TRAFFIC IMPACT BRIEF

DATE November 10, 2026

TO Ruben Plaza
Director Environment Cement VCNA
St. Marys Cement Inc. (Canada)

CC Kate Liubansky, Jamie McEvoy

FROM WSP Canada Inc. **EMAIL** Cindy.Costain@wsp.com

TRAFFIC IMPACT BRIEF SUPPORTING THE ALTERNATIVE LOW CARBON FUEL ENVIRONMENTAL COMPLIANCE APPROVAL AMENDMENT APPLICATION FOR ALTERNATIVE LOW CARBON FUEL USE AT ST. MARYS CEMENT

St. Marys Cement Inc. (Canada) (St. Marys Cement), a subsidiary of Votorantim Cimentos North America (VCNA), is preparing an application to amend its existing Environmental Compliance Approval (ECA) for the Bowmanville Cement Plant located at 410 Bowmanville Avenue in Bowmanville, Ontario (the Facility). The Facility currently operates under ECA No. 0550-CEAHMA issued September 19, 2022, which permits the use of Alternative Low Carbon Fuels (ALCFs) in the cement manufacturing process.

The proposed ALCF ECA Amendment Application will seek the 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. We understand that, when approved, the Facility would ramp up the use of ALCFs gradually depending on availability of ALCFs and process conditions, following the required onsite modifications. The ALCF ECA Amendment Application process under Part II.1 of the *Ontario Environmental Protection Act* which is being completed in accordance with Ontario Regulation 79/15 does not require a Traffic Impact Study; however, WSP Canada Inc. (WSP) was retained to prepare this Traffic Impact Brief to supplement the application and address anticipated public concerns regarding potential traffic impacts associated with increased ALCF truck activity. The information presented in this Traffic Impact Brief is subject to change based on final project design and pending regulatory approval.

St. Marys Cement originally started using ALCFs in 2018 as part of a Demonstration Project after which an ECA Application for permanent use was prepared in 2020. The January 2020 traffic analysis[1] that supported the original ECA application found that the declining traffic operations in the study area, defined as the area between the Highway 401 ramp terminal intersections and the Facility entrance, were caused by background

[1] AECOM. (2020). *Alternative Low Carbon Fuel Use at the St Marys Cement Bowmanville Plant - Traffic Impact Study - Summary Memo.*

traffic growth, not the incremental truck traffic, which accounted for less than one percent of the total traffic volumes. Since then, traffic signals recommended in that assessment have been installed at the Energy Drive intersections with Bowmanville Avenue and the Highway 401 south ramp terminal.

Traffic level-of-service impacts are typically assessed based on peak-hour travel demand. This Traffic Impact Brief considers potential traffic impacts within the same study area as the January 2020 traffic analysis assessment, which covers the truck route to and from the Facility.

Currently, ALCF trucks arrive at the Facility from suppliers located in Ontario (Toronto, Kitchener, and Ottawa) and Quebec via Highway 401 and Bowmanville Avenue. ALCF trucks do not travel through nearby residential communities or other sensitive receptor areas. All trucks, including ALCF trucks, are permitted to deliver materials to the Facility 24 hours a day, seven days a week; although ALCF deliveries typically occur between 8:00 am and 6:00 pm. During the morning and afternoon peak hours, a maximum of three trucks deliver ALCFs to the Facility.

Upon approval of the increase in ALCF usage, trucks would continue to access the Facility via Bowmanville Avenue and Highway 401 avoiding nearby residential communities and other sensitive receptor areas. As the Facility increases its ALCF use to 800 tonnes per day, more ALCF truck deliveries would be needed throughout the day to meet the ALCF demand. All trucks, including ALCF trucks, would continue to be permitted to deliver materials to the Facility 24 hours a day, seven days a week. However, it is anticipated that the delivery schedule may extend to 6:00 am to 8:00 pm to accommodate for the increase in ALCF use, while the maximum peak-hour delivery rate would remain at three trucks per hour. The proposed increase in ALCF use is not expected to impact other truck volumes; therefore, no overall reduction in truck trips is anticipated. No changes to the existing site access arrangements are anticipated.

Based on WSP's understanding of the current and future Facility scenarios and the proposed ALCF ECA Amendment Application, the proposed increase of ALCF use from 400 to 800 tonnes per day would not change the peak-hour delivery rate of three trucks per hour. In WSP's opinion, the planned increase of ALCF use would therefore generate no additional peak-hour travel demand, and no traffic impacts are anticipated within the study area.

Please note that other proposed travel demand changes and/or infrastructure improvements that could impact traffic conditions within the study area were not considered in this analysis.

Furthermore, previous analysis attributed declining traffic operations to background growth rather than incremental truck demand. With signals now operating at Energy Drive/Bowmanville Avenue and the Energy Drive/Highway 401 south ramp terminal, any ALCF truck activity is expected to be indistinguishable from overall traffic conditions at any of the intersections along the planned travel route between the Facility driveway and the Highway 401 interchange ramp terminal intersections.

WSP Canada Inc. prepared this Traffic Impact Brief solely for the use of the intended recipient, St. Marys Cement Inc. (Canada), a subsidiary of Votorantim Cimentos North America, in accordance with the professional services agreement. The intended recipient is solely responsible for the disclosure of any information contained in this report. The content and opinions contained in the present Traffic Impact Brief are based on the observations and/or information available to WSP Canada Inc. at the time of preparation. The information, recommendations and opinions expressed in this Traffic Impact Brief are for the sole benefit of the intended recipient, subject to the limitations and purposes described herein.

We trust that this summary adequately addresses the magnitude of the potential incremental truck traffic generation related to the planned increase in the transport of ALCFs and the associated traffic impacts.

However, please do not hesitate to contact the undersigned at your convenience if you have any questions or requests for clarification.

Yours sincerely,

WSP Canada Inc.



Cindy Costain, P.Eng.
Project Manager

CC/EM/KL/JDM/NM

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