Use and Risk Management Measures	N/A	☐ Yes ☐ No		☐
Map showing location of the site in relation to local features	N/A	☐ Yes ☐ No		☐

✔ Completion Status (6.5 Waste Disposal Sites)

6.6 Waste Management Systems

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Proof of vehicle and/or equipment ownerships	N/A	☐ Yes ☐ No		☐
Complete Fleet List (list of all vehicles, trailers and equipment used)	N/A	☐ Yes ☐ No		☐
Copy of the Liability Insurance for all vehicles for which insurance is required	N/A	☐ Yes ☐ No		☐
Copy of the storage tank design	N/A	☐ Yes ☐ No		☐

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Copy of commercial vessel licence	N/A	☐ Yes ☐ No		☐
Description of the physical location where the vehicles transporting biomedical waste are being disinfected	Optional	☐ Yes ☐ No		☐
Drivers Training Manual (for PCB/Biomedical Waste)	Optional	☐ Yes ☐ No		☐
A copy of the applicant's Operation Plan including detailed packaging and biomedical waste handling methods	Optional	☐ Yes ☐ No		☐
Contingency and Emergency Procedures Plan (for PCB/ Biomedical Waste/Hauled Sewage (Septage))	Optional	☐ Yes ☐ No		☐
Other (please describe)	Optional	☐ Yes ☐ No		☐

✔ Completion Status (6.6 Waste Management Systems)

6.7 Mobile Waste Processing ☑ N/A

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Design and Operations Report - Mobile Waste Processing of General Waste	N/A	☐ Yes ☐ No		☐
Design and Operations Report - Mobile Waste Processing of Liquid Waste	N/A	☐ Yes ☐ No		☐
Other (please describe)	Optional	☐ Yes ☐ No		☐

✔ Completion Status (6.7 Mobile Waste Processing)

6.8 Cleanup of Contaminated Sites ☑ N/A

Attachment	Required, Optional or N/A	Attached?	If no, provide explanation, (include referenced attachment if more space is required for rationale)	Confidential/ Not Suitable for Public Viewing
Design Report for Cleanup of Contaminated Sites	N/A	☐ Yes ☐ No		☐
Other (please describe)	Optional	☐ Yes ☐ No		☐

✔ Completion Status (6.8 Cleanup of Contaminated Sites)

6.9 Other Attachments ☐ N/A

Title	Reference	Confidential/ Not Suitable for Public Viewing
Air Quality Study		☐
Traffic Impact Brief		☐
ALCF Manual		☐

Add Row

Is there an attachment of an additional list of attachments?

☐ Yes ☑ No

If there is not enough space to list all of the attachments included in this application package, please include an additional listing of these attachments.

✔ Completion Status (6.9 Other Attachments)

6.10 Confidentiality / Not Suitable for Public Viewing

Note** Although the applicant may identify the supporting information as confidential, the information is subject to the FIPPA and EBR.

For each attachment selected in tables 6.1 to 6.9 as having confidential information, provide an explanation for confidentiality / why the attachment(s), or information within the attachment(s) is not suitable for public viewing.

Please provide a redacted copy of this document(s) that can be used for public viewing.

Attachment containing confidential information (i.e. Name of document)	Explanation for Confidentiality	Redacted Copy Attached?	Explanation is Confidential/Not Suitable for Public Viewing
		☐ Yes ☐ No	☐

Add Row

✔ Completion Status (6.10 Confidentiality / Not Suitable for Public Viewing)

Attachments

Add File

File Name	Size (MB)	Selected File
		☐
Total		

Delete File

Please note: The collection of personal information in this application is necessary to administer the Ministry's approvals program, which is authorized pursuant to the *Environmental Protection Act* and the *Ontario Water Resources Act*. The personal information collected in this application will be used to administer the program, including for the purposes of the Ministry's compliance and enforcement activities under the aforementioned acts, and for the purposes of making information in respect of Environmental Compliance Approvals available to the public with the exception of payment information. For all questions related to preparing or submitting this form or about the Ministry of the Environment, Conservation and Parks collection of information related to this form, contact the ministry at enviropermissions@ontario.ca or at (Toll-free) 1-800-461-6290 (GTA) 416-314-8001.

7. Authorization

7.1 Statement of the Applicant Show Information

I am authorized to prepare and submit this application and to make this certification. I have reviewed the complete application and I have made all inquiries that are necessary to declare to the best of my knowledge, information and belief:

- The information contained in this application is complete and accurate.
- The Technical Contact(s) identified in this application has/have been authorized to prepare certain technical material, and act on behalf of the applicant to discuss this application with the Ministry of the Environment, Conservation and Parks and to provide additional information about this application to the Ministry on request.
- The information provided to the Technical Contact(s) in relation to this application is complete and accurate.

☑ By checking this each of the undersigned acknowledge that in providing their name on the applicable line below in electronic form will constitute a signature for the purposes of the *Electronic Commerce Act, 2000*, S.O. 2000, c. 17. *

Name of Signing Authority (Please print) *
Ruben Plaza

Title *
Director Environment Cement VCNA

Telephone Number	ext.	Mobile Number	Fax Number
[redacted]			

Email Address
ruben.plaza@vcimentos.com

Signature (hard copy submission must be signed)	Date (yyyy/mm/dd) *
[redacted]	2026/11/10

✔ Completion Status (7.1 Statement of the Applicant)

7.2 Statement of the Municipality ☐ N/A Show Information

I, the undersigned hereby declare on behalf of the Municipality, that the Municipality provides its consent to the construction of the works in the Municipality under section 93 of the *Municipal Act, 2001*.

☐ By checking this each of the undersigned acknowledge that in providing their name on the applicable line below in electronic form will constitute a signature for the purposes of the *Electronic Commerce Act, 2000*, S.O. 2000, c. 17. *

Name (Please print) *

Title *	Name of Municipality *

Signature (hard copy submission must be signed)	Date (yyyy/mm/dd) *

✔ Completion Status (7.2 Statement of the Municipality)

7.3 Statement of Technical Contacts

Technical Contact 1

I have been authorized by the applicant to prepare the technical materials for the area(s) of responsibility identified in section 2.6 that are included in the application. I have reviewed those technical materials and I have made all inquiries that are necessary to declare to the best of my knowledge, information and belief:

- The technical materials contained in this application in respect of the area(s) of responsibility identified in section 2.6 are complete and accurate.
- I have the relevant education and experience necessary to provide this certification.

☑ By checking this each of the undersigned acknowledge that in providing their name on the applicable line below in electronic form will constitute a signature for the purposes of the *Electronic Commerce Act, 2000*, S.O. 2000, c. 17. *

Name of Technical Contact (Please print) *
Kate Liubansky

Signature (hard copy submission must be signed)	Date (yyyy/mm/dd) *
[redacted]	2026/11/10

Technical Contact 2

I have been authorized by the applicant to prepare the technical materials for the area(s) of responsibility identified in section 2.6 that are included in the application. I have reviewed those technical materials and I have made all inquiries that are necessary to declare to the best of my knowledge, information and belief:

- The technical materials contained in this application in respect of the area(s) of responsibility identified in section 2.6 are complete and accurate.
- I have the relevant education and experience necessary to provide this certification.

☑ By checking this each of the undersigned acknowledge that in providing their name on the applicable line below in electronic form will constitute a signature for the purposes of the *Electronic Commerce Act, 2000*, S.O. 2000, c. 17. *

Name of Technical Contact (Please print) *
Xiaoxi Song

Signature (hard copy submission must be signed)	Date (yyyy/mm/dd) *
[redacted]	2026/11/10

Technical Contact 3

I have been authorized by the applicant to prepare the technical materials for the area(s) of responsibility identified in section 2.6 that are included in the application. I have reviewed those technical materials and I have made all inquiries that are necessary to declare to the best of my knowledge, information and belief:

- The technical materials contained in this application in respect of the area(s) of responsibility identified in section 2.6 are complete and accurate.
- I have the relevant education and experience necessary to provide this certification.

☑ By checking this each of the undersigned acknowledge that in providing their name on the applicable line below in electronic form will constitute a signature for the purposes of the *Electronic Commerce Act, 2000*, S.O. 2000, c. 17. *

Name of Technical Contact (Please print) *
Harry Ao Cai

Signature (hard copy submission must be signed)	Date (yyyy/mm/dd) *
[redacted]	2026/11/10

✔ Completion Status (7.3 Statement of Technical Contacts)

8. Payment Information - Application for an Environmental Compliance Approval

Show Information

Payment Options *

The information collected in this section of the form is considered confidential and will only be used to process the application fee. All fees should be paid in Canadian funds.

☐ **Pay online** (under $10,000)

- Ensure the application form is complete before paying your application fee online.
- The application form and supporting documents (attached in Section 6) will be automatically emailed (up to 13 MB of data) to the Client Services and Permissions Branch after payment has been confirmed.
- If your submission is greater than 13 MB, do not attach the supporting documents, send us a link to download your files by emailing ECA.submission@ontario.ca.

☐ **Certified cheque** (payable to the Minister of Finance)

☐ **Money order** (payable to the Minister of Finance)

If payment by **certified cheque or money order**, email the application package to ECA.submission@ontario.ca.
Wait for the Ministry to provide the reference number, then complete the Application Summary Page below (include the reference number), staple the cheque / money order to the page, and mail it to the Client Services and Permissions Branch.

Mailing Address

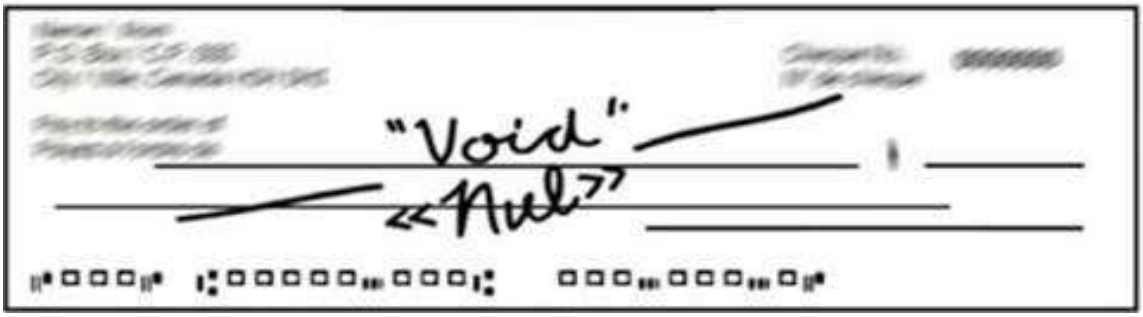
Client Services and Permissions Branch
Ministry of the Environment, Conservation and Parks
40 St. Clair Ave W, 2nd Floor
Toronto ON M4V 1M2

If this form has been completed by hand, the fee calculations must be completed and attached separately. The supplemental fee calculations do not need to be included if this form has been completed electronically.

If this form has been completed electronically, the fees for this application have been calculated based on the information provided. The Ministry may require additional information during the review of the application that could impact the total fee required.

✔ Completion Status (8 Payment Information)

If paying by certified cheque or money order, please attach it here.



Application Summary

Reference Number	Payment Received ($)	Date (yyyy/mm/dd)	Initials

Applicant Name

St. Marys Cement Inc. (Canada)

Project Name

ALCF ECA Amendment Application for St. Marys Cement Bowmanville Plant

Project Description Executive Summary

St. Marys Cement Inc. (Canada) (St. Marys Cement), a subsidiary of Votorantim Cimentos North America (VCNA), is proposing to amend Environmental Compliance Approval (ECA) No. 0550-CEAHMA issued on September 19, 2022 under Part II.1 of the Ontario Environmental Protection Act for its Bowmanville Cement Plant located at 410 Bowmanville Avenue, Bowmanville, Ontario, L1C 7B5 to increase its use of Alternative Low-Carbon Fuels (ALCFs).

The proposed ALCF ECA Amendment Application will seek approval to increase the maximum ALCF use from 400 tonnes per day to 800 tonnes per day and to incorporate planned modifications associated with ALCF ancillary equipment. These modifications include upgrades to the calciner to accommodate increased ALCF use and a process improvement to increase combustion residence time. The calciner modifications will support increased ALCF usage and further displacement of conventional fuels currently used at the Facility. In addition, the proposed ECA Application incorporates modifications that are not related to ALCFs, including main kiln stack modification and addition of Finish Mill #4 which were assessed as part of the limited operational flexibility process. The proposed modifications are assessed in the Emission Summary and Dispersion Modelling (ESDM) Report and Acoustic Assessment Report (AAR) which support the proposed ALCF ECA Amendment Application.

As part of the proposed ALCF ECA Amendment Application, St. Marys Cement will request the approved list of ALCF baskets and materials on the ECA to be:

- Material that is biomass fuel derived from harvested plant and forest sources, end of life agricultural sources, Woodwaste or Agricultural Waste, and includes but is not limited to sawdust, wood chips, wood, miscanthus grass, millet, sorghum, hemp, switch grass, and maize;
- Material that is comprised of non-recyclable plastics, including but not limited to manufacturing rejects, material resource recovery facility rejects, nylon (including but not limited to tire fluff), plastics bags and packaging;
- Material that is comprised of construction, renovation & demolition waste, including but not limited to scrap wood, treated lumber, carpets, textiles, sawdust, nylon, floor laminates and asphalt shingles;
- Material that is comprised of non-recyclable paper fiber/wood/plastic composites, including but not limited to single-serve coffee pods, printed papers, paper towels, rejects and trimmings from paper recycling facilities such as ragger tails (residue including plastic trimmings, staples, paper fibre and metal wire), end rolls and cores; and
- Material that is comprised of rubber (non-tire derived), including but not limited to shredded conveyor belts.

