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September 11, 2025

St Marys Cement Plant

Community Liaison Committee Meeting

Agenda

- Welcome and Introductions
- Complaints 2025 Year to Date including Complaints Process for Odour and Dust
- Alternative Low Carbon Fuels Updates
- Questions Brought Forward in Advance
- Round Table
- Closing Remarks

Welcome and Introductions

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st marys cement

Community Liaison Committee

The next Community Liaison Committee Meeting will be held on **Friday, September 12th at 10am** at the St. Marys Municipal Operations Center. Members of the public who wish to observe are welcome to attend.

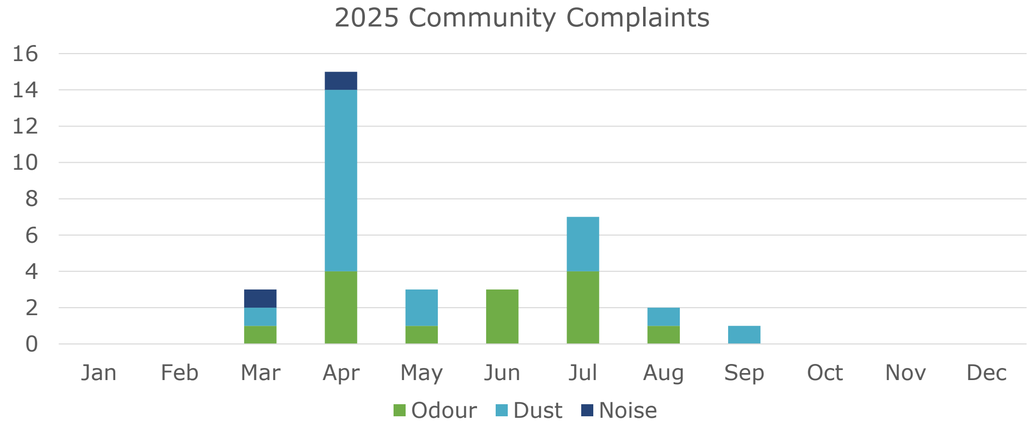
Residents who wish to speak in front of the Committee may submit a detailed request in writing at least 3 days prior to the meeting in writing to the Committee. The request will be considered by the Committee and approved prior to the meeting. Please submit all requests, questions, and concerns for the meeting to kara.pelissero@vcimentos.com by **Wednesday, September 10th**

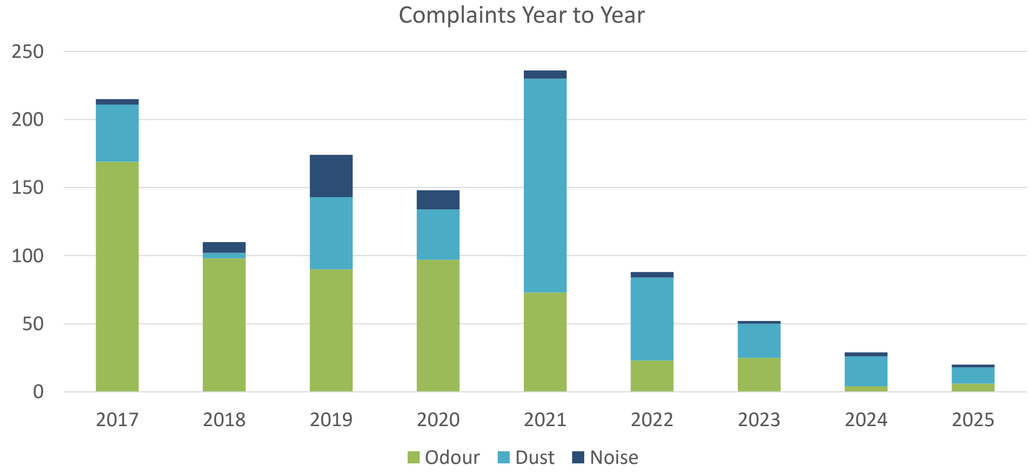
- **Thank you to the Town of St Marys for allowing us to use their Youtube Channel and the Municipal Operations Center**
- **Welcome back everyone!**
- **Round Table Introductions**
- **Did anyone have questions/concerns about the June 13th 2025 meeting?**

Complaints Received 2025 Year To Date

		Odour*	Mention Health**	Dust	Invalid Dust	Noise/ Blasting
2025	**Total**	**14**	**5**	**17**	**8**	**2**
	January	0	0	0	0	0
	February	0	0	0	0	0
	March	1	0	1	0	1
	April	4	2	10	6	1
	May	1	0	1	0	0
	June	0	0	0	0	0
	July	4	2	3	1	0
	August	1	1	1	0	0
	September	0	0	1	1	0
	October					
	November					
	December					

* Odour complaints reviewed on the next slides
**Complaints which 'Mention Health' are counted when a resident calls with an odour complaint and highlights that they have health concerns. They are not separate complaints received by the plant.





