



March 3rd, 2023

St Marys Cement Plant

Community Liaison Committee Meeting



Agenda

- ❖ **Welcome and Introductions**
- ❖ **Complaints 2022 and 2023 Year to Date**
- ❖ **ALCF Update**
- ❖ **Particulate Concentrations**
- ❖ **Questions Brought Forward in Advance of Today's Meeting**
- ❖ **Round Table**
- ❖ **Closing Remarks**



Welcome and Introductions



Community Liaison Committee

The next Community Liaison Committee Meeting is going to be held on **Friday March 3rd at 10am**. Members of the public who wish to observe as the members of the Committee discuss information with respect to St Marys Cement can watch the live meeting online. Please see the Town of St Marys Events Calendar for the link to the online meeting.

Please submit any questions and concerns for the meeting by March 1st to kara.terpstra@vcimentos.com.

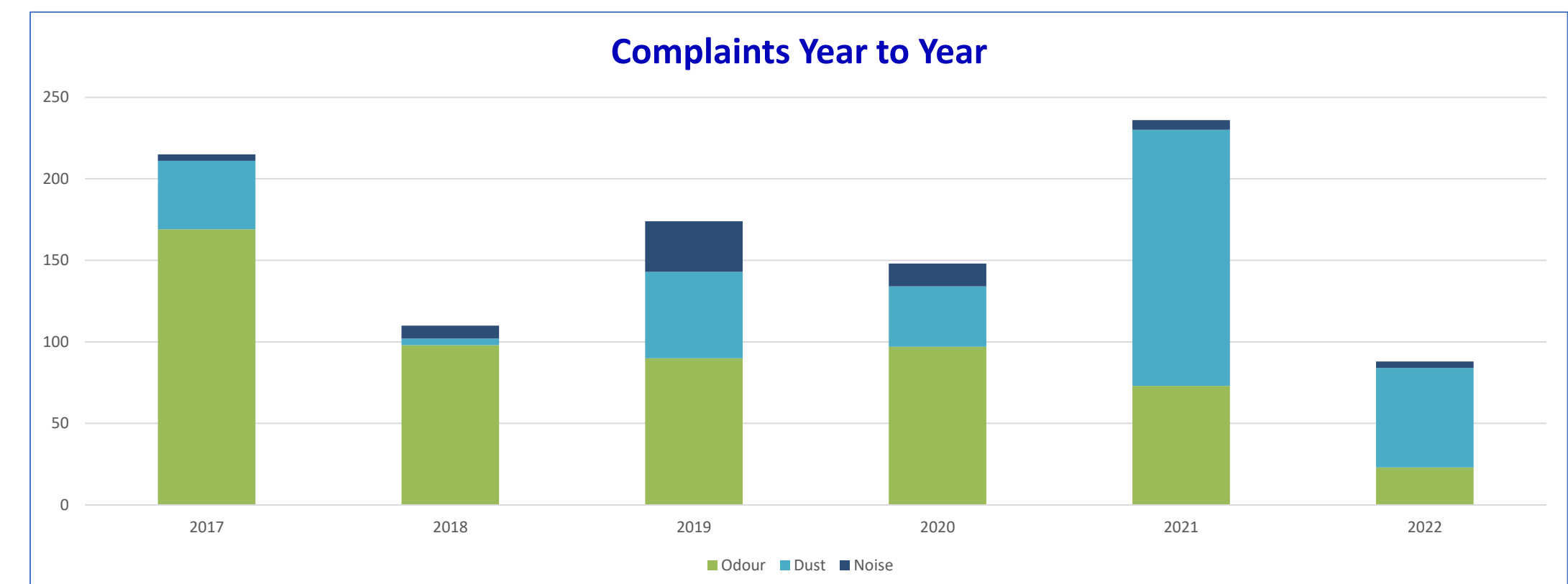
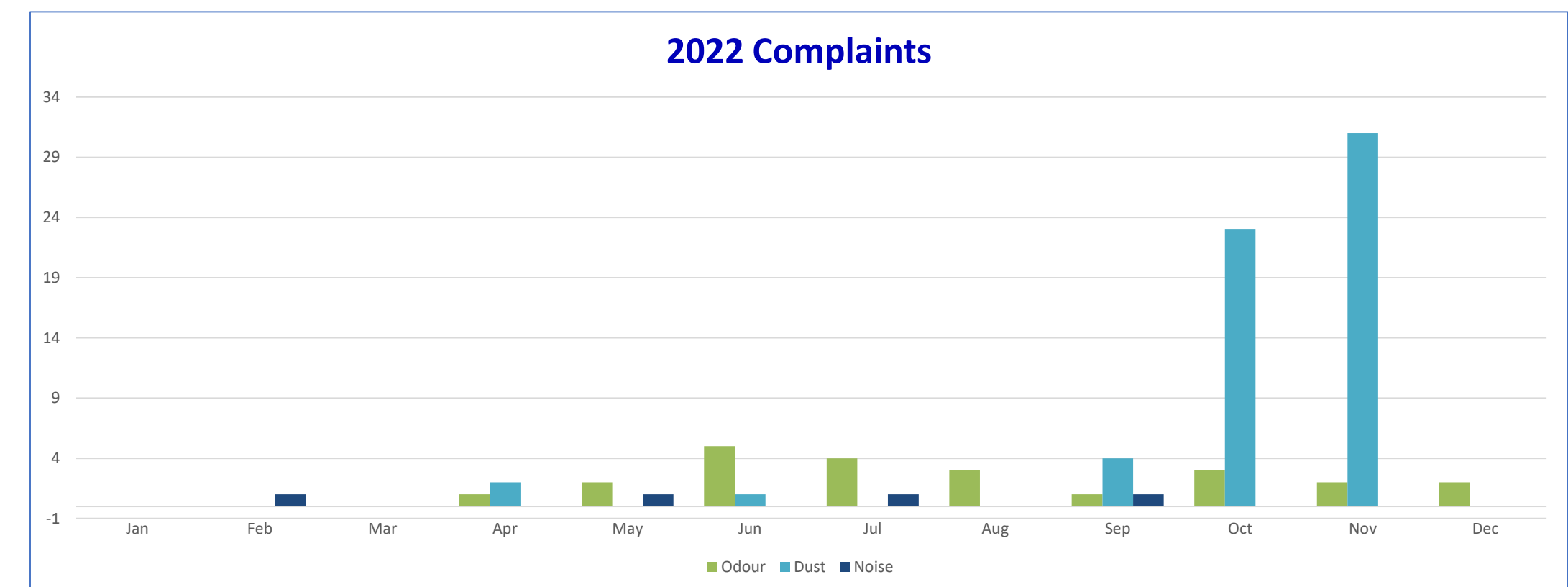
- ❖ **Thank you to the Town of St Marys for allowing us to use their Youtube Channel**
- ❖ **Round Table Introductions**
- ❖ **New to our CLC we have Councillor Rob Edney**
- ❖ **Did anyone have questions/concerns about the December 9th Meeting Minutes**