The proposed ALCF ECA Amendment Application includes the Carbon Dioxide Emission Intensity Report which assesses the carbon dioxide emission intensities of the ALCFs used and proposed to be used at the Facility in accordance with O. Reg. 79/15.

The following supplemental documents are also included in the proposed ALCF ECA Amendment Application: Traffic Technical Memorandum (i.e., Brief), Air Quality Study, and ALCF Testing and Handling Manual.

In accordance with O. Reg. 79/15, the proposed ALCF ECA Amendment Application included consultation and engagement activities consisting of notification and an online commenting period. Recognizing the importance of maintaining transparent communication with Indigenous communities, local stakeholders, municipal representatives, and neighbouring residents, St. Marys Cement chose to undertake a voluntary engagement event in the form of a Public Information Session which exceeds the minimum regulatory requirements and facilitates meaningful dialogue regarding the proposed changes and its potential environmental effects.

The proposed ALCF ECA Amendment Application is supported by technical documentation that demonstrates the proposed changes can be implemented in a manner that remains protective of human health and the environment and satisfy the requirements of O. Reg. 79/15 and O. Reg. 419/05.

Supplemental Application Information
N/A

Application Status Show Information

Section	Completed?
1. Application Information	☑ Yes ☐ No
2. Project Information	☑ Yes ☐ No
3. Regulatory Requirements	☑ Yes ☐ No
4. Site Information	☑ Yes ☐ No
5. Facility Information	☑ Yes ☐ No
6. Supporting Documentation	☑ Yes ☐ No
7. Authorization	☑ Yes ☐ No
8. Payment Information	☑ Yes ☐ No

Fee Summary

Activity	Amount ($)
Administrative Processing	$200.00
Review of EPA s. 9 activities	$5,800.00
Review of EPA s. 27 activities	$0.00
Review of OWRA s. 53 activities	$0.00
Total Fee	$6,000.00

The Ministry may request additional fees upon review of this application.
If this form is submitted in print version only and the smart calculation feature is not used, please attach the fee calculation separately.

Save Form Print Form Clear Form

Attachment 2

Current ECA

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL
NUMBER 0550-CEAHMA
Issue Date: September 19, 2022

St. Marys Cement Inc. (Canada)
410 Bowmanville Avenue, Bowmanville
Clarington, Ontario
L1C 3K3

Site Location: St. Marys Cement (Canada) Inc.
410 Bowmanville Avenue, Bowmanville
Clarington Municipality, Regional Municipality of Durham
L1C 7B5

You have applied under section 20.2 of Part II.1 of the Environmental Protection Act , R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

Description Section

A cement manufacturing facility, consisting of the following processes and support units:

- Quarry operations - limestone extraction, processing and shipping;
- Raw material delivery, storage, processing and transfers;
- Conventional Fuels processing, storage and handling;
- Alternative Low-Carbon Fuels processing, storage and handling;
- Clinker production- Cement Kiln operations;
- Clinker storage and transfer; and
- Cement production including ball mills, cement storage and shipping;

including the Equipment and any other ancillary and support processes and activities, operating at a Facility Production Limit of up to a **clinker production rate of 2.4 million tonnes per year,** discharging to the air as described in the Original ESDM Report.

For the purpose of this environmental compliance approval, the following definitions apply:

1. "ACB list" means the document entitled "Air Contaminants Benchmarks (ACB)

List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants", as amended from time to time and published by the Ministry and available on a Government website;

2. "Acceptable Point of Impingement Concentration" means a concentration accepted by the Ministry as not likely to cause an adverse effect for a Compound of Concern that,
    a. is not identified in the ACB list, or
    b. is identified in the ACB list as belonging to the category “Benchmark 2” and has a concentration at a Point of Impingement that exceeds the concentration set out for the contaminant in that document.
    With respect to the Original ESDM Report, the Acceptable Point of Impingement Concentration for a Compound of Concern mentioned above is the concentration set out in the Original ESDM Report;
3. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 and Appendix A of the Basic Comprehensive User Guide, by Corey Kinart, P.Eng. / HGC Engineering, dated September 29, 2020, submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility, as updated in accordance with Condition 5 of this Approval;
4. "Acoustic Assessment Summary Table" means a table prepared in accordance with the Basic Comprehensive User Guide summarising the results of the Acoustic Assessment Report, as updated in accordance with Condition 5 of this Approval;
5. "Agricultural Waste" has the same meaning as defined in O. Reg. 347;
6. "Alternative Low-Carbon Fuels" means a fuel as defined in O. Reg. 79/15 and includes the material approved under Condition 7 of this Approval;
7. "Approval" means this entire Environmental Compliance Approval and any Schedules to it;
8. "Basic Comprehensive User Guide" means the Ministry document titled "Basic Comprehensive Certificates of Approval (Air) User Guide" dated March 2011, as amended;
9. "Best Management Practices Plan" means the document titled "St. Marys Cement Inc., Cement Plant Operations - Bowmanville Site, Best Management Practices Plan for the Control of Fugitive Dust Emissions" Revision 7, dated February, 2020, as amended;
10. "CAEAL" means the Canadian Association for Environmental Analytical Laboratories;
11. "Carbon Dioxide Emission Intensity" has the same meaning as defined under O.

Reg. 79/15;

12. "Cement Kiln" means the cement kiln and the calciner, using Conventional Fuels, Alternative Low-Carbon Fuels, hydrogen and oxygen generated from an Electrolysis System, and Fuel Adjunct Material, described in the ESDM Report, this Approval, and in the supporting documentation referred to herein;
13. "CEM System" means the continuous monitoring and recording system used to measure the emissions from the Cement Kiln stack;
14. "CPM System" means the continuous monitoring and recording system used to measure the operational parameters of the Cement Kiln;
15. "Company" means St. Marys Cement Inc. (Canada) that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA;
16. "Compound of Concern" means a contaminant described in paragraph 4 subsection 26 (1) of O. Reg. 419/05, namely, a contaminant that is discharged from the Facility in an amount that is not negligible;
17. "Conventional Fuels" means solid fuels including petroleum coke and coal for regular firing and also includes diesel, propane and natural gas for preheating during start-up;
18. "Description Section" means the section on page one of this Approval describing the Company's operations and the Equipment located at the Facility and specifying the Facility Production Limit for the Facility;
19. "Director" means a person appointed for the purpose of section 20.3 of the EPA by the Minister pursuant to section 5 of the EPA;
20. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located;
21. "Electrolysis System" means the Ultimate Cell Continuous Combustion (UC3) system described in the Original ESDM Report, or an equivalent system, where up to 30 normal cubic meters per hour of hydrogen and up to 15 normal cubic meters per hour of oxygen are generated and introduced each into the fuel injection ports of the cement kiln and the calciner.
22. "Emission Summary Table" means a table described in paragraph 14 of subsection 26 (1) of O. Reg. 419/05;
23. "Environmental Assessment Act" means the Environmental Assessment Act, R.S.O. 1990, c.E.18;
24. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
25. "Equipment" means equipment or processes described in the ESDM Report, this

Approval and in the Schedules referred to herein and any other equipment or processes;

26. "Equipment with Specific Operational Limits" means the Cement Kiln (except the fuel feed system feeding Alternative Low-Carbon Fuels and Conventional Fuels to the Cement Kiln), and any other Equipment related to the thermal oxidation of waste or waste derived fuels, fume incinerators or any other Equipment that is specifically referenced in any published Ministry document that outlines specific operational guidance that must be considered by the Director in issuing an Approval;
27. "ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Facility. The ESDM Report is based on the Original ESDM Report and is updated after the issuance of this Approval in accordance with section 26 of O. Reg. 419/05 and the Procedure Document;
28. "Facility" means the entire operation located on the property where the Equipment is located;
29. "Facility Production Limit" means the production limit placed by the Director on the main product(s) or raw materials used by the Facility;
30. "Fuel Adjunct Materials" means solid fuel, wholly used at the Facility, as supplementary fuels to coal and petroleum coke for firing the Cement Kiln, such as but not limited to carbon dust, metallurgical coke and carbon black, but which does not include Alternative Low-Carbon Fuels;
31. "Industrial By-Product Materials" means industrial by-product materials such as but not limited to iron slag from smelting industry, fly ash from coal fired generating plants, ash from waste water treatment plants and foundry sand used in casting processes, wholly used at the Facility as substitute raw material sources of calcium oxide, silica, iron oxide and alumina required for the ongoing cement manufacturing process and which do not serve as fuel for the Cement Kiln;
32. "Log" means a document that contains a record of each change that is required to be made to the ESDM Report and Acoustic Assessment Report, including the date on which the change occurred. For example, a record would have to be made of a more accurate emission rate for a source of contaminant, more accurate meteorological data, a more accurate value of a parameter that is related to a source of contaminant, a change to a Point of Impingement and all changes to information associated with a Modification to the Facility that satisfies Condition 2;
33. "Manager" means the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, or any other person who represents and carries out the duties of the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch, as those

duties relate to the conditions of this Approval;

34. "Minister" means the Minister of the Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of the EPA under the Executive Council Act;
35. "Ministry" means the ministry of the Minister;
36. "Modification" means any construction, alteration, extension or replacement of any plant, structure, equipment, apparatus, mechanism or thing, or alteration of a process or rate of production at the Facility that may discharge or alter the rate or manner of discharge of a Compound of Concern to the air or discharge or alter noise or vibration emissions from the Facility;
37. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers;
38. "O. Reg. 79/15" means Ontario Regulation 79/15: Alternative Low-Carbon Fuels; as amended;
39. “O. Reg. 347” means Ontario Regulation 347: General – Waste Management; as amended;
40. "O. Reg. 419/05" means Ontario Regulation 419/05: Air Pollution – Local Air Quality; as amended;
41. "Original ESDM Report" means the Emission Summary and Dispersion Modelling Report which was prepared in accordance with section 26 of O. Reg. 419/05 and the Procedure Document by BCX Environmental Consulting and dated February 18, 2021 submitted in support of the application, and includes any changes to the report made up to the date of issuance of this Approval;
42. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05;
43. "Point of Reception" means Point of Reception as defined by Publication NPC-300;
44. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code;
45. "Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2018, as amended;
46. "Processes with Significant Environmental Aspects" means the Equipment which, during regular operation, would discharge one or more contaminants into the air in an amount which is not considered as negligible in accordance with section 26 (1) 4 of O. Reg. 419/05 and the Procedure Document;

47. "Publication NPC-207" means the Ministry draft technical publication "Impulse Vibration in Residential Buildings", November 1983, supplementing the Model Municipal Noise Control By-Law, Final Report, published by the Ministry, August 1978, as amended;
48. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended;
49. "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", August 2013, as amended;
50. "Report EPS1/PG/7" means means the document published by Environment Canada entitled “Protocols and Performance Specifications for Continuous Monitoring of Gaseous Emissions from Thermal Power Generation";
51. "Schedules" means the following schedules attached to this Approval and forming part of this Approval namely:
    Schedule A - Supporting Documentation
    Schedule B - Performance Requirements - In-Stack Emission Limits
    Schedule C - Process Dust Control Equipment Operational Requirements
    Schedule D - Material Analysis Contaminants
    Schedule E - Alternative Low-Carbon Fuels Operational Requirements
    Schedule F - Procedure for Source Testing
    Schedule G - Test Sources and Test Contaminants - Source Testing
52. "Source Testing" means sampling and testing to measure emissions resulting from operating the test sources under conditions which yield the worst case emissions within the approved operating range of the test sources which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
53. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended;
54. "Toxicologist" means a qualified professional currently active in the field of risk assessment and toxicology that has a combination of formal university education, training and experience necessary to assess contaminants;
55. "Woodwaste" has the same meaning as defined in O. Reg 347; and
56. "Written Summary Form" means the electronic questionnaire form, available on the Ministry website, and supporting documentation, that documents the activities undertaken at the Facility in the previous calendar year.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. **GENERAL**
    1. Except as otherwise provided by this Approval, the Facility shall be designed, developed, built, operated and maintained in accordance with the terms and conditions of this Approval and in accordance with the following Schedules attached hereto:
        - Schedule A - Supporting Documentation
        - Schedule B - Performance Requirements - In-Stack Emission Limits
        - Schedule C - Process Dust Control Equipment Operational Requirements
        - Schedule D - Material Analysis Contaminants
        - Schedule E - Alternative Low-Carbon Fuels Operational Requirements
        - Schedule F - Procedure for Source Testing
        - Schedule G - Test Sources and Test Contaminants - Source Testing
    2. The use of Alternative Low-Carbon Fuels is approved at the Facility under the requirements of O. Reg. 79/15, and pursuant to Section 3 of O. Reg. 79/15, section 27 of the EPA does not apply to the Facility.
2. **LIMITED OPERATIONAL FLEXIBILITY**
    1. Pursuant to section 20.6 (1) of the EPA and subject to Conditions 2.2 and 2.3 of this Approval, future construction, alterations, extensions or replacements are approved in this Approval if the future construction, alterations, extensions or replacements are Modifications to the Facility that:
        a. are within the scope of the operations of the Facility as described in the Description Section of this Approval;
        b. do not result in an increase of the Facility Production Limit above the level specified in the Description Section of this Approval;
        c. result in compliance with the performance limits as specified in Condition 4.
    2. Condition 2.1 does not apply to,
        a. the addition of any new Equipment with Specific Operational Limits or to the Modification of any existing Equipment with Specific Operational Limits at the Facility;
        b. alteration of the Alternative Low-Carbon Fuels and the increase in the quantity of Alternative Low-Carbon Fuels specified in Condition 7 of this Approval; and

c. modification to the Facility that would be subject to the Environmental Assessment Act.