Odour Complaints

Lab Odour Testing

- In 2018 SMC completed lab-scale testing for determining odour contribution of our raw materials
- Samples were heated in a tube oven, similar to the cement process, and the gases emitted from each sample were captured
- Gas samples were analyzed in both an electronic odour analyzer (MSEM) and a sensory olfactometer

Lab Testing Results

- SMC analyzed numerous samples including raw materials, limestone samples, petroleum coke, and kiln feed mixtures
- Samples of limestone consistently tested higher in odour units than other samples
- Analysis of limestone showed odour concentrations are random at different depths
- Since limestone makes up 75-80% of our raw material mixture, it cannot be eliminated or substituted
- As a result of this testing, SMC is focused odour abatement efforts on improving dispersion

Lab Equipment used for Odour Testing

Limestone Odour Strength Based of Blast Hole – Oct 2018

Depth/Rank	
6-12	2
12-18	9
18-24	8
33-36	1
42-45	6
45-48	4
51-54	3
54-57	5
57-60	7

Odour Complaints

Dispersion

- SMC determined that a stack extension of 30m would improve the odour dispersion of the emissions from the main stack which would decrease the perceived impact of the odour by residents.
- Stack extension was complete in May 2020

Monitoring

- After completing the stack extension SMC began investigating complaints received to see trends in weather patterns and complaints received.
- SMC implemented the Enviro-Suite monitoring software which uses wind direction and speed to examine if the odour perceived at a location could have originated from the facility.

Community Concerns

St Marys Cement has noted that community concerns about odour do not always indicate that the cement plant was the source.

Odour Monitoring using Enviro-Suite Software

Likely Originated from SMC

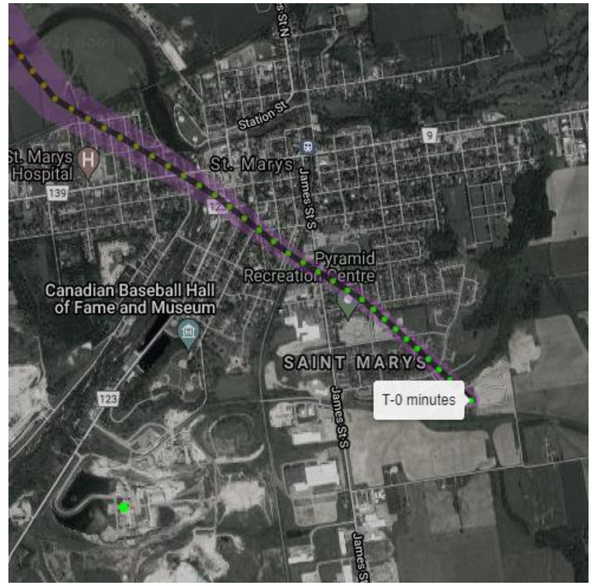
The trajectory generated by Enviro-Suite aligns with the location of the stack.

Possibly Originated from SMC

The trajectory generated by Enviro-Suite is close to aligning with the location of the stack.

Probably did not Originate from SMC

The trajectory generated by Enviro-Suite is not close to the stack but direction of the trajectory is towards SMC.



Did Not Originate from SMC

The trajectory generated by Enviro-Suite is clearly not in the direction of the stack.

Odour Complaints Received

Date	Enviro-Suite Results
Tuesday, June 17, 2025	Likely originated from SMC
Saturday, June 21, 2025	Likely originated from SMC
Saturday, June 21, 2025	Likely originated from SMC
Tuesday, July 15, 2025	Likely originated from SMC
Thursday, July 24, 2025	Possibly Originated from SMC
Saturday, July 26, 2025	Likely originated from SMC
Monday, July 28, 2025	Likely originated from SMC
Monday, August 11, 2025	Likely originated from SMC

Enviro-Suite Results		
	2024 YE	**2025 YTD**
Likely Originated from SMC	**4**	**11**
Possibly Originated from SMC	**0**	**1**
Did not Originate from SMC	**0**	**0**
Location not Provided	**0**	**2**

* Out of Enviro-Suite complaints generated using the Enviro-Suite Software

Dust Complaints

St Marys Cement has developed a procedure where the facility work with residents to address community dust concerns.