Complaints Received 2022 Year End

		Odour*	Mention Health**	Dust	Noise
2022	Total	23	6	61	4
	January	0	0	0	1
	February	0	0	0	0
	March	0	0	0	0
	April	1	0	2	0
	May	2	0	0	1
	June	5	2	1	0
	July	4	2	0	1
	August	3	2	0	1
	September	1	0	4	1
	October	3	0	23	0
	November	2	0	31	0
	December	2	0	0	0

* 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.

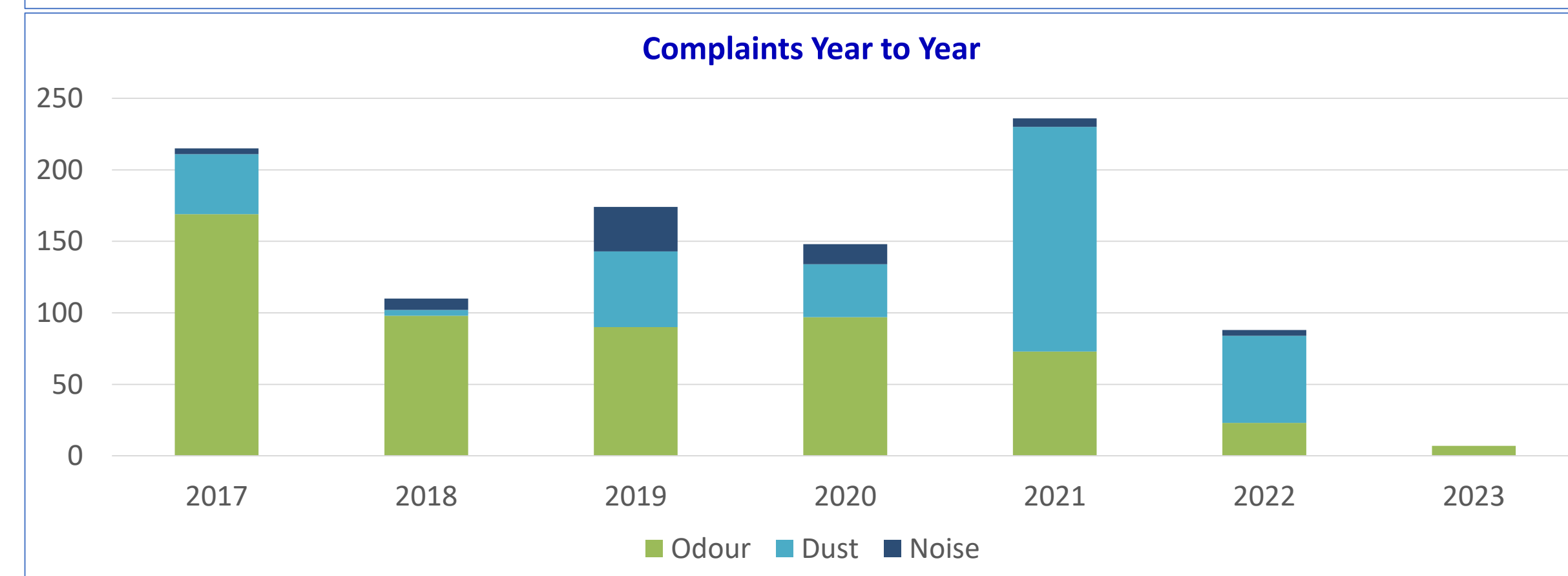
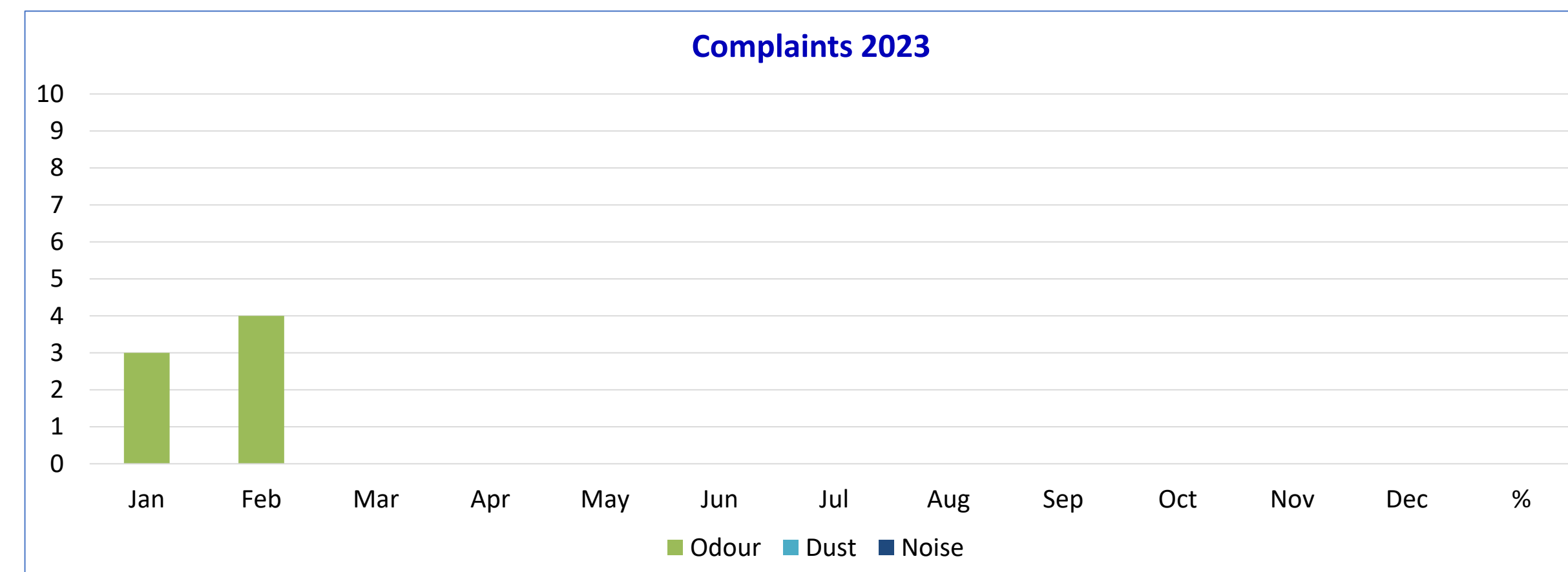