3. Condition 2.1 of this Approval shall expire on March 31, 2031, unless this Approval is revoked prior to the expiry date. The Company may apply for renewal of Condition 2.1 of this Approval by including an ESDM Report and an Acoustic Assessment Report that describes the Facility as of the date of the renewal application.

3. **REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION**

1. Prior to making a Modification to the Facility that satisfies Condition 2.1.a. and 2.1.b., the Company shall prepare a proposed update to the ESDM Report to reflect the proposed Modification.
2. The Company shall request approval of an Acceptable Point of Impingement Concentration for a Compound of Concern if the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and a proposed update to an ESDM Report indicates that one of the following changes with respect to the concentration of the Compound of Concern may occur:
   a. The Compound of Concern was not a Compound of Concern in the previous version of the ESDM Report and
      i. the concentration of the Compound of Concern exceeds the concentration set out for the contaminant in the ACB list; or
      ii. the Compound of Concern is not identified in the ACB list; or
   b. The concentration of the Compound of Concern in the updated ESDM Report exceeds the higher of,
      i. the most recent Acceptable Point of Impingement Concentration, and
      ii. the concentration set out for the contaminant in the ACB list,if the contaminant is identified in that document.
3. The request required by Condition 3.2 shall propose a concentration for the Compound of Concern and shall contain an assessment, performed by a Toxicologist, of the likelihood of the proposed concentration causing an adverse effect at Points of Impingement.
4. If the request required by Condition 3.2 is a result of a proposed Modification described in Condition 3.1, the Company shall submit the request, in writing, to the Director at least 30 days prior to commencing to make the Modification. The Director shall provide written confirmation of receipt of this request to

the Company.

5. If a request is required to be made under Condition 3.2 in respect of a proposed Modification described in Condition 3.1, the Company shall not make the Modification mentioned in Condition 3.1 unless the request is approved in writing by the Director.
6. If the Director notifies the Company in writing that the Director does not approve the request, the Company shall,
    a. revise and resubmit the request; or
    b. notify the Director that it will not be making the Modification.
7. The re-submission mentioned in Condition 3.6 shall be deemed a new submission under Condition 3.2.
8. If the Director approves the request, the Company shall update the ESDM Report to reflect the Modification.
9. Condition 3 does not apply if Condition 2.1 has expired.

4. **PERFORMANCE LIMITS**
    1. Subject to Condition 4.2, the Company shall not discharge or cause or permit the discharge of a Compound of Concern into the air if,
        a. the Compound of Concern is identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the Benchmark 1 concentration; or
        b. the Compound of Concern is not identified in the ACB list as belonging to the category "Benchmark 1" and the discharge results in the concentration at a Point of Impingement exceeding the higher of,
            i. if an Acceptable Point of Impingement Concentration exists, the most recent Acceptable Point of Impingement Concentration, and
            ii. the concentration set out for the contaminant in the ACB list, if the contaminant is identified in that document.
    2. Condition 4.1 does not apply if the benchmark set out in the ACB list has a 10-minute averaging period and no ambient monitor indicates an exceedance at a Point of Impingement where human activities regularly occur at a time when those activities regularly occur.
    3. The Company shall, at all times, ensure that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300.
    4. The Company shall, at all times, ensure that the vibration emissions from the Facility comply with the limits set out in Ministry Publication NPC-207.

5. The Company shall operate any Equipment with Specific Operational Limits approved by this Approval in accordance with the Original ESDM Report.
6. The Company shall ensure that at all times when Alternative Low-Carbon Fuels are co-fired with Conventional Fuels in the Cement Kiln, the discharge from the Cement Kiln complies with the performance requirements specified in **Schedule B** of this Approval.

5. **DOCUMENTATION REQUIREMENTS**
    1. The Company shall maintain an up-to-date Log.
    2. No later than June 30 in each year, the Company shall update the Acoustic Assessment Report and shall update the ESDM Report in accordance with section 26 of O. Reg. 419/05 so that the information in the reports is accurate as of December 31 in the previous year.
    3. The Company shall make the Emission Summary Table (see section 27 of O. Reg. 419/05) and Acoustic Assessment Summary Table available for examination by any person, without charge, by posting it on a Company website and by making it available during regular business hours at the Facility.
    4. The Company shall, within three (3) months after the expiry of Condition 2.1 of this Approval, update the ESDM Report and the Acoustic Assessment Report such that the information in the reports is accurate as of the date that Condition 2.1 of this Approval expired.
    5. Conditions 5.1 and 5.2 do not apply if Condition 2.1 has expired.

6. **REPORTING REQUIREMENTS**
    1. Subject to Condition 6.2, the Company shall provide the Director no later than June 30 of each year, a Written Summary Form to be submitted through the Ministry's website that shall include the following:
        a. a declaration of whether the Facility was in compliance with section 9 of the EPA, O. Reg. 419/05 and the conditions of this Approval;
        b. a summary of each Modification satisfying Condition 2.1.a. and 2.1.b. that took place in the previous calendar year that resulted in a change in the previously calculated concentration at a Point of Impingement for any Compound of Concern or resulted in a change in the sound levels reported in the Acoustic Assessment Summary Table at any Point of Reception.
    2. Condition 6.1 does not apply if Condition 2.1 has expired.

7. **APPROVED ALTERNATIVE LOW-CARBON FUELS**

1. The following Alternative Low-Carbon Fuels are approved for use as a fuel in the Cement Kiln at the Facility:
    a. Material that is biomass fuel derived from harvested plant and forest sources, end of life agricultural sources, Woodwaste or Agricultural Waste, and includes but is not limited to sawdust, wood chips, wood, miscanthus grass, millet, sorghum, hemp, switch grass, and maize;
    b. Material that is comprised of non-recyclable plastics, including but not limited to manufacturing rejects, material resource recovery facility rejects, plastics bags and packaging;
    c. Material that is comprised of construction, renovation & demolition waste, including but not limited to scrap wood, treated lumber, carpets, textiles, sawdust, floor laminates and asphalt shingles; and
    d. Material that is comprised of non-recyclable paper fiber/wood/plastic composites, including but not limited to single-serve coffee pods, printed papers, paper towels, rejects and trimmings from paper recycling facilities such as ragger tails (residue including plastic trimmings, staples, paper fibre and metal wire), end rolls and cores.
2. Notwithstanding Condition 7.1 of this Approval, the Company shall ensure that the Alternative Low-Carbon Fuels are not derived from or composed of any material set out in Schedule 1 of O. Reg. 79/15.
3. The combined amount of Alternative Low-Carbon Fuels approved under Condition 7.1 of this Approval, subjected to thermal processing in the Cement Kiln shall not exceed 400 tonnes per day.

8. **OPERATION AND MAINTENANCE**
    1. The Company shall prepare and implement, not later than three (3) months from the date of this Approval, operating procedures and maintenance programs for all Processes with Significant Environmental Aspects, which shall specify as a minimum:
        a. frequency of inspections and scheduled preventative maintenance;
        b. procedures to prevent upset conditions;
        c. procedures to minimize all fugitive emissions;
        d. procedures to prevent and/or minimize odorous emissions;
        e. procedures to prevent and/or minimize noise emissions;
        f. procedures for record keeping activities relating to the operation and maintenance programs;
        g. acceptable range of the static pressure drop for the process dust control

equipment listed in **Schedule C** of this Approval;

h. program to monitor and record the pressure differential across each of the primary dust collectors as specified in **Schedule C** of this Approval and any other applicable primary dust control equipment, including the frequency of measurement and procedures to investigate and correct the cause of any anomalous measurements of the static pressure drop;

i. list of management and supervisory personnel responsible for the operation and maintenance of process dust control equipment specified in **Schedule C** of this Approval and any other applicable process dust control equipment.

2. The Company shall maintain and update to keep current, a list of all process dust control equipment, including the following details:
Source identification; Production building/area served; Process/location served; Stack gas flow rate; Filter area; Stack diameter and Stack height above grade.

3. The Company shall ensure that all Processes with Significant Environmental Aspects are operated and maintained in accordance with this Approval, the operating procedures and maintenance programs.

4. The Company shall prepare, update as necessary and implement, not later than three (3) months from the date of this Approval, procedures for the handling, processing and combustion in the Cement Kiln of Alternative Low-Carbon Fuels, including but not limited to:
    a. operating and maintenance procedures in accordance with good engineering practices and as recommended by the equipment suppliers;
    b. start-up, shut-down and emergency measures;
    c. procedures for handling, storage, maintenance and conveyance of Alternative Low-Carbon Fuels and the inspection of such facilities in accordance with the requirements set out in O. Reg. 79/15;
    d. procedures for record keeping activities, including but not limited to the record keeping requirements for Alternative Low-Carbon Fuels facility inspection, and Alternative Low-Carbon Fuels use and transport, in accordance with the requirements set out in O. Reg. 79/15;

5. The Company shall ensure that the Facility/Equipment is properly designed and operated at all times while firing Alternative Low-Carbon Fuels and comply with the operational requirements set out in **Schedule E** of this Approval.

6. Alternative Low-Carbon Fuels shall be fired in accordance with the operating

procedures and shall only be fired once the Cement Kiln has achieved normal operation, temperatures and production and shall be introduced directly into the Cement Kiln to maintain the requirements set out in **Schedule E** of this Approval**.**

7. The introduction of Alternative Low-Carbon Fuels in the Cement Kiln shall be stopped (following appropriate procedures) if:
    a. the temperature, residual oxygen or pressure as measured by the CPM System do not meet the operational requirements outlined in **Schedule E** of this Approval for more than four (4) consecutive hours; or
    b. the CPM System for one or more of the parameters specified in condition 8.7 (a) are down or malfunctioning for more than four (4) consecutive hours.

8. The Company shall comply with the following Alternative Low-Carbon Fuels storage requirements:
    a. the Alternative Low-Carbon Fuels shall be stored indoors or in enclosed containers, and the storage location shall be secure;
    b. the maximum amount of Alternative Low-Carbon Fuels stored and the maximum time periods for which the Alternative Low-Carbon Fuels can be stored shall be in accordance with the requirements set out in O. Reg. 79/15; and
    c. the Alternative Low-Carbon Fuels stored shall be combusted in the Cement Kiln.

9. The Company shall record the following data during Cement Kiln operation:
    a. daily combined raw feed in the Cement Kiln in tonnes per day;
    b. daily Alternative Low-Carbon Fuels fired in the Cement Kiln in tonnes per day, recorded separately for the kiln and the calciner, for each category of Alternative Low-Carbon Fuels approved under condition 7 of this Approval;
    c. daily Conventional Fuels fired in the Cement Kiln in tonnes per day, recorded separately for the kiln and the calciner;
    d. hours of operation of each of the Electrolysis System units in hours per day and the amount of hydrogen and oxygen produced by each of the Electrolysis System units and introduced in the cement kiln and calciner in normal cubic meters per hour.
    e. daily Fuel Adjunct Material and Industrial By-Product Material in tonnes per day used in the Cement Kiln;

f. daily clinker production in tonnes per day;

g. records of any incidents specified in Condition 8.7 of this Approval, and

h. any start-up, shut-down and malfunction incidents.

9. **MATERIAL ANALYSIS AND CRITERIA FOR ACCEPTANCE - ALTERNATIVE LOW-CARBON FUELS, INDUSTRIAL BY-PRODUCT AND FUEL ADJUNCT MATERIAL**

1. The Company shall ensure that a material analysis program and criteria for acceptance for Alternative Low-Carbon Fuels is implemented as follows:

a. A protocol for Alternative Low-Carbon Fuels vendor screening, sampling and analysis shall be immediately implemented in accordance with the document "Alternative Low-Carbon Fuels Handling Procedures and Testing Manual, St. Marys Cement Inc. (Canada)- Bowmanville Cement Plant, Version 1.0- March 5, 2021 revision, as amended. At a minimum, the Alternative Low-Carbon Fuels analysis parameters shall comply with the criteria specified in Table 1 and Table 2 of this document. Any change in the criteria specified in Table 1 and Table 2 shall be finalized in consultation with the District Manager.

b. If the analysis results of the Alternative Low-Carbon Fuels indicate that the emission rates of contaminants from the Cement Kiln are higher than the maximum emission rates identified in the maximum emission scenario outlined in the ESDM Report, the Company shall update the ESDM Report with the emission rates derived from this analysis in accordance with he document "Alternative Low-Carbon Fuels Handling Procedures and Testing Manual, St. Marys Cement Inc. (Canada)- Bowmanville Cement Plant, Version 1.0- March 5 2021, as amended.