1. When SMC receives a dust concern from a resident, a representative from the cement plant promptly goes to the residence and takes a sample of dust off the vehicle.
    - Complaints need to be prompt to ensure no contamination can occur.
    - SMC uses deionized water and ash-less filter paper to remove the sample from the vehicle.
    - Deionized water does not add any mineral contaminants to the sample.
    - Hydration of the dust on the vehicle allows us to see how the dust reacts with water.
    - Ash-less filter paper is critical in the analysis process.

2. The sample is taken from the windshield or sunroof of the vehicle for several reasons.

    - Not from a painted surface to avoid scratching the paint
    - Not from the rear window because a lot of dirt can be kicked up from the wheels and settle on the back vehicle.
    - Not from the side windows because dust needs a horizontal surface to settle on.

3. SMC then analyzes the sample I the St Marys Cement lab to determine if it matches any of the raw materials or products at the facility. The test methods used at the lab are commonly used in the cement industry and we use the results to compare to our own on site products and materials.

Dust Complaints

While the sample is in the lab St Marys Cement begins the root cause investigation.

1. Complaint Location
- Location Relative to St Marys Cement operations
- Distance from the plant
- Location relative to other sources of dust (construction, farming activities, roadways (paved and unpaved), seasonal sources (ie. road salt or pollen).

2. Weather Conditions
- Wind Direction
- Wind Speed
- Rain / Moisture (dew)

3. Plant Conditions
- St Marys Cement employees are constantly observing for dust being emitted from any source on site
- If dust is identified then employees take immediate action to eliminate the dust
- Actions taken are recorded in a log.

Once analysis is back the facility compares data from the root cause investigation to the analysis results to determine if the material could have originated from St Marys Cement.

Dust Complaints

Date	Number of Complaints	Valid Complaints	Sample Results
7/17/2025	1	0	Did not indicate cementitious material
7/23/2025	2	2	Reportable dust incident from an air slide malfunction.
8/11/2025	1	1	Material Transfer Point moisture management
9/2/2025	1	0	Did not indicate cementitious material

Alternative Low Carbon Fuels

ALCF Wood

ALCF Plastic

St Marys Cement started using ALCF in the process

in May 2024.

As of May 31, 2025 SMC has used

1727 tons of wood

and

18,095 tons of plastic

as Alternative Low Carbon Fuels.

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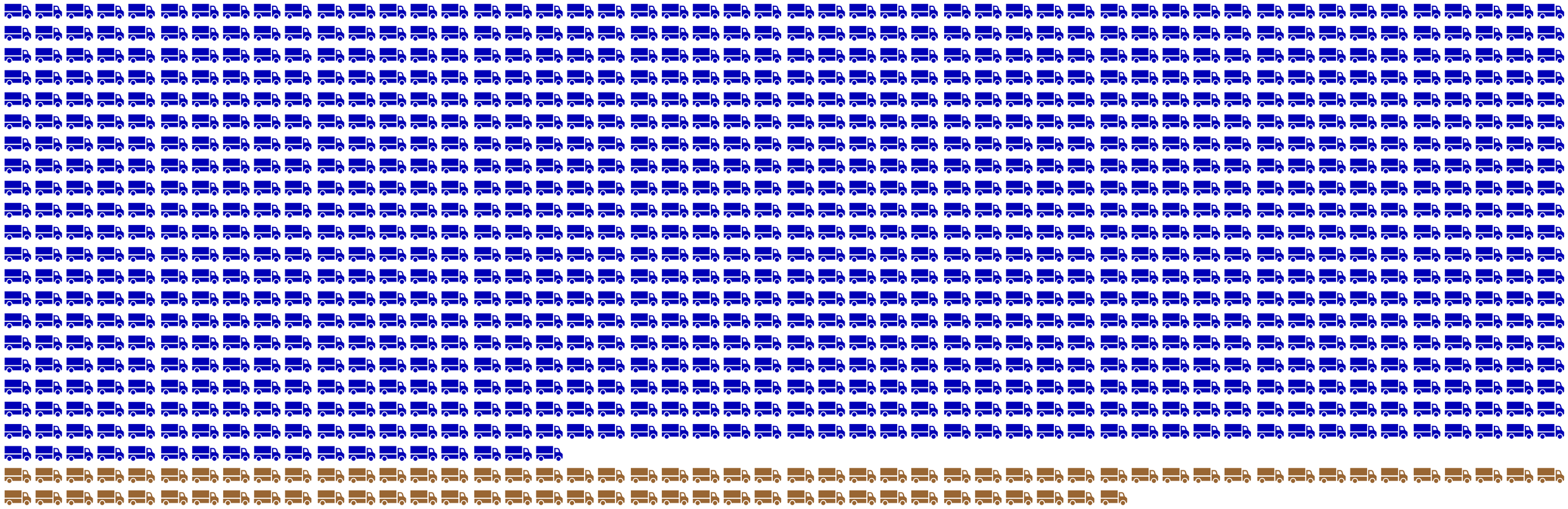