Complaints Received 2023 Year To Date

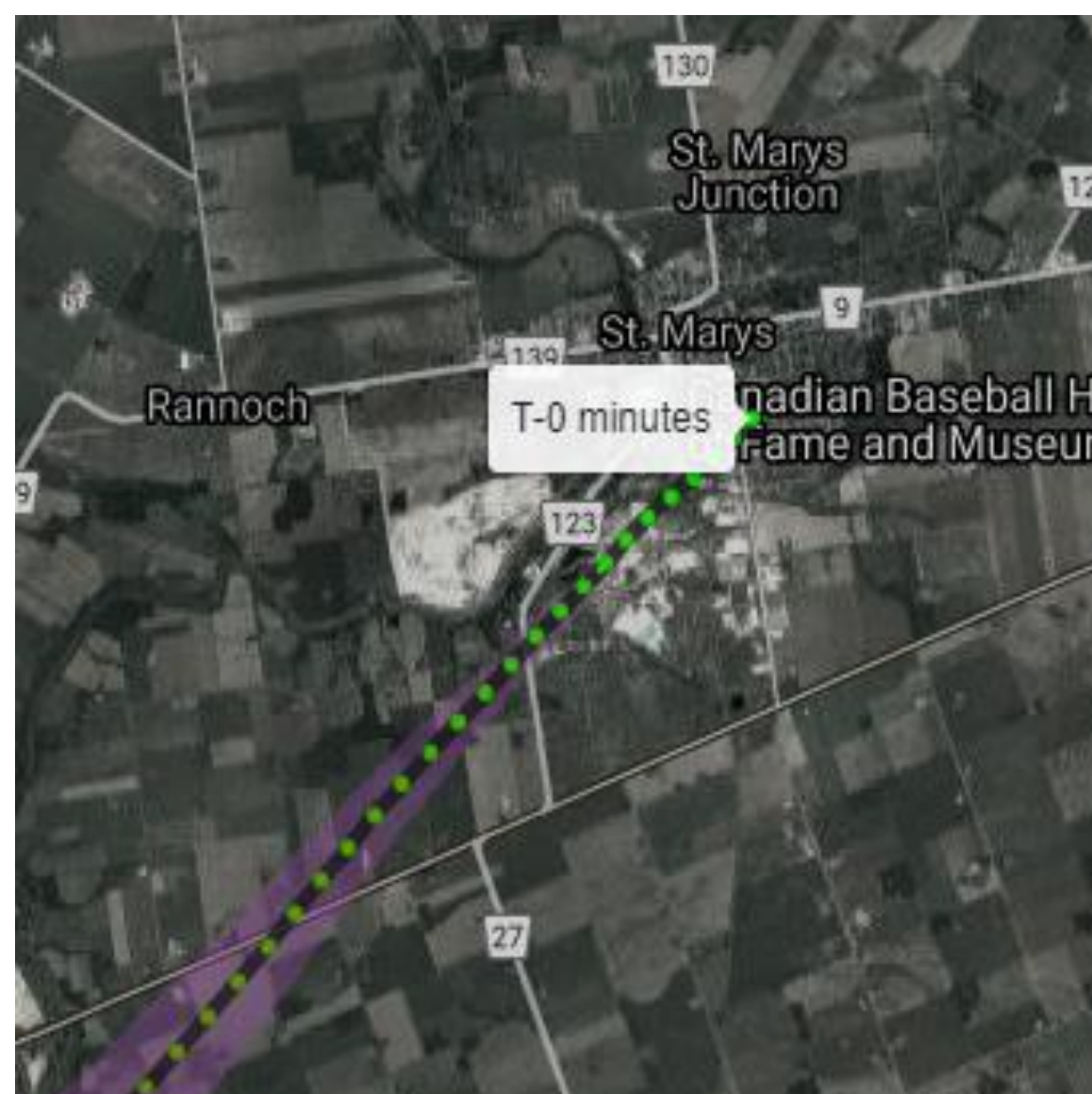
		Odour*	Mention Health**	Dust	Noise
2023	Total	7	3	0	0
	January	3	1	0	0
	February	4	2	0	0
	March				
	April				
	May				
	June				
	July				
	August				
	September				
	October				
	November				
	December				