2. The Company shall ensure that a material analysis program to measure and record the concentration of contaminants for Industrial By-Product Material and Fuel Adjunct Material is implemented as follows:

a. For each material used as Fuel Adjunct Materials, the Company shall obtain a metals/metal hydrides scan, including at a minimum the contaminants listed in **Schedule D** on a quarterly or Lot basis, as applicable. The Company shall ensure that the standard sampling methods outlined in the document "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario, Ontario Ministry of the Environment and Energy, Standards Development Branch, December, 1996" are used, and that the samples are submitted to a CAEAL certified laboratory for analysis.

b. For each material used as Industrial By-Product Materials, the Company

shall obtain a metals/metal hydrides scan, including at a minimum the contaminants listed in **Schedule D**, on a quarterly or Lot basis, as applicable. The Company shall ensure that the standard sampling methods outlined in the document "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario, Ontario Ministry of the Environment and Energy, Standards Development Branch, December, 1996" are used, and that the samples are submitted to a CAEAL certified laboratory for analysis.

c. At any time, should the Company either independently or through other sources reasonably expect other metal/metal hydrides not outlined under **Schedule D** to be present in any material at greater than the trace concentrations, the Company shall obtain the appropriate analysis forthwith.

d. Upon receipt of the analysis, the Company shall ensure that the Point of Impingement concentrations of metal/metal hydrides do not exceed the respective performance limits based on the maximum emissions scenario outlined in the ESDM Report.

e. The Company shall limit the accumulation of Industrial By-Product Materials and other raw materials in exterior storage piles to amounts which may reasonably be expected to be necessary for use in the cement manufacturing processes.

f. The Company shall ensure that any Industrial By-Product Material stored at the Facility which the Company determines cannot be utilized in ongoing cement manufacturing processes, is managed in accordance with applicable waste management regulations, and, where an Industrial By-Product Material becomes unusable, the Company shall advise the District Manager in writing, of the type and quantity of such material, the reasons why it cannot be used and the specific manner in which the material is to be managed as a waste.

10. **CONTINUOUS MONITORING**

1. **Continuous Emissions Monitoring in the Kiln Stack**

a. The Company shall ensure that the CEM System continuously monitors the following parameters in the exhaust gas stream from the Cement Kiln stack:

i. Nitrogen Oxides

ii. Sulphur Dioxide

iii. Total Particulate Matter

b. The CEM System for nitrogen oxides and sulphur dioxide shall be installed, operated, maintained and quality assurance conducted and reported in accordance with the requirements set out in Report EPS1/PG/7. The CEM System for total particulate matter shall follow the guidance on design and quality assurance outlined in the document USEPA 40CFR60 Performance Specification 11, and the guidance on the ongoing operation and maintenance on the particulate matter CEM System outlined in the document USEPA Procedure 2: Quality Assurance Requirements for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources, as amended. The annual Relative Accuracy Test Audit (RATA) report, including the required production data during the testing shall be submitted to the Manager and District Manager by June 30 of each year, for the previous calendar year. The quarterly cylinder gas audit reports shall be made available to the Ministry upon request.

2. **Continuous Monitoring of Process Conditions**
   a. The Company shall install, operate and maintain a CPM System to continuously monitor:
      i. the concentration of residual oxygen and carbon monoxide in the backend of the kiln and calciner down comer duct;
      ii. the temperatures of gases leaving the kiln at the K5 cyclone upstream of the kiln, where the gas temperature reaches a minimum of 800 degree Celsius, which corresponds to a kiln gas outlet temperature of a minimum of 1,000 degree Celsius for a period of not less than 6 seconds;
      iii. the temperatures of gases leaving the calciner at a point where the gas temperature reaches a minimum of 850 degree Celsius for not less than 3 seconds; and
      iv. Total Hydrocarbon (as methane) in the gases leaving the Cement Kiln stack.

   b. The CPM System specified in condition 10.2.a shall be designed, operated and maintained in accordance with an approved continuous monitoring plan, complete with specifications based on manufacturer's specifications and manuals. In this regard, the continuous monitoring plan shall be revised to assure proper calibration, maintenance and operation of the CPM System, in order to establish its performance on a continuous basis. The revised continuous monitoring plan shall be provided to the Manager for approval within three (3) months of the date of issuance of this Approval.

3. **Continuous Monitoring Documentation**
    a. The Company shall prepare monthly reports by the end of the following month, including the data monitored during the preceding month by the CEM System and CPM System, summarizing the following as a minimum:
        i. the daily minimum, maximum and average readings for the parameters specified in condition 10 of this Approval;
        ii. the percent availability of the CEM System and CPM System for the parameters specified in condition 10 of this Approval on a monthly basis; and
        iii. daily operational status (on/off) of the raw mill and the fuel mill.
    b. After one (1) month of the date of commencement of operation of the Electrolysis System, the Company shall prepare monthly reports by the end of the following month, including the data monitored during the preceding month, for the following parameters as a minimum:
        i. the hourly average readings for the parameters specified in conditions 10.1, 10.2 and 8.9.d of this Approval, maintained electronically in a spreadsheet format;
        ii. the parameters specified in conditions 8.9.a, 8.9.b, 8.9.c, 8.9.e and 8.9.f of this Approval.
    c. The Company shall retain the monthly reports included in Conditions 10.3.a and 10.3.b of this Approval at the Facility, and when requested provide these to the District Manager and the Manager within 15 days of the date of the request.
    d. The District Manager may relax the frequency and/or scope of the reports required under Condition 10.3 of this Approval, if the data is observed to be within the performance requirements of this Approval on a consistent basis.
    e. The Company shall establish the normal operating concentration range for total hydrocarbon for baseline conditions (operating conditions which include the use of Conventional Fuel, Fuel Adjunct Materials and Industrial By-Product Materials in the Cement Kiln) based on CPM System data. The Company shall, at a minimum on a quarterly basis, review the CPM System data and identify and investigate any anomalous total hydrocarbon concentrations when using Alternative Low-Carbon Fuels. An investigations report shall be prepared and retained on site.

f. The Company shall retain on site, all raw data generated by the CEM System and CPM System for a minimum of five (5) years from the date of their creation.

11. **SOURCE TESTING**

1. The Company shall perform Source Testing in accordance with the procedure in **Schedule F** to determine the rate of emission of the test contaminants from the sources specified in **Schedule G**. Source Testing shall be conducted not later than twelve (12) months from the date of commencement of operation of the Alternative Low-Carbon Fuels feed equipment which permits expanding the use of higher quantity of Alternative Low-Carbon Fuels up to 400 tonnes per day, or within a time frame as directed or agreed to in writing by the District Manager.
2. The Company shall notify the District Manager in writing of the details of the installed equipment, date of installation and date of commencement of operation of the Alternative Low-Carbon Fuels feed equipment which permits expanding the use of higher quantity of Alternative Low-Carbon Fuels up to 400 tonnes per day within two (2) weeks of the installation and the commencement of operation.
3. In addition to Source Testing required under Conditions 11.1 of this Approval, Source Testing shall be repeated once every calendar year in accordance with the procedure in **Schedule F** to determine the rate of emission of the test contaminants from the sources specified in **Schedule G**. Annual Source Testing is not required to be conducted in the year in which Source Testing required under Condition 11.1 was conducted.
4. The Source Testing required under Conditions 11.1 and 11.3 of this Approval shall include, as a minimum, the rates of emissions of the test contaminants from the Cement Kiln stack, when the Cement Kiln is co-fired with Conventional Fuels and Alternative Low-Carbon Fuels, at an Alternative Low-Carbon Fuels maximum approved firing rate of 400 tonnes per day, or at a firing rate agreed to in writing by the Manager, subject to the condition that operational checks of the Cement Kiln are accepted by the Company. The Alternative Low-Carbon Fuels used during the Source Testing shall contain a representative blend of the Alternative Low-Carbon Fuels approved under Condition 7 of this Approval, with considerations of the market availability of Alternative Low-Carbon Fuels types and quantities at the time of Source Testing. The blend (s) of Alternative Low-Carbon Fuels and quantity proposed to be used for the Source Testing shall be submitted along with the Pre-Test Plan to the Manager and the Director for approval, along with the details regarding the process for selection of the Alternative Low-Carbon

Fuels blend (s) and quantity for Source Testing.

5. The Company shall perform Source Testing in accordance with the procedure in **Schedule F** to determine the rate of emission of the test contaminants from the sources specified in **Schedule G** during the regular operation of the Electrolysis System. Source Testing shall be conducted not later than (6) six months from the date of commencement of operation of the Electrolysis System and shall be conducted while Conventional Fuels and Alternative Low-Carbon Fuels are used as required for Source Testing in condition 11.4 of this Approval.
6. The Company shall notify the District Manager in writing of the date of installation and the date of commencement of operation of the Electrolysis System within two (2) weeks of the installation and the commencement of operation.
7. The District Manager may relax the frequency and/or scope of the annual Source Testing required under Condition 11.3 of this Approval, if the results of the annual Source Testing program indicate that the emissions and Point of Impingement concentrations of Compounds of Concern are consistently recorded as insignificant when substituting a portion of Conventional Fuels with Alternative Low-Carbon Fuels.

12. **CARBON DIOXIDE EMISSION INTENSITY TESTING**
    1. The Company shall perform Carbon-Dioxide Emission Intensity testing of the representative samples of the Alternative Low-Carbon Fuels and Conventional Fuels at all times when Source Testing is carried out under Condition 11 of this Approval. Representative samples of the Alternative Low-Carbon Fuels and Conventional Fuels used during the Source Testing events shall be used for performing Carbon-Dioxide Emission Intensity testing. The Carbon-Dioxide Emission Intensity testing shall be carried out in accordance with the requirements set out in O. Reg. 79/15.
    2. The Company shall prepare a Carbon-Dioxide Emission Intensity report in respect of the Alternative Low-Carbon Fuels combusted at the site, in accordance with the requirements set out in O. Reg. 79/15, that includes a statement that the Carbon-Dioxide Emission Intensity of the Alternative Low-carbon Fuels are less than the Carbon Dioxide Emission Intensity of the Conventional Fuels in the place of which the Alternative Low-Carbon Fuels are proposed to be combusted.
    3. The Company shall submit the Carbon-Dioxide Emission Intensity report along with the Source Testing report to the District Manager.

13. **FUGITIVE EMISSIONS CONTROL**

1. The Company shall update as necessary and implement the Best Management Practices Plan for the control of fugitive dust emissions.
2. The Company shall:
    a. review and evaluate the Best Management Practices Plan on an annual basis;
    b. record the results of each annual review and update as required the Best Management Practices Plan within two (2) months of the completion of the annual review;
    c. maintain the updated Best Management Practices Plan at the Facility;
    d. implement, at all times, the most recent version of the Best Management Practices Plan.
3. The Company shall record and retain such records, each time a specific preventative and control measure described in the Best Management Practices Plans is implemented. The Company shall record, as a minimum:
    a. the date when each emission control measure is implemented, including a description of the control measure;
    b. the date when each new preventative measure or operating procedure to minimize emissions is implemented, including a description of the preventative measure or operating procedure; and
    c. the date, time of commencement, and time of completion of each periodic activity conducted to minimize emissions, including a description of the preventative measure/procedure and the name of the individual performing the periodic activity.

14. **COMPLAINTS RECORDING AND REPORTING**
    1. If at any time, the Company receives an environmental complaint from the public regarding the operation of the Equipment approved by this Approval, the Company shall take the following steps:
        a. Record and number each complaint, either electronically or in a log book. The record shall include the following information: the time and date of the complaint and incident to which the complaint relates, the nature of the complaint, wind direction at the time and date of the incident to which the complaint relates and, if known, the address of the complainant.
        b. Notify the District Manager of the complaint within two (2) business days after the complaint is received, or in a manner acceptable to the District Manager.

c. Initiate appropriate steps to determine all possible causes of the complaint, and take the necessary actions to appropriately deal with the cause of the subject matter of the complaint attributable to the operations of the Facility.

d. Complete and retain on-site a report written within five (5) business days of the complaint date. The report shall list the actions taken to appropriately deal with the cause of the complaint and set out steps to be taken to avoid the recurrence of similar incidents.

15. **RECORD KEEPING REQUIREMENTS**

1. Any information requested by any employee in or agent of the Ministry concerning the Facility and its operation under this Approval, including, but not limited to, any records required to be kept by this Approval, shall be provided to the employee in or agent of the Ministry, upon request**,** in a timely manner.
2. Unless otherwise specified in this Approval, the Company shall retain, for a minimum of five (5) years from the date of their creation all reports, records and information described in this Approval, including,
   a. a copy of the Original ESDM Report and each updated version;
   b. a copy of each version of the Acoustic Assessment Report;
   c. supporting information used in the emission rate calculations performed in the ESDM Reports and Acoustic Assessment Reports;
   d. the records in the Log;
   e. copies of each Written Summary Form provided to the Ministry under Condition 6.1 of this Approval;
   f. records of maintenance, repair and inspection of Equipment related to all Processes with Significant Environmental Aspects;
   g. records related to environmental complaints made by the public, as required under conditions on "Complaints Recording and Reporting" of this Approval.
   h. records related to Source Testing events, as required under conditions on "Source Testing" of this Approval;
   i. records related to the operation of the CEM System and CPM System, as required under conditions on “Continuous Monitoring” of this Approval;
   j. records related to the preventative and control measures implemented, as required under conditions on "Fugitive Emissions Control" of this

Approval;

k. records related to sampling and analysis, as required under conditions on "Material Analysis and Criteria of Acceptance - Alternative Low-Carbon Fuels, Industrial By-Product and Fuel Adjunct Material" and "Operation and Maintenance" of this Approval; and

l. records related to Carbon Dioxide Emission Intensity testing, as required under conditions on "Carbon Dioxide Emission Intensity Testing" of this Approval.

16. **COMPLIANCE REPORTING**

1. The Company shall prepare and submit by June 30 of each year to the District Manager, an Annual Report summarizing the operation of the Facility, covering the previous calendar year. The Annual Report shall include, as a minimum, the following information:

a. a statement of whether the Facility was in compliance with this Approval, including compliance with the Performance Limits;

b. the Emission Summary Table and Acoustic Assessment Summary Table for the Facility as of December 31 from the previous calendar year;

c. clinker and cement production in tonnes per year;

d. maximum daily feed rate and average daily feed rate of Alternative Low-Carbon Fuels and Conventional Fuels in the Cement Kiln for each month of the preceding calendar year, and the weight percentage of each category of Alternative Low-Carbon Fuels approved under Condition 7 of this Approval, of the total monthly Alternative Low-Carbon Fuel used.

e. maximum and average percent thermal replacement of Conventional Fuels by combined Alternative Low-Carbon Fuels for each month;

f. a summary of data from CEM System, CPM System, Source Testing and Carbon Dioxide Emission Intensity testing described under conditions 10.3(a), 11 and 12 of this Approval, and a description of the status of compliance with the Performance Limits, Alternative Low-Carbon Fuel definition under this Approval and Alternative Low-Carbon Fuels operational requirements described in **Schedule E** of this Approval;

g. a summary of dates, duration and reasons for any operational events including but not limited to events described in condition 8.7 of this Approval that may have negatively impacted the quality of the

environment and corrective measures taken to address these impacts;

h. details of environmental complaints including a summary of complaints received, causes of complaints and action taken to avoid the recurrence of similar incidents, as described in condition 14 of this Approval.

2. The Company shall make the Annual Report available for examination by any person by posting it on a Company website and making it available without charge during regular business hours at the Facility, immediately after it is submitted to the Ministry.

17. **REVOCATION OF PREVIOUS APPROVALS**
    1. This Approval replaces and revokes all Certificates of Approval (Air) issued under section 9 EPA and Environmental Compliance Approvals issued under Part II.1 EPA to the Facility in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

SCHEDULE A

Supporting Documentation

1. Environmental Compliance Approval amendment application, dated August 11, 2021, signed by Ruben Plaza and submitted by the Company;
2. Updated Emission Summary and Dispersion Modelling Report, prepared by BCX Environmental Consulting and dated August 11, 2021;
3. Additional information on the UC3 system provided by BCX Environmental Consulting dated February 18, 2022 and April 21, 2022;
4. Environmental Compliance Approval Application, dated March 26, 2020, signed by Ruben Plaza and submitted by the Company;
5. Emission Summary and Dispersion Modelling Report, prepared by BCX Environmental Consulting and dated February 18, 2021;
6. Carbon Dioxide Emission Intensity Report, Votorantim Cimentos North America - Prepared by Golder Associates Ltd., January 2020;
7. Air Quality Study and Cumulative Effects Assessment in Support of an Application under Alternative Low-Carbon Fuels regulation (O. Reg 79/15), St. Marys Cement Inc. (Canada), Bowmanville Facility - Prepared by BCX Environmental Consulting, January 2020;
8. Alternative Low Carbon Fuel Use at St. Marys Cement Bowmanville Plant - Consultation Report - Prepared by Golder Associates Ltd., March 2020;
9. Alternative Low Carbon Fuel Handling Procedures and Testing Manual- St. Marys

Cement Inc. (Canada) - Bowmanville Cement Plant, Version 1.0, revised on March 5, 2021;

10. Alternative Fuel Demonstration Project, Summary Waste Report, St. Marys Cement Inc. (Canada), Bowmanville Cement Plant- ECA 1255-7QVJ2N, Condition 53, Prepared by HDR Consultants, May 2019;
11. Alternative Fuel Demonstration Project, Summary Report, St. Marys Cement Inc. (Canada), Bowmanville Cement Plant- ECA 4614-826K9W - Prepared by BCX Environmental Consulting, May 2019;
12. Additional air emissions and AERMOD dispersion modelling related information provided by BCX Environmental Consulting dated November 27, 2020 and February 11, 2021;
13. Final CALMET files provided by BCX Environmental Consulting on February 20, 2021 for CALPUFF Air Dispersion Modelling;
14. Tiered Approach for Merging Modelling Results - prepared by BCX Environmental Consulting for post-processing of AERMOD and CALPUFF dispersion modelling results and attached as Appendix K of Emission Summary and Dispersion Modelling Report dated February 18, 2021; and
15. Acoustic Assessment Report, prepared by HGC Engineering, dated September 29, 2020 and signed by Corey Kinart, P.Eng.

SCHEDULE B

PERFORMANCE REQUIREMENTS - IN-STACK EMISSION LIMITS

Parameter	Cement Kiln Stack Emission Limit	Verification of Compliance
Particulate Matter (PM)	50 mg/Rm^3	Results from compliance source testing
Cadmium (Cd)	7 µg/Rm3	Results from compliance source testing
Lead (Pb)	60 µg/Rm3	Results from compliance source testing

Mercury (Hg)	20 µg/Rm3	Results from compliance source testing
Dioxins and Furans	80 pg/Rm^3 as ITEQ	Results from compliance source testing; results expressed as I-TEQ.
Hydrochloric Acid (HCl)	27 mg/Rm^3	Results from compliance source testing

Notes:

- R : Reference flue gas conditions, defined as follows:
  - Temperature 25 °C
  - Pressure 101.3 kPa
  - Oxygen content 11%
  - Water content nil (dry conditions)
- mg/Rm3 : milligrams per cubic metre of gas at Reference conditions.
- µg/Rm3 : micrograms per cubic metre of gas at Reference conditions.
- pg/Rm3 : picograms per cubic metre of gas at Reference conditions.
- I-TEQ : a toxicity equivalent concentration calculated using the toxic equivalency factors (I-TEFs) derived for each dioxin and furan congener by comparing its toxicity to the toxicity of 2,3,7,8 tetrachloro dibenzo-p-dioxin, recommended by the World Health Organization (WHO) dioxin toxicity equivalence factors (TEFs) in 2005, and adopted by Ontario in April 2012.

SCHEDULE C

PROCESS DUST EQUIPMENT OPERATIONAL REQUIREMENTS

Primary Dust Control Equipment

Primary dust control equipment includes the Cement Kiln Baghouse; Bypass Baghouse, Fuel Mill Baghouse; Cooler Baghouse, Finish Mill Baghouses.

The static pressure drop across the primary dust control equipment filter bag compartments shall be measured and recorded continuously by the Facility’s automated control system.

Secondary Dust Control Equipment

Secondary dust control equipment includes all other fabric filter dust collectors which are not primary dust control equipment.

The static pressure drop across the secondary dust control equipment filter bag compartments shall be measured and recorded at least quarterly.

Where applicable, the static pressure drop must be referenced to the value recorded during previous testing. In the absence of previous testing values, the parameter must be referenced to the value or normal range representing normal operation, recorded as soon as possible.

SCHEDULE D

MATERIAL ANALYSIS CONTAMINANTS

1. Antimony
2. Arsenic
3. Barium
4. Beryllium
5. Cadmium
6. Chromium
7. Cobalt
8. Iron
9. Lead
10. Manganese
11. Mercury
12. Nickel
13. Selenium
14. Silver
15. Tin
16. Vanadium
17. Total Halogens

SCHEDULE E

ALTERNATIVE LOW-CARBON FUELS OPERATIONAL

REQUIREMENTS

Parameter	Limits	Measurement
Total Quantity of Alternative Low-Carbon Fuels combusted in the Cement Kiln.	400 tonnes per day	Measured continuously and summed daily.
Temperature in the Cement Kiln	Greater than 1000 Deg. C at a gas residence time of more than 6 seconds in the kiln. Greater than 850 Deg. C at a gas residence time of more than 3 seconds in the calciner.	As demonstrated by the CPM System measuring the temperature of the gases at the K5 cyclone upstream of the kiln where the gas temperature reaches a minimum of 800 Deg C. As demonstrated by the CPM System Calculated as a rolling 1-hour arithmetic average measured by the CPM System.
Residual oxygen	>1% residual oxygen at the backend (raw material feed end) of the kiln. >3% residual oxygen at the calciner down comer duct (raw material feed end of the calciner)	Measured by the CPM System and calculated by volume on a dry basis in the undiluted gases leaving the kiln and calciner. Calculated as a rolling 1-hour arithmetic average measured by the CPM System.
Pressure Control	Kiln, Calciner, Preheater tower and Raw Mill must be operated under negative pressure at all times.	Measured at the top of the preheater towers and in Raw Mill by continuous monitor.
Start-Up, Shut-down and Upset Operating Conditions	No Alternative Low-Carbon Fuels shall be used.	-

SCHEDULE F

PROCEDURE FOR SOURCE TESTING

1. The Company shall submit, not later than three (3) months prior to the Source Testing required under Conditions 11.1 and 11.5 of this Approval, a Pre-Test Plan for

the Source Testing required under this Approval to the Manager and the Director. In addition to the required information, the Pre-Test plan shall also include applicable information on the following. The Company shall finalize the Pre-Test Plan in consultation with the Manager and the Director:

2. the blend (s) of Alternative Low-Carbon Fuels and quantity proposed to be used for the Source Testing along with details regarding the process for selection of the Alternative Low-Carbon Fuels blend (s) and quantity for Source Testing.

3. operational details of the Electrolysis System.

4. The Company shall not commence the Source Testing until the Manager has accepted the Pre-Test Plan.

5. For subsequent Source Testing under Condition 11.3 of this Approval:

6. The Company shall submit either a written notification of intent to use a previously approved Pre-Test Plan (with version reference if there were more than one (1) previously approved Pre-Test Plan), or a new Pre-Test Plan, to the Manager and Director not later than three (3) months of the planned date of the Source Testing for approval. The written notification or the new Pre-Test Plan shall also include information on the blend (s) of Alternative Low-Carbon Fuel and the quantity proposed to be used for the Source Testing, along with details regarding the process for selection of the blend (s) for Source Testing for its finalization in consultation with the Manager and the Director.

7. If the Company submitted a written notification of intent to use a previously approved Pre-Test Plan, the Manager may either accept the use of a previously approved Pre-Test Plan, or request the submission of a new Pre-Test Plan for approval. The Company shall submit the requested new Pre-Test Plan within two (2) months after the Manager requested the submission.

8. The Company shall complete the subsequent Source Testing no later than three (3) months after the Manager has either agreed with the written notification or approved the new Pre-Test Plan.

9. The Company shall notify the District Manager, the Manager and the Director in writing of the location, date and time of any impending Source Testing required by this Approval, at least fifteen (15) days prior to the Source Testing.

10. The Company shall submit a report (hardcopy and electronic format) on the Source Testing to the Manager and the District Manager not later than four (4) months after completing the Source Testing, or not later than a time frame agreed in writing with the

Manager. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:

11. an executive summary;

12. results of Source Testing, including the emission rate, emission concentration and relevant emission factor of the Test Contaminants;

13. records of operating conditions at the time of Source Testing and other information including but not limited to:

a. an executive summary
b. a summary of records specified in condition 8.9 of this Approval and records of operating conditions at the time of Source Testing, including but not limited to:
    i. Clinker production rate in tonnes/hour
    ii. Conventional Fuels fired in the Cement Kiln in tonnes/hour
    iii. Each category of the Alternative Low-Carbon Fuels described in condition 7.1 of the Approval fired in the Cement Kiln in tonnes/day;
    iv. Fuel Adjunct Material and Industrial By-Product Material input into the Cement Kiln in tonnes/day;
    v. Operating condition of Electrolysis System units including hours of operation, amount of hydrogen and oxygen produced by each of the units and introduced in the Cement Kiln in normal cubic meters per hour.
c. any other records that may affect the Source Testing results.

14. A summary of all records of the CEM System and CPM System for the parameters specified in Condition 10 of this Approval at the time of Source Testing;

15. A summary table that compares the Source Testing results to the emission estimates described in the Company's application, the ESDM Report and the Performance Limits;

16. The Director may not accept the results of the Source Testing if:

17. the Source Testing Code or the requirements of the Manager were not followed;

18. the Company did not notify the District Manager, the Manager and the Director of the Source Testing; or

19. the Company failed to provide a complete report on the Source Testing.

20. If the Director does not accept the results of the Source Testing, the Director may require re-testing. If re-testing is required, the Pre-Test Plan strategies need to be revised and submitted to the Manager for approval. The actions taken to minimize the possibility of the Source Testing results not being accepted by the Director must be noted in the revision.

21. If the Source Testing results are higher than the emission estimates in the Company's ESDM Report, the Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 with the results from the Source Testing report and make these records available for review by staff of the Ministry upon request. The updated Emission Summary Table from the updated ESDM Report shall be submitted with the report on the Source Testing.

22. The Company shall ensure that the above mentioned Source Testing report is made available and easily accessible for review by the public at the Facility immediately after the document is submitted to the Ministry.

SCHEDULE G

TEST CONTAMINANTS AND SOURCES

TEST SOURCES: Cement Kiln Stack

TEST CONTAMINANTS

- Total Suspended Particulate Matter
- Hydrogen Chloride
- Ammonia
- Carbon Monoxide

List of Metals:

- Arsenic
- Barium
- Beryllium
- Cadmium
- Chromium
- Cobalt
- Copper
- Lead

- Mercury
- Manganese
- Molybdenum
- Nickel
- Selenium
- Silver
- Thallium
- Vanadium
- Zinc

SCHEDULE G

Volatile Organic Matter	List of Polycyclic Organic Matter
• Acetaldehyde • Acetone • Acrolein • Benzene • Bromodichloromethane • Bromoform • Bromomethane • Butadiene, 1,3 - • Butanone, 2 - • Carbon Tetrachloride • Chloroform • Cumene • Dibromochloromethane • Dichlorodifluoromethane • Dichloroethane, 1,2 - • Dichloroethene, Trans - 1,2 • Dichloroethene, 1,1 - • Dichloropropane, 1,2 - • Ethylbenzene • Ethylene Dibromide • Mesitylene • Methanol	• Acenaphthylene • Acenaphthene • Anthracene • Benzo(a)anthracene • Benzo(b)fluoranthene • Benzo(k)fluoranthene • Benzo(a)fluorene • Benzo(b)fluorene • Benzo(ghi)perylene • Benzo(a)pyrene • Benzo(e)pyrene • 2-Chloronaphthalene • Chrysene • Coronene • Dibenzo(a,c)anthracene • 9,10-Dimethylanthracene • 7,12-Dimethylbenzo(a)anthracene • Fluoranthene • Fluorene • Indeno(1,2,3-cd)pyrene • 2-Methylanthracene • 3-Methylcholanthrene

• Methylene Chloride • Phenol • Propionaldehyde • Styrene • Tetrachloroethene • Toluene • Trichloroethane, 1,1,1 - • Trichloroethene • Trichloroethylene, 1,1,2 - • Trichlorotrifluoroethane • Trichlorofluoromethane • Xylenes, M-, P- and O • Vinyl Chloride	• 1-Methylnaphthalene • 2-Methylnaphthalene • 1-Methylphenanthrene • 9-Methylphenanthrene • Naphthalene • Perylene • Phenanthrene • Picene • Pyrene • Tetralin • Triphenylene

SCHEDULE G

Dioxins, Furans and Dioxin-like PCBs (Polychlorinated Biphenyls)

Toxicity equivalency factors (TEFs) are applied to 29 isomers of dioxins, furans and dioxin-like PCBs to convert them into 2,3,7,8-CDD (tetrachlorodibenzo-p-dioxin) toxicity equivalents (TEQ). The conversion involves multiplying the concentration of each isomer by the appropriate TEF to yield the TEQ for this isomer. Summing the individual TEQ values for each of the isomers provides the total toxicity equivalent level for the sample mixture.

A table listing the isomers and their TEFs can be found in the Ministry publication titled “Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants”, as amended from time to time.

No.	Dioxins, Furans, and Dioxin-like PCBs	CASRN	WHO $_{2005}$ Toxic Equivalency Factors [TEFs]
1	2,3,7,8-Tetrachlorodibenzo-p-dioxin [2,3,7,8-TCDD]	1746-01-6	1
2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin [1,2,3,7,8-PeCDD]	40321-76-4	1
3	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin [1,2,3,4,7,8-HxCDD]	39227-28-6	0.1
4	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin [1,2,3,6,7,8-HxCDD]	57653-85-7	0.1

5	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin [1,2,3,7,8,9-HxCDD]	19408-74-3	0.1
6	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin [1,2,3,4,6,7,8-HpCDD]	35822-46-9	0.01
7	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin [1,2,3,4,6,7,8,9-OCDD]	3268-87-9	0.0003
8	2,3,7,8-Tetrachlorodibenzofuran [2,3,7,8-TCDF]	51207-31-9	0.1
9	1,2,3,7,8-Pentachlorodibenzofuran [1,2,3,7,8-PeCDF]	57117-41-6	0.03
10	2,3,4,7,8-Pentachlorodibenzofuran [2,3,4,7,8-PeCDF]	57117-31-4	0.3
11	1,2,3,4,7,8-Hexachlorodibenzofuran [1,2,3,4,7,8-HxCDF]	70648-26-9	0.1
12	1,2,3,6,7,8-Hexachlorodibenzofuran [1,2,3,6,7,8-HxCDF]	57117-44-9	0.1
13	1,2,3,7,8,9-Hexachlorodibenzofuran [1,2,3,7,8,9-HxCDF]	72918-21-9	0.1

SCHEDULE G

No.	Dioxins, Furans, and Dioxin-like PCBs	CASRN	WHO $_{2005}$ Toxic Equivalency Factors [TEFs]
14	2,3,4,6,7,8-Hexachlorodibenzofuran [2,3,4,6,7,8-HxCDF]	60851-34-5	0.1
15	1,2,3,4,6,7,8-Heptachlorodibenzofuran [1,2,3,4,6,7,8-HpCDF]	67562-39-4	0.01
16	1,2,3,4,7,8,9-Heptachlorodibenzofuran [1,2,3,4,7,8,9-HpCDF]	55673-89-7	0.01
17	1,2,3,4,6,7,8,9-Octachlorodibenzofuran [1,2,3,4,6,7,8,9-OCDF]	39001-02-0	0.0003
18	3,3',4,4'-Tetrachlorobiphenyl [3,3',4,4'-tetraCB (PCB 77)]	32598-13-3	0.0001
19	3,4,4',5- Tetrachlorobiphenyl [3,4,4',5-tetraCB (PCB 81)]	70362-50-4	0.0003
20	3,3',4,4',5- Pentachlorobiphenyl (PCB 126) [3,3',4,4',5-pentaCB (PCB 126)]	57465-28-8	0.1
21	3,3',4,4',5,5'- Hexachlorobiphenyl [3,3',4,4',5,5'-hexaCB (PCB 169)]	32774-16-6	0.03
22	2,3,3',4,4'- Pentachlorobiphenyl [2,3,3',4,4'-pentaCB (PCB 105)]	32598-14-4	0.00003
23	2,3,4,4',5- Pentachlorobiphenyl [2,3,4,4',5-pentaCB (PCB 114)]	74472-37-0	0.00003
24	2,3',4,4',5- Pentachlorobiphenyl [2,3',4,4',5-pentaCB (PCB 118)]	31508-00-6	0.00003
25	2',3,4,4',5- Pentachlorobiphenyl [2',3,4,4',5-pentaCB (PCB 123)]	65510-44-3	0.00003
26	2,3,3',4,4',5- Hexachlorobiphenyl [2,3,3',4,4',5-hexaCB (PCB 156)]	38380-08-4	0.00003
27	2,3,3',4,4',5'- Hexachlorobiphenyl [2,3,3',4,4',5'-hexaCB (PCB 157)]	69782-90-7	0.00003
28	2,3',4,4',5,5'- Hexachlorobiphenyl [2,3',4,4',5,5'-hexaCB (PCB 167)]	52663-72-6	0.00003

29	2,3,3',4,4',5,5'- Heptachlorobiphenyl [2,3,3',4,4',5,5'-heptaCB (PCB 189)]	39635-31-9	0.00003

SCHEDULE G

NOTE:

The TEF scheme is intended to be used with isomer specific analytical results. In cases where results are reported by congener group only, staff at Ministry's Technical Assessment and Standards Development Branch shall be contacted for appropriate procedures to convert non-isomer specific data to TEQs.

The reasons for the imposition of these terms and conditions are as follows:

1. **GENERAL**
   Condition No. 1 is included to require the Approval holder to build, operate and maintain the Facility in accordance with the Supporting Documentation in Schedule A considered by the Director in issuing this Approval.
2. **LIMITED OPERATIONAL FLEXIBILITY, REQUIREMENT TO REQUEST AN ACCEPTABLE POINT OF IMPINGEMENT CONCENTRATION AND PERFORMANCE LIMITS**
   Conditions No. 2, 3 and 4 are included to limit and define the Modifications permitted by this Approval, and to set out the circumstances in which the Company shall request approval of an Acceptable Point of Impingement Concentration prior to making Modifications. The holder of the Approval is approved for operational flexibility for the Facility that is consistent with the description of the operations included with the application up to the Facility Production Limit. In return for the operational flexibility, the Approval places performance based limits that cannot be exceeded under the terms of this Approval. Approval holders will still have to obtain other relevant approvals required to operate the Facility, including requirements under other environmental legislation such as the Environmental Assessment Act.
3. **DOCUMENTATION REQUIREMENTS**
   Condition No. 5 is included to require the Company to maintain ongoing documentation that demonstrates compliance with the performance limits as specified in Condition 4 of this Approval and allows the Ministry to monitor on-going compliance with these performance limits. The Company is required to have an up to date ESDM Report and Acoustic Assessment Report that describe the Facility at all times and make the Emission Summary Table and Acoustic Assessment Summary Table from these reports available to the public on an ongoing basis in order to maintain public communication with regard to the emissions from the Facility.

4. **REPORTING REQUIREMENTS**
   Condition No. 6 is included to require the Company to provide a yearly Written Summary Form to the Ministry, to assist the Ministry with the review of the site's compliance with the EPA, the regulations and this Approval.
5. **APPROVED ALTERNATIVE LOW-CARBON FUELS**
   Condition No. 7 is included to define Alternative Low-Carbon Fuels in this Approval.
6. **OPERATION AND MAINTENANCE**
   Condition No. 8 is included to require the Company to properly operate and maintain the Processes with Significant Environmental Aspects to minimize the impact to the environment from these processes.
7. **MONITORING AND TESTING**
   Condition Nos. 9, 10, 11 and 12 are included to require the Company to gather and retain accurate information so that compliance with the EPA, O. Reg. 419/05, O. Reg. 79/15 and this Approval may be verified.
8. **FUGITIVE EMISSIONS CONTROL**
   Condition No. 13 is included to emphasize that the Equipment and Facility must be maintained and operated in accordance with a procedure that will result in compliance with the EPA, Regulation 419/05 and this Approval and to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the EPA, Regulation 419/05 and this Approval may be verified.
9. **COMPLAINTS RECORDING AND REPORTING PROCEDURE**
   Condition No. 14 is included to require the Company to respond to any environmental complaints regarding the operation of the Equipment, according to a procedure that includes methods for preventing recurrence of similar incidents and a requirement to prepare and retain a written report.
10. **RECORD KEEPING REQUIREMENTS**
    Condition No. 15 is included to require the Company to retain all documentation related to this Approval and provide access to employees in or agents of the Ministry, upon request, so that the Ministry can determine if a more detailed review of compliance with the Performance Limits as specified in Condition 4 of this Approval is necessary.
11. **COMPLIANCE REPORTING**
    Condition No. 16 is included to require the Company to provide an Annual Report to the Ministry and the public, to assist the Ministry with the review of the site's compliance with the EPA, the regulations and this Approval and to ensure that the public has access to information on the environmental impacts of the Facility.
12. **REVOCATION OF PREVIOUS APPROVALS**
    Condition No. 17 is included to identify that this Approval replaces all Section 9

Certificate(s) of Approval and Part II.1 Approvals in regards to the activities mentioned in subsection 9(1) of the EPA and dated prior to the date of this Approval.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 6729-BYRJEP issued on March 31, 2021

In accordance with Section 139 of the *Environmental Protection Act,* you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the *Environmental Bill of Rights,* 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") shall state:

a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

Pursuant to subsection 139(3) of the *Environmental Protection Act,* a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

and

The Minister of the Environment, Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

and

The Director appointed for the purposes of Part II.1 of the *Environmental Protection Act*
Ministry of the Environment, Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or** www.olt.gov.on.ca

This instrument is subject to Section 38 of the *Environmental Bill of Rights,* 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

The above noted activity is approved under s.20.3 of Part II.1 of the *Environmental Protection Act.*

DATED AT TORONTO this 19th day of September, 2022

Nancy E Orpana, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

SA/
c: District Manager, MECP York-Durham
Xiaoxi (Winnie) Song, BCX Environmental Consulting

Attachment 3

MECP Pre-Application Consultation

Ontario

Ministry of the Environment, Conservation and Parks

Pre-submission Meeting Request Form

General Information and Instructions

General

This form is for requesting a pre-submission meeting with the Ministry of the Environment, Conservation and Parks to discuss your environmental compliance approvals (ECA) or renewable energy approval (REA) application.

The ministry implemented a one-year service standard for the review of complete and high quality ECA and REA submissions. A pre-submission meeting with the ministry can be helpful to clarify project requirements and avoid delays in the review of applications. Typically, a pre-submission meeting is recommended for:

1. Matters that may potentially delay the ministry's review of the application (e.g. applications with potential significant impacts to the environment);
2. Additional site-specific guidance beyond what is publicly available (e.g. applications that include new technology for which existing guidance is not adequate); and/or
3. Items that require a broader discussion with the ministry to determine how to proceed with the application (e.g. applications to discuss matters of non-compliance).

To help facilitate a pre-submission meeting, an applicant is required to provide sufficient information about their project prior to the meeting. A pre-submission meeting may be declined if the purpose for the meeting and/or project information is insufficient. Completion of this form will help ensure the appropriate information is submitted in your request.

A pre-submission meeting to discuss an ECA or REA proposal may be facilitated at the local district office or the Client Services and Permissions Branch. The type of project you are proposing in your ECA application and the matters to be discussed (Step 1 of the form) will determine which ministry office to contact.

Please allow at least 3 weeks from the date the completed form has been received for the ministry to schedule a meeting. Questions regarding the completion and submission of the form should be directed to a Customer Service representative at the Client Services and Permissions Branch by phone at 416-314-8001 or 1-800-461-6290 or by e-mail at enviropermissions@ontario.ca.

Step 1 – Determine if a Pre-submission Meeting is Recommended

The Pre-Application Considerations Checklist in Appendix 1 of the Guide to Applying for an ECA, will help you to decide if you should seek a pre-submission meeting with the ministry. Please identify the matters that you would like to discuss during the meeting (check all that apply):

Section 1 – contact local district office

- ☐ Potential impacts to surface water and/or groundwater (e.g. project requires preparation of hydrogeological report, surface water impact assessment reports, development of effluent criteria)
- ☐ Potential impacts to environmentally sensitive area
- ☐ Waste management activities
- ☐ Non-compliance
- ☐ Environmental emergency
- ☐ Project is a streamlined environmental assessment undertaking (e.g. class environmental assessment)

Section 2* – contact the Client Services and Permissions Branch

- ☑ Issues of significant public interest or concerns
- ☐ Concerns from Indigenous communities, or the proposed project/activity is occurring on Crown land
- ☐ System-wide or multi-site requirements
- ☐ Innovative or new technology
- ☐ Cumulative Effects Assessment in Air Approvals policy
- ☐ Project is an individual environmental assessment undertaking
- ☐ Renewable energy approval
- ☐ Other _____

*If you have identified matters in *both* sections 1 and 2 of the above, please send the pre-submission request form to the Client Services and Permissions Branch.

Step 2 – Applicant Information

Applicant Name (legal name of individual or organization as evidenced by legal documents)
St Marys Cement Inc. (Canada)

Date
08/14/2026

Business Name ☑ same as legal name above

Unit Number	Street Number	Street Name	PO Box
	55	Industrial St	

City/Town	Province	Country	Postal Code
Toronto	ON		M4G 3W9

Concession	Rural Route

Telephone Number	Email Address (if available)
[redacted]	

Applicant Contact Name

Last Name	First Name	Title
Plaza	Ruben	Director Environment Cement VCNA

Telephone Number	Mobile Number	Email Address
905 243 5841		ruben.plaza@vcimentos.com

Step 3 – Requester Contact Information

☐ same as Applicant Contact Name above ☑ Technical Contact

Last Name	First Name	Title
Liubansky	Kate	Senior Project Manager & Senior Air Quality Specialist

Company Name	Telephone/ Mobile Number	Email Address
WSP Canada Inc.	[redacted]	kate.liubansky@wsp.com

Step 4 – Project Site Address

☐ Mobile or ☐ Multi-site or ☑ System-wide

Unit Number	Street Number	Street Name
	410	Bowmanville Avenue

City/Town	Province	Country	Postal Code
Bowmanville	ON		L1C 7B5

Concession and/or Rural Route	Ministry District Office (use the use the online district locator to find your local district office.)
	York-Durham MECP District Office

Step 5 – Project Information

Project Description - please include anticipated monitoring program and contingency measures, site plans and process flow diagrams as attachments, if available.

VCNA is preparing an Alternative Low-Carbon Fuel Application for a Non-Demonstrative Project under O. Reg. 79/15 for an amendment to Environmental Compliance Approval (ECA) number 6729-BYRJEP, issued on March 31, 2021 to increase the use of ALCFs at the St. Marys Cement Plant from 400 tonnes/day to 800 tonnes/day. In addition, this ECA Application will seek permission for the expansion of the calciner and increasing the footprint of the ALCF building.

Anticipated emissions and/or discharge

- ☑ air
- ☐ vibration
- ☑ noise
- ☐ wastewater
- ☐ odour
- ☐ waste

Regional Technical Support Requirements

- ☐ hydrogeological report
- ☐ surface water assessment report
- ☐ effluent discharge criteria
- ☐ unknown (guidance required to determine if there are negative impacts to groundwater and/or surface water)

Current environmental compliance approval number, if applicable

6729-BYRJEP

Anticipated date of construction/operation	Anticipated date of ECA application submission

Indigenous Consultation Requirements

- ○ yes
- ◉ no, please provide rationale

Not required for amendment applications under O. Reg. 79/15 but VCNA will engage with Indigenous Communities

Environmental Assessment Act requirements

- ☑ Proposal is not an environmental assessment undertaking
- ☐ Unknown, additional guidance sought to determine if an environmental assessment is required
- ☐ Proposal is an environmental assessment undertaking
  - The proposed undertaking has completed the environmental assessment process? ○ yes ○ no
  - Were there any Part II Order requests or elevation requests? ○ yes ○ no ○ n/a
  - Are there any commitments in the environmental assessment that need to be addressed in the ECA? ○ yes *(please include description of commitments and proposed resolution)* ○ no
  - If the project completed the Class EA process or the Environmental Screening Process (pursuant to O. Reg. 101/07 or O. Reg. 116/01), did ministry staff review and provide comments during the environmental assessment? ○ yes ○ no

Step 6 – Discussion Items

Clearly identify questions or matters to be discussed during the pre-submission meeting. Please include any attachments to help facilitate the discussions (e.g. site plans, agenda).

VCNA and WSP are interested in reviewing the plan for the ECA Application process, including the voluntary public engagement component.

Step 7 – List of Attendees

List pre-submission meeting attendees (name, title, company and email). If applicable, please include the names of ministry staff familiar with your project (e.g. Environmental Officer at the local district office or technical review engineer).

Ruben Plaza - Director Environment Cement, VCNA, ruben.plaza@vcimentos.com
Kate Liubansky - Project Manager & Senior Air Quality Specialist, WSP Canada Inc., kate.liubansky@wsp.com
Jamie McEvoy - Senior Technical Manager, WSP Canada Inc., jamie.mcevoy@wsp.com
Ellen Marejka - Air Quality and GHG Scientist, WSP Canada Inc., Ellen.Marejka@wsp.com
Nadia Dabagh - Environmental Planner, WSP Canada Inc., nadia.dabagh@wsp.com

Identify ministry staff who may provide guidance on questions or matters that you have identified in Step 6:

☑ Review Engineer ☐ Surface Water Specialist ☐ Hydrogeologist ☐ Indigenous Consultation Advisor
☐ Other Shareen Han, Sushan Agarwal, David Keene

Step 8 – Submitting Your Request

Based on your response from Step 1 of this form, please submit the completed form and any **supporting information** you would like to provide to the District Office identified in Step 4 of the form or the Client Services and Permissions Branch at enviropresubmission@ontario.ca

Meeting Minutes

Title / Subject:	Pre-Submission Consultation MECP Meeting - ALCF ECA Application
Date / Time:	10-09-2026 11:00
Venue:	MS Teams
Attendees:	Sushant Agarwal, Zainab Coovadia, Shareen Han, David Keene, Craig Maizin, Bijal Shah, Patricia Wang (Ministry of the Environment, Conservation and Parks [MECP]) Ruben Plaza (St. Marys Cement Inc. (Canada) [St. Marys Cement]) Kate Liubansky, Ellen Marejka, Jamie McEvoy (WSP) Xiaoxi Song (Ramboll)
Apologies:	Nancy Orpana (MECP)
Distribution:	MECP, VCNA, WSP, Ramboll

Agenda:	
1	Introductions
2	ALCF Amendment ECA Application Process
3	Project Description
4	Air Emissions
5	Other Studies
6	Overview of Public and Indigenous Community Engagement

1. Introductions

- MECP welcomed everyone to the meeting.
- MECP and project team members introduced themselves.
- WSP presented the purpose of the meeting as the first pre-submission meeting with the MECP to discuss the ALCF ECA Amendment Application (ECA Application) process for the St. Marys Cement Bowmanville plant located at 410 Bowmanville Ave, Bowmanville, Ontario. WSP shared the agenda for the meeting.

2. ALCF ECA Application Process

- WSP went over the timeline of the ECA Application: the Notice of Intention to Apply is targeted for mid-October and will include the ECA Application, including technical reports. Following a 30-day comment period, the Consultation Report will be prepared and a Notice of Completion of the Consultation Report will be distributed. The ECA Application is planned to be submitted by the end of December 2026. The overall project timeline was presented, with the MECP review of the ECA Application by December 2027 based on the 1-year service standard, onsite construction and installation activities from 2028 through 2029, and commissioning in 2029.
- St. Marys Cement will voluntarily hold an open house for members of public in November 2026.

3. Project Description and Application Scope

- WSP presented the project description and site changes in the context of the ECA Application and the existing ECA with Limited Operational Flexibility (LOF):
  - The ECA Application will seek the approval of increasing the use of ALCFs to 800 tonnes per day, updating the ALCF baskets and materials (to be discussed later), expanding the ALCF building, modifying the conveyance system, and modifying the calciner;
  - Other site changes would be addressed as part of the facility's Limited Operational Flexibility; these other site changes include the Main Kiln stack installation and Finish Mill addition.

> **Post-meeting clarification:** The intent of this discussion was to note that the ECA Application would be submitted for the approval of the items listed above; however, the site changes listed would be assessed through the ESDM Report as future modifications as the facility's current ECA has LOF which allows for modifications as long as they are assessed prior to implementation and are below the O. Reg. 419/05 limits. The modifications of Main Stack installation and Finish Mill addition were previously assessed and the MECP was aware of these proposed modifications.

- A discussion was held about the information presented regarding site changes.

Post-meeting note: The following discussion was based on the original understanding and prior to the above clarification. A post-meeting note was added at the end of this section to propose the updated approval application approach for confirmation by the MECP.

- MECP asked if there will be any changes to the kiln to accommodate the increase in ALCFs. St. Marys Cement indicated the calciner will be modified to increase residence time from approximately 3 seconds to 6 seconds and accommodate increased ALCF use.
- MECP asked if ALCFs will be used in both burners. St. Marys Cement indicated that ALCFs will be used in both the main burner and calciner burner; but that clinker production will remain unchanged.
- MECP asked whether the LOF-related modifications should be included in the ECA Application to present the full project impact. St. Marys Cement noted that the Finish Mill is already under construction and proposed addressing ALCF building and conveyance changes through the LOF process. Ramboll clarified that these proposed modifications under the ECA LOF have already been assessed to ensure compliance.
- MECP indicated that including the modifications in the ECA Application may be more transparent to the public and suggested that the Finish Mill and Main Stack modifications be considered for the public notification. St. Marys Cement agreed.
- WSP presented the truck volume change associated with the proposed increase of ALCF use. It is estimated that there will be an increase of ALCF truck deliveries to the site from 3 trucks per hour currently to 6 trucks per hour.
- WSP introduced two changes to the ALCF material baskets: (i) the ALCF material baskets will include the explicit inclusion of nylon (including but not limited to tire fluff) under the non-recyclable plastics ALCF material basket, and (ii) addition of a new ALCF material basket comprised of non-tire derived rubber (including but not limited to conveyor belts).

  Post-meeting clarification: As brought up through discussion later in the meeting, nylon is currently used at the facility, but St. Marys Cement will request the wording in the ECA to be revised for transparency.

- WSP indicated the current ALCFs used at the facility achieve approximately 50% substitution and the proposed ALCFs would achieve at least 50% substitution, including the proposed conveyor belt material. MECP asked about the ALCF percent substitution for the proposed 800 tonnes/day and why it is 50%. WSP clarified that the proposed ALCF substitution rate is anticipated to be greater than 50%, likely closer to 70%-80% but it will vary depending on the ALCF blend and the source of the ALCF. This assumes the target typical fuel mix comprised of approximately 60%

biomass and 40% non-recyclable plastics, with other ALCFs contributing in smaller amounts to the fuel mix on a less frequent basis.

- MECP inquired about the current substitution rate of ALCFs at the facility. St. Marys Cement indicated that current ALCF use ranges up to 300 tonnes/day but averages approximately 100 tonnes/day because of downtime. The proposed maximum of 800 tonnes/day is based on increasing the current permitted maximum of 400 tonnes/day.

- MECP asked where the ALCFs will be sourced from. St. Marys Cement indicated that ALCF materials will preferably be sourced locally, subject to supplier availability and viability.

Post-meeting proposed updated approach:

As discussed, the main goal of the ECA Application is to seek approval to use a higher daily amount of ALCFs and revise the ALCF material baskets. The ESDM Report that will support this ECA Application would demonstrate that the increase of ALCF usage and addition of an ALCF material basket would not impact compliance with O. Reg. 419/05 limits. The ESDM Report supporting the ECA Application will include a tabular comparison of emissions and predicted concentrations of contaminants based on ALCF usage at 400 tonnes/day and 800 tonnes/day.

The following approach is proposed for the emissions and dispersion modelling assessment:

Base Case Scenario	**Future Scenario**
400 tonnes/day ALCF usage	800 tonnes/day ALCF usage
Main Stack	— (already included)
Finish Mill	— (already included)
	Calciner Modification
	ALCF Building Expansion*
	Conveyance Equipment*

*Note: Planning of ALCF Building Expansion and Conveyance Equipment is not complete; therefore, required updates will be completed in the future as part of an annual ESDM Report update.

- MECP noted that they will consult the waste unit regarding the revised material mix and may request information on material sources, including nylon and conveyor belt components, to confirm acceptability.

4. ESDM Report

- Ramboll presented the emissions approach for the ESDM Report and indicated that particulate matter (PM), sulfur dioxide (SO_2) and nitrogen oxides (NOx) emissions are not expected to change.

The modified Main Kiln stack will have a fibreglass liner and smaller diameter resulting in an increased flow rate.

- MECP inquired how emissions will be estimated. Ramboll responded indicated emissions will be estimated using source testing information, mass balance input, chemical analyses and pro-rating to 800 tonnes/day. Trace metals will be assessed for all proposed ALCF materials.
- St. Marys Cement clarified the changes to the ALCF material baskets, stating that nylon is already used at the site and will be described more clearly in the ECA Application and that non-tire derived rubber (e.g., conveyor belts) is expected to be a minor component of a typical fuel mix and of similar composition to other plastics. MECP recommended supporting the assessment with third-party or plant information on thermal treatment of rubber related to potential organic emissions.
- The MECP inquired about potential impact on SO_2 emissions. St. Marys Cement responded that the addition of non-tire derived rubber is unlikely to impact SO_2 emissions as the material does not contain sulfur, but agreed to look into the matter further.
- MECP suggested that St. Marys Cement review comments and questions received from the public during the previous ECA Application. St. Marys Cement agreed to address this recommendation.
- MECP inquired about the modelling approach and meteorological data being used. Ramboll indicated that modelling will use five years of site-specific meteorological data and a combination of AERMOD and CALPUFF, building off the approved model prepared for the ESDM Report issued for the CBM Ready Mix.
- The ECA Application will document the increased kiln airflow, potential fan changes and revised stack flow rate associated with operation at 800 tonnes/day.

Post-meeting clarification: As noted above, the modification of the Main Stack will be included as part of the Base Case Scenario (including the 400 tonnes/day) and, therefore, the Future Scenario will already include the Main Stack modification.

5. Other Studies

- WSP presented the other studies that will be prepared as part of the ECA Application, including the CO_2 Emission Intensity study required per O. Reg. 79/15, the noise study to assess noise impacts from increased truck traffic and calciner modifications.
- WSP outlined the local air quality study as a high-level study using available monitoring information for criteria air contaminants and metals. The study is intended to describe local trends, the site contribution and whether the proposed increase from 400 to 800 tonnes/day of ALCFs is expected to affect local air quality.
- MECP noted that the public may request a cumulative effects modelling assessment and asked whether it should be completed at this stage to avoid delays later on.

- WSP raised their concern that the cumulative effects assessment conducted for the previous ALCF ECA Application included the facility's conservative (worst-case) emissions assessment combined with conservative dispersion modelling and then combined with worst-case monitoring data the public typically has difficulty understanding the resulting high predicted concentrations of contaminants that would unlikely occur in the local area. WSP explained that presenting actual emissions data from the facility, other industrial sources near the facility, and transportation impacts are likely to be more meaningful for the public to understand the local air quality. This information presented as local trends would also help understand changes over time in the area.
- MECP emphasized that the public-facing rationale should be transparent and should explain why dispersion modelling is not proposed. WSP acknowledged this concern. WSP offered a second pre-submission consultation meeting to discuss the local air quality study further if needed.
- MECP asked about compliance with other regulatory requirements such as ALCF storage. WSP responded that the ALCF Handling and Testing Manual will address requirements related to storage, handling, and testing requirements.
- MECP asked if the in-stack limits will be addressed. Ramboll responded that the ESDM Report will include the applicable in-stack limits.

6. Public and Indigenous Community Engagement

- WSP indicated that St. Marys Cement will engage with the public and Indigenous communities as part of the consultation process. The consultation process will include distribution of a Notice to Apply, a voluntary public open house, consultation with Indigenous communities, and preparation of a Consultation Report. WSP indicated that they will provide MECP with a formal letter regarding consultation the Indigenous communities following the meeting.

7. Other Discussion

- MECP asked about the status of the UC3 technology. St. Marys Cement is planning on undertaking additional trials.
- MECP asked how increased ALCF use could affect the existing SO_2 and NOx abatement. St. Marys Cement noted that ALCFs generally reduce NOx and sulfur inputs and that control systems are in place; the technical report will compare ALCFs with conventional fuels and explain any potential emission changes using available source testing information.
- MECP asked about temperature changes when using ALCFs. St. Marys Cement explained that kiln temperature does not change; however, the lower heat value of biomass relative to petcoke or plastics requires balancing the fuel mix. St. Marys Cement noted that there are events when kiln temperatures fluctuate within a range during normal operating conditions. When biomass is burned, there is a reduction in available oxygen. St Marys Cement indicated that the UC3 hydrogen system is intended to support higher-temperature combustion when blended with ALCFs, but the benefits of hydrogen use have not yet been confirmed through trials.

- MECP asked about airflow requirements associated with the ALCF increase to 800 tonnes/day. St. Marys Cement noted that the use of 800 tonnes/day of ALCFs would require increased airflow and a kiln fan change. The corresponding approximately 5% increase in flow rate and the calciner retention-time modification will be included in the ECA Application.

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October 2, 2026

Shareen Han
Ministry of the Environment, Conservation and Parks
135 St Clair Avenue West
Toronto, Ontario
M4V 1P5
Canada

Subject: St. Marys Cement Inc. (Canada) – Alternative Low Carbon Fuel Use at the St. Marys Cement Bowmanville Plant – Indigenous Community Consultation and Engagement

Dear Ms. Shareen Han:

St. Marys Cement Inc. (Canada), a company of Votorantim Cimentos North America, (St. Marys Cement), is undertaking efforts to increase their use of Alternative Low Carbon Fuels (ALCFs) as a fuel at the St. Marys Bowmanville plant located at 410 Bowmanville Avenue in Bowmanville, Ontario (the Facility) as can be seen in Figure 1 – Site Location on page 3. The use of ALCFs supports the reduction of greenhouse gas emissions by replacing fossil fuels such as petroleum coke and coal, promotes a circular economy through the reuse of non-recyclable materials, and facilitates landfill diversion efforts.

The Facility currently operates under an existing Environmental Compliance Approval (ECA) Number 0550-CEAHMA issued on September 19, 2022. As part of ongoing efforts to reduce carbon emissions and advance sustainable cement manufacturing practices, St. Marys Cement is proposing to amend the existing ECA, in accordance with Ontario Regulation (O. Reg.) 79/15, to increase ALCF usage at the Facility from 400 tonnes per day to 800 tonnes per day and accommodate planned operational improvements associated with the cement manufacturing process.

St. Marys Cement considers the identification and early engagement of Indigenous communities a critical component of project planning and delivery. St. Marys Cement is committed to participate in meaningful discussion and information sharing with Indigenous communities to continue to build relationships, to improve the project through consideration of their input, and to satisfy the requirements for Indigenous engagement in accordance with the amendment application process outlined in O. Reg. 79/15.

As noted during the discussion with the Ministry of the Environment, Conservation and Parks (the Ministry) on September 10, 2026, St. Marys Cement has identified a list of Indigenous communities that may have an interest in the ECA Application. The preliminary list below reflects on our current understanding of the location of

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Indigenous traditional territories in relation to the Facility, as well as Indigenous communities with proximity to the Facility.

St. Marys Cement is seeking input from the Ministry on the suitability of the list, confirmation that the relevant Indigenous communities will be engaged, and that the appropriate level of engagement is being undertaken[1]. The Indigenous communities identified for engagement and notification purposes for the Project include[2]:

- Alderville First Nation
- Beausoleil First Nation
- Chippewas of Georgina Island First Nation
- Chippewas of Rama First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Métis Nation of Ontario
- Mississaugas of Scugog Island First Nation
- Wendat Nation
- Williams Treaty First Nations

St. Marys Cement respectfully requests confirmation from the Ministry that the list of Indigenous communities provided above is deemed appropriate for Indigenous engagement for this amendment application.

We look forward to hearing back regarding this matter. Please do not hesitate to contact me by email at ruben.plaza@vcimentos.com.

Respectfully,

Ruben Plaza

Director Environment Cement

[1] The level of engagement to be had with each community will be reviewed and assessed based on the interest expressed by each community upon being notified about the Project.
[2] The level of engagement to be had with each community will be reviewed and assessed based on the interest expressed by each community upon being notified about the Project.

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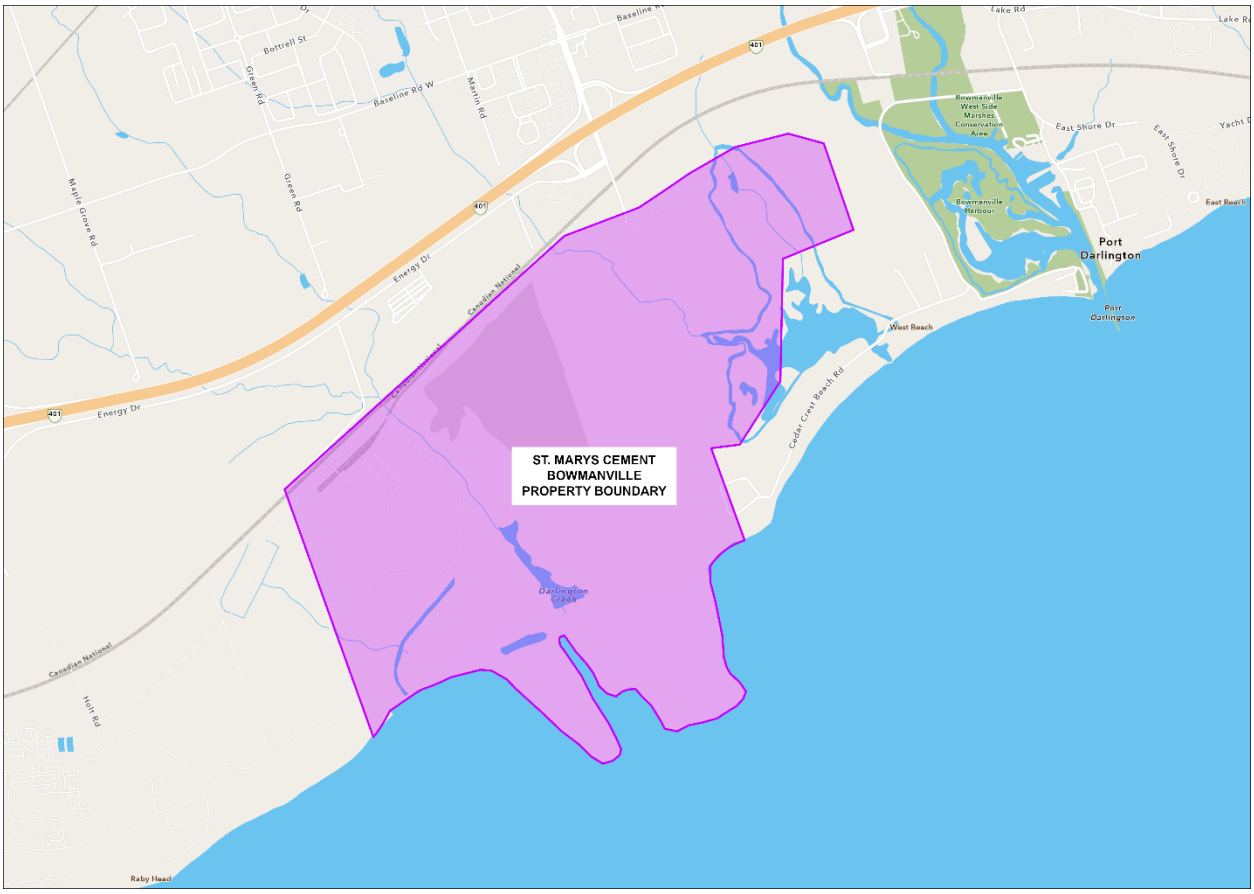


Figure 1: Site Location (St. Marys Cement Bowmanville Cement Plant)

Outlook

RE: St. Marys Cement - Indigenous Communities Notification for ALCF ECA Amendment Application

From Han, Shareen (MECP) <Shareen.Han@ontario.ca>
Date Tue 2026-10-06 10:23 AM
To Marejka, Ellen <Ellen.Marejka@wsp.com>
Cc Liubansky, Kate <kate.liubansky@wsp.com>; McEvoy, Jamie <jamie.mcevoy@wsp.com>; Dabagh, Nadia <Nadia.Dabagh@wsp.com>; ruben.plaza <ruben.plaza@vcimentos.com>; Keene, David (MECP) <David.Keene@ontario.ca>

1 attachment (434 KB)
CA0076898.4598-L-Rev0_VCNA_SMCBowmanville_IndigenousCommunities_02Oct2026.pdf;

Hi Ellen,

Appreciate you reaching out.

Based on the project information provided, the ministry has identified the following Indigenous communities to receive notice of the proposed ALCF amendment application under O. Reg. 79/15:

- Alderville First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Mississaugas of Scugog Island First Nation
- Kawartha Nishnawbe

St. Marys Cement may also engage other Indigenous communities with which it has an existing relationship or wishes to develop a relationship.

This advice is based on the information currently available and does not constitute a determination that consultation requirements have been fully satisfied. The scope of engagement may need to be revisited if new information or concerns arise regarding potential impacts on Aboriginal or treaty rights.

Much thanks,
Shareen

From: Marejka, Ellen <Ellen.Marejka@wsp.com>
Sent: October 2, 2026 2:36 PM
To: Han, Shareen (MECP) <Shareen.Han@ontario.ca>
Cc: Liubansky, Kate <kate.liubansky@wsp.com>; McEvoy, Jamie <jamie.mcevoy@wsp.com>; Dabagh, Nadia <Nadia.Dabagh@wsp.com>; ruben.plaza <ruben.plaza@vcimentos.com>
Subject: St. Marys Cement - Indigenous Communities Notification for ALCF ECA Amendment Application

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Hi Shareen,

On behalf of St. Marys Cement, please find attached the letter requesting confirmation of the Indigenous Communities proposed to be notified of the upcoming ALCF ECA amendment application for the Bowmanville plant. Could you please let us know an approximate timeframe for your review of the letter and confirmation of the Indigenous Communities?

Please let me know if you have any questions.

Thank you,

Ellen

Ellen Marejka
Air Quality and GHG Scientist
M.E.Sc., EIT, LEED Green Associate
she/her

[redacted]

WSP

wsp.com



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