Since May 2024 St Marys Cement has used **1068 trucks of plastic*** and **86 trucks of wood*** as Alternative Low Carbon Fuel.

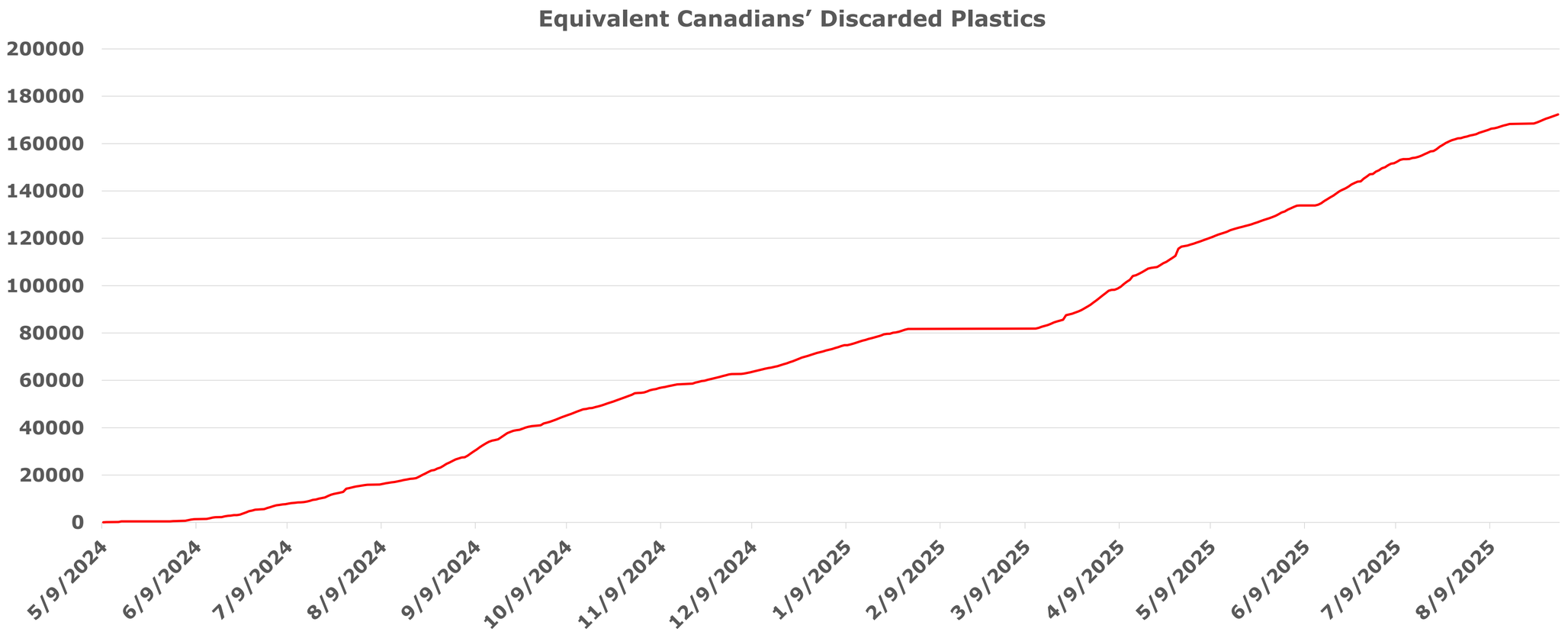
https://www150.statcan.gc.ca/n1/daily-quotidien/230309/dq230309e-eng.htm

***Actual values, previous CLC Meetings used average truck weights, data from today is actual count of trucks**

According to Statistics Canada in 2019 the average Canadian disposed of 105 kg of plastic.

As of August 31st, 2025 the quantity of plastic used as ALCF at SMC is the equivalent of **172,323** Canadians' discarded plastic.

https://www150.statcan.gc.ca/n1/daily-quotidien/230309/dq230309e-eng.htm



Questions Brought Forward in Advance

I am a long time resident of ST Marys and have some concerns related to ST Marys Cement stack emissions. I would like to ask the Committee members a few questions related to air emissions generated by ST Marys Cement.

1. Please provide an average location POI (Point of impingement: the point at which a contaminant contacts the ground or a building). How is the decision made as to what would be an acceptable exposure at the average POI?

2. When stack emissions are tested and reported is the sample (s) taken at 100% burn capacity?

3. Has there been any investigation or studies related to long term exposure to emissions generated by the production of cement products.

4. With ongoing global warming (Heat events) and air quality alerts due to forest fires, is there any decison making guidelines for this company to not burn during those events thereby not adding to the burden of pollutants.

Thank you for your consideration and I look forward to either voicing my questions at the meeting or have them answered at that time.

Questions Brought Forward in Advance

1. Please provide an average location POI (Point of impingement: the point at which a contaminant contacts the ground or a building). How is the decision made as to what would be an acceptable exposure at the average POI?

- St Marys Cement works with Ramboll Engineering on Air Dispersion modelling and reporting requirements.
- The POI limits are determined by the MECP and the Ministry of Health. The regulations for POI are calculated on a maximum case scenario (not average) because the maximum results are compared to the Point of Impingement Limits.
- The maximum emissions for St Marys Cement were modelled for all contaminants using the Ministry approved US EPA AERMOD system (Version 22112) and site-specific meteorological data provided by the Ministry.
- The results are summarized displaying the maximum POI concentrations for all contaminants and the results are updated annually.
- Results are displayed in the facility's Annual Compliance Report which is posted on the company website. The 2024 results show the maximum case scenario emissions for the various components are below their respective limits. Therefore, the Facility can operate in compliance with Section 20 of O. Reg. 419/05.

Questions Brought Forward in Advance

2. When stack emissions are tested and reported is the sample (s) taken at 100% burn capacity?

- St Marys Cement Plant is required to install and maintain a Continuous Emissions Monitoring (CEM) System on the main stack. The CEM system takes data points every 10 seconds for NOx, SO2, CO2, and Opacity as required by the Air Permit. The CEM System must comply with the requirements of EC32102 which outlines the requirements for the performance, calibration, certification, reporting, and compliance requirements of the CEM.
- Because the facility continuously monitors the emissions while running, emissions are reported during all operational times including periods of both high and low production and fuel consumption.
- Additional requirements of the air permit require stack testing during full plant production capacity.

Questions Brought Forward in Advance

3. Has there been any investigation or studies related to long term exposure to emissions generated by the production of cement products.

- The Perth District Health Unit published a report in 2018 about St Marys Cement Health Hazard Investigation. This report is available on the Town of St Marys Website and the St Marys Cement Plant Website.
- Limits for air emissions are developed by the Ministry of Health and are determined based on long term exposure.

https://www.stmaryscement.com/wp-content/uploads/sites/10/2024/11/Perth-District-Health-Unit-Report-St-Marys-Cement-Health-Hazard-Investigation-May-2018-.pdf

Questions Brought Forward in Advance

4. With ongoing global warming (Heat events) and air quality alerts due to forest fires, is there any decison making guidelines for this company to not burn during those events thereby not adding to the burden of pollutants.

- Studies have found that the emissions from Wildfires in Canada contribute more CO2 than Emissions than all other industries combined.
- In 2018 the MECP installed a monitoring station in town for PM and noted that there was more PM from non-industrial sources than there were from St Marys Cement.
- St Marys Cement Plant is a 24/7 operation and the process of properly shutting down the primary equipment (kiln and raw mill) is a complex process taking up to 48 hours.

https://vancouversun.com/news/canadas-wildfire-emissions-exceeded-all-other-sources-in-2023-report

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Round Table

For any Questions or Concerns related to St Marys Cement Plant Operations please contact

Kara Pelissero – Environmental Manager
at 519-284-1020 x 235
or at
kara.pelissero@vcimentos.com

Upcoming Meetings
Thursday December 11, 2025 @ 6pm