* 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 Monitoring using Enviro-Suite Software



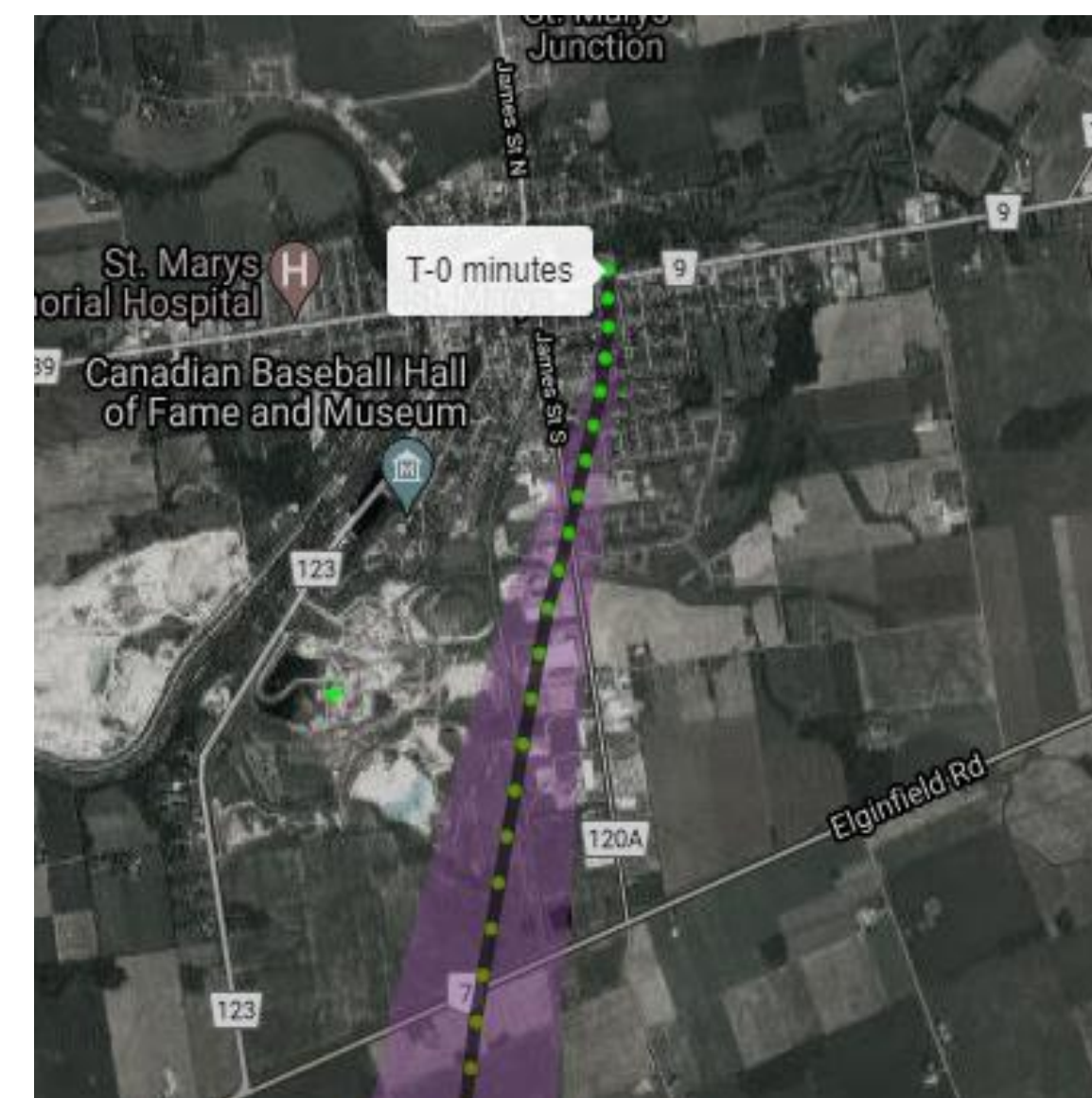
Likely Originated from SMC

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
Saturday, December 16, 2023	Possibly Originated from SMC
Friday, December 22, 2023	Likely Originated from SMC
Sunday, January 1, 2023	Likely Originated from SMC
Thursday, January 5, 2023	Likely Originated from SMC
Friday, January 27, 2023	Likely Originated from SMC
Thursday, February 2, 2023	Likely Originated from SMC
Thursday, February 2, 2023	Likely Originated from SMC
Thursday, February 2, 2023	Location not provided
Thursday, February 2, 2023	Likely Originated from SMC

Enviro-Suite Results		
	2022 YE	2023 YTD
Likely Originated from SMC	18	6
Possibly Originated from SMC	4	0
Did not Originate from SMC	1	0
Location not Provided	0	1

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

Topics for Review

Does SMC have a new ALCF permit from MECP yet? Any conditions or share with group.

Can you summarize the particulate concentrations over the past five years?

ALCF Updates

Does SMC have a new ALCF permit from MECP yet? Any conditions or share with group.

- The MECP has provided a Draft ALCF Permit but the final permit has not been issued yet.
- SMC has reviewed the operating parameters proposed in the permit and sent back alternatives to the MECP. SMC will not be able to share the conditions of the permit until it is finalized with the plant.
- The Draft Permit focuses on the following;
 - 175 TPD of ALCF including biomass, end of life agricultural sources, non-recyclable plastics, construction and demolition waste, non recyclable paper, conveyor belts, etc.
 - The Structure of the Permit closely follows the structure of our current air permit including
 - Limited Operational Flexibility
 - Performance Limits and Emission Summary Dispersion Model Requirements
 - Equipment Operation and Maintenance
 - Raw Material and Fuel Testing (Including ALCF)
 - Emissions Monitoring
 - Stack Testing
 - Dust, Odour, and Noise Control
 - Community Engagement
 - Compliance Reporting



Proposed Alternative Low Carbon Fuels Building Location

Particulate (Dust) Concentrations

Can you summarize the reported particulate concentrations over the past five years?



St Marys Cement

Dust On Site

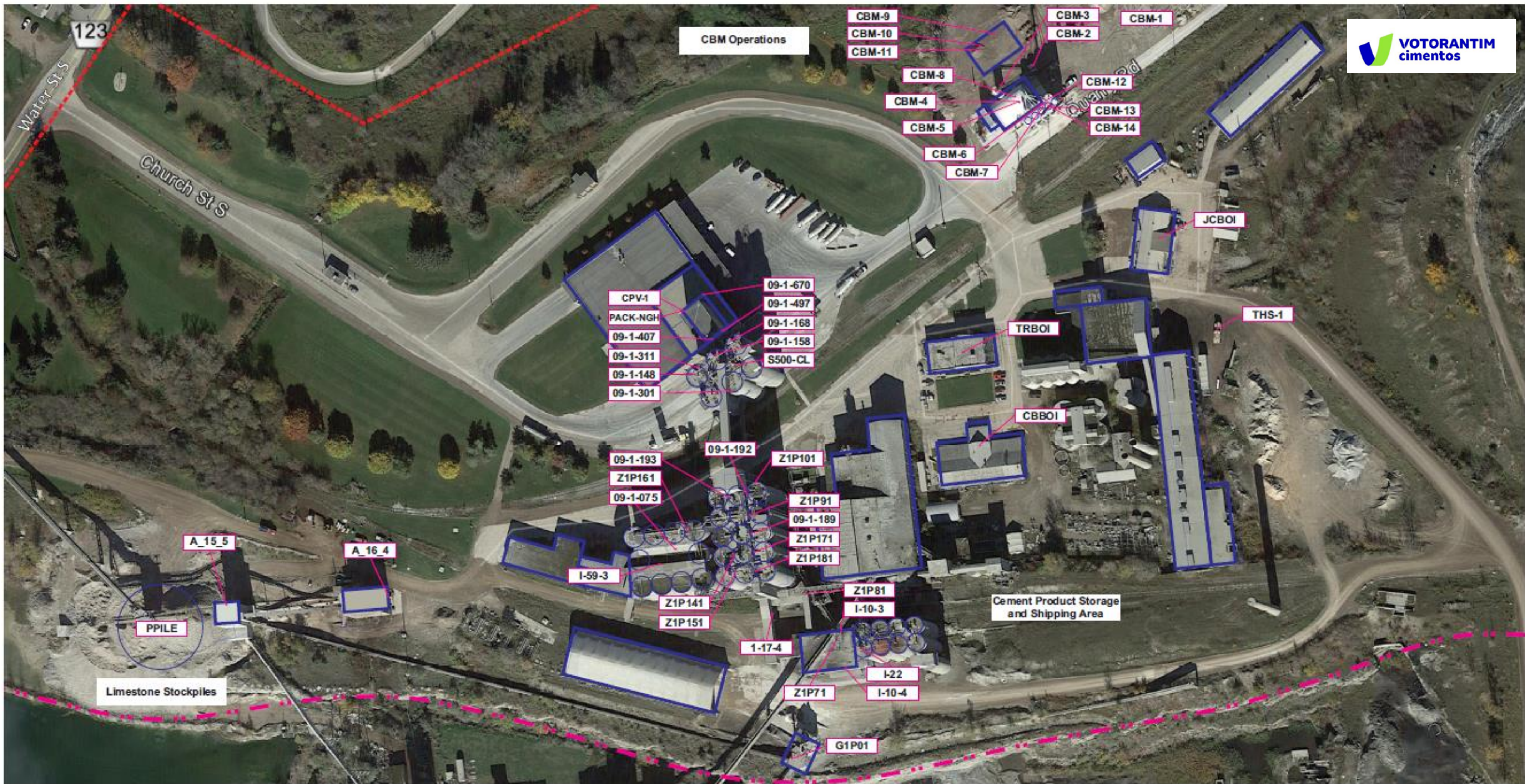
- Dust can originate from various sources on site including
 - Dust Collectors (Stack and Point Emissions)
 - Main Stack (Stack and Point Emissions)
 - Material Piles (Fugitive Emissions)
 - Material Transfer Points (Fugitive Emissions)
 - Shipping (Fugitive Emissions)
 - Roads
 - Spills
- To determine the total dust emission from the plant we have to take all of these into account



St Marys Cement

Emission Summary Dispersion Model

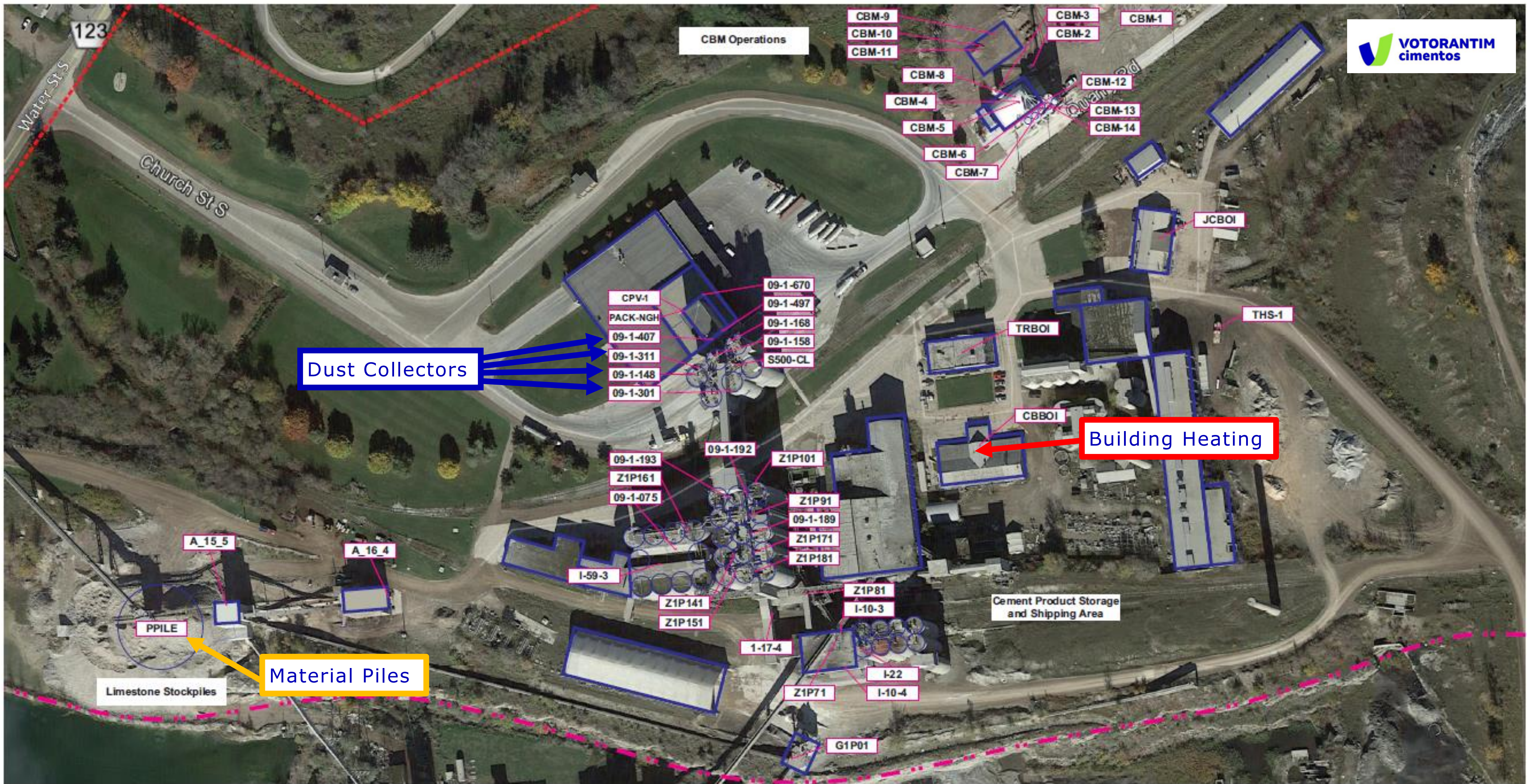
- The ESDM is a computer generated model that uses AERMOD software to simulate the combined particulate emissions from sources on site (Stack and Point Emissions, Fugitive Releases, Spills, and Roads).
- The Emission Summary Dispersion Model (ESDM) for the facility determines particulate concentrations by using engineering estimates, published emission factors, or measured results combined with operational hours of equipment and dust collectors on site to determine the total dust emission for the year.
- An engineering estimate is a pre-determined calculation based off the design of a dust collector or quantity of material used and the estimated equipment hours used to move it
- A published emission factor is based off industry standards for dust sources such as roadways and the known variables (ie. Roadway type and estimated vehicle hours)
- Measured results are from metering devices on site used for process control and environmental monitoring.
- The next slide shows the sources of dust on site which are input into the ESDM for the facility.



LEGEND	
ST01	Source ID
-----	Property Line
- - - - -	Former Quarry Perimeter

0 m 100 m

SITE LAYOUT - NORTH	
	St. Marys Cement Plant 585 Water Street, St. Marys, Ontario
	File No.: 1002-01.66 Date: February 2023
	Drawn By: MCO
	ST. MARYS CEMENT INC. (CANADA) ST. MARYS PLANT ESDM UPDATE
FIGURE 2B	



LEGEND	
ST01	Source ID
-----	Property Line
-----	Former Quarry Perimeter

0 m 100 m

SITE LAYOUT - NORTH	
	St. Marys Cement Plant 585 Water Street, St. Marys, Ontario
	ST. MARYS CEMENT INC. (CANADA) ST. MARYS PLANT ESDM UPDATE
File No.: 1002-01.66 Date: February 2023 Dwg.: 1002-01.66_20 Drawn By: MKC FIGURE 2B	



LEGEND

ST01 Source ID

Former Quarry Perimeter

0 m 100 m

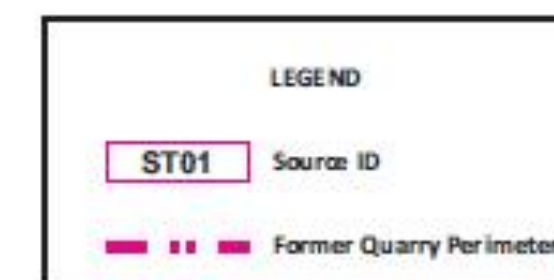
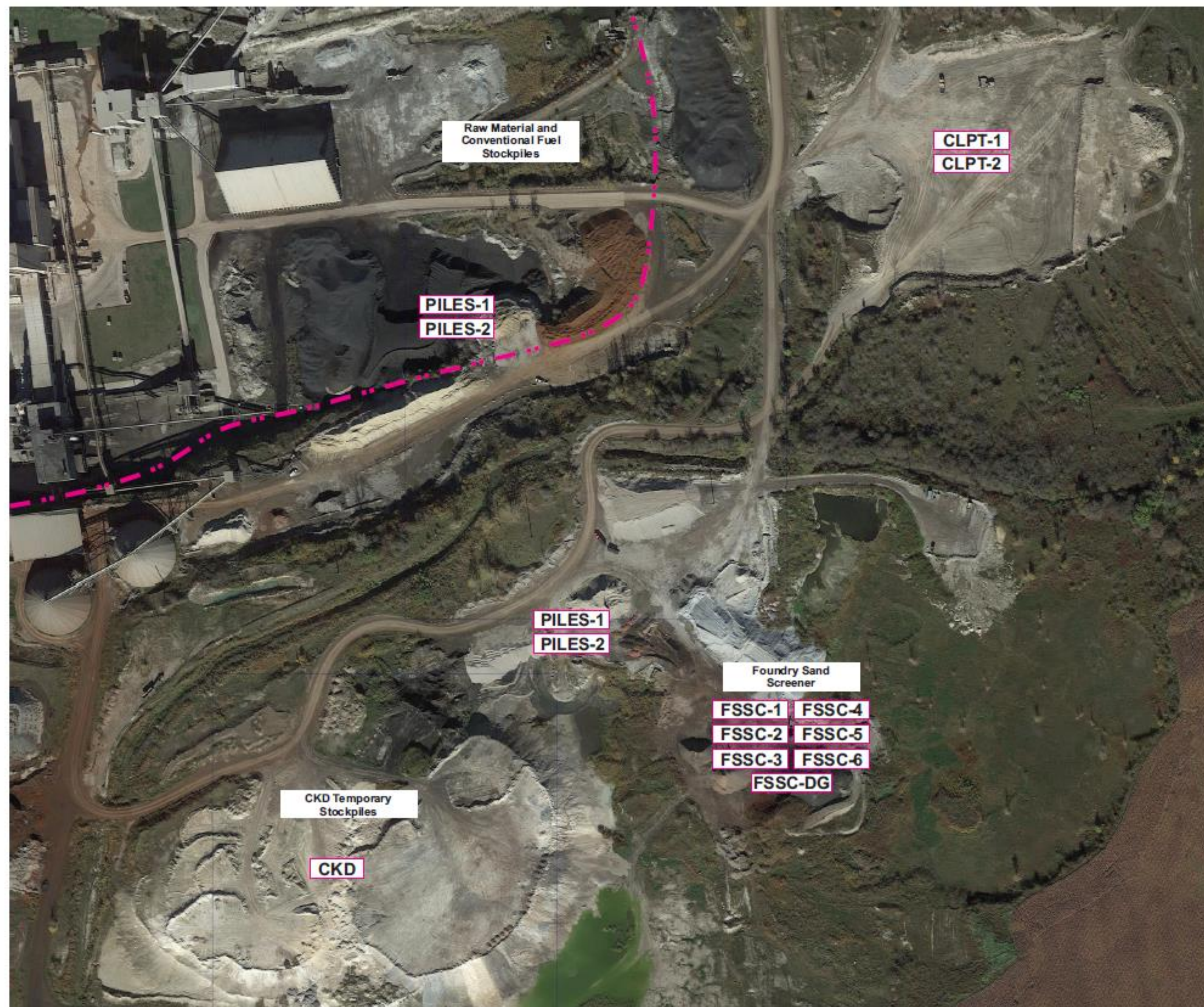
SITE LAYOUT - SOUTH

St. Marys Cement Plant
585 Water Street, St. Marys, Ontario



ST. MARYS CEMENT INC. (CANADA)
ST. MARYS PLANT
ESDM UPDATE

File No.: 1002-01.66
Date: February 2023
Dwg.: 1002-01.66_2C
Drawn By: MD
FIGURE
2C



0 m 150 m

SITE LAYOUT - STOCKPILES		
St. Marys Cement Plant 585 Water Street, St. Marys, Ontario		File No.: 1002-01.66 Date: February 2023
	ST. MARYS CEMENT INC. (CANADA) ST. MARYS PLANT ESDM UPDATE	Dwg: 1002-01.66.20 Drawn By: MO
		FIGURE
		2D



Stack or Point Emissions

- St Marys Cement has over 70 Dust Collectors on site
- Dust collectors are designed to purify dust from a high concentration to a low concentration of dust in the air emissions.
- Baghouses are located at any spot where there would be a transfer of material that could generate movement of dust causing it to become airborne.
- St Marys Cement's Air Permit requires the facility to monitor the operations and maintenance of these baghouses to ensure optimal performances
- Dust collectors on site are interlocked to the equipment that they service. Ie. If the belt stops moving underneath a dust collector, the collector will stop. Similarly, if a dust collector has issues and will stop, the belt will also stop.
- The Emission Summary Dispersion Model (ESDM) for the facility uses operational hours of equipment and dust collectors on site to determine the total dust emission for the years



Stack or Point Emissions

Main Stack & Primary Dust Collectors

- The Air Permit includes all dust collectors on site but also highlights that 5 of them are 'primary' dust collectors due to their size (Main Baghouse, Clinker Cooler, Coal Mill, Finish Mill, Electrostatic Precipitator)
- The largest baghouse on site is the Main Baghouse, which processes 300,000m³/hour
- There are 12 different compartments in the main baghouse with 274 bags in each, totaling 3288 bags.
- Due to the size of the main dust collector there are additional requirements for the condition of the outlet air, requiring it to be within 20% opacity
- Opacity the amount of light blocked by the dust coming through the stack. 0% opacity would mean the air is perfectly clear, and 100% opacity means the air is completely saturated with dust.
- Opacity is a continuously measured parameter, so SMC is able to watch the readings to determine when action is required to minimize the opacity from the main stack.

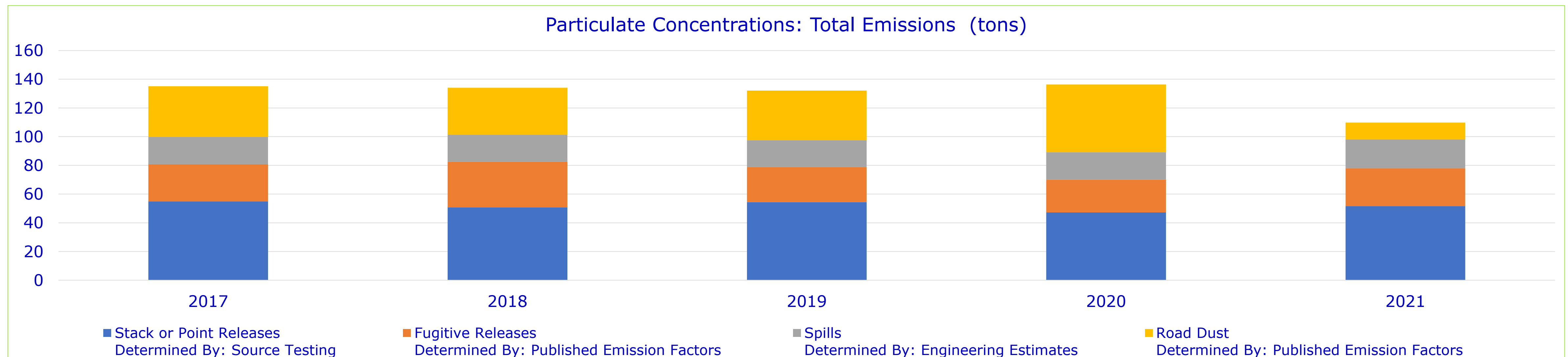


St Marys Cement

Particulate Concentrations

Can you summarize the particulate concentrations over the past five years?

- SMC works with BCX Environmental Engineering Consultants to input all of the process data into the ESDM model to generate the total particulate concentrations for the year
- This data is reported through the MECP National Pollutant Reporting Inventory (NPRI) website
- Shifts in totals can be attributed to total production numbers for the year, main baghouse improvement results, implementation in dust control measures, and ongoing site management.



Questions Brought Forward in Advance

To St. Marys Cement, to the Community Liaison Committee, to Votorantim Cimentos. and **anyone** who can understand its about the afflicted pain I have to endure

Once again, I am asking for someone to understand how invasive, and mentally and physically destructive sound waves can be on the human mind and body. It is now one month short of a thousand days that I have had to endure the bombardment of sound waves hitting my house and therefore me! My head hurts! My eyeballs hurt! My chest hurts! My stomach is sick! My ears hurt and ring all day long now - ever since the tower was extended! Internet says that St. Marys Cement has seismic equipment that measures vibrations on a constant basis. There are cycles to the vibrations. If not them(St. Marys Cement), the seismic equipment should be able to assist in exposing the source. There is nowhere in town that I can go to escape the distortion in the air. When the fan is not running during a shut down, my head goes quiet (although the ringing is now a permanent condition). The last time I talked to Kara, she said they were shut down, but I said the fans were still running and she said yes. There is the proof! Please come and talk to me. Please help!

Very Sincerely

Barb Reinwald

I deserve peace after almost 1000 days

Questions Brought Forward in Advance

- As reviewed in previous meetings SMC has provided resources to perform testing and monitoring at the resident's location and did not detect any noise or vibration attributable to St Marys Cement operations.
- Correlations between cement plant operations and periods of high vibration noted by the resident are not consistent.
- The District Officer for the MECP noted that he would follow up with predecessors about the concerns from the resident and provide some feedback.

Questions Brought Forward in Advance

To the Resident;

We acknowledge that you are experiencing discomfort and have health concerns. As per previous presentations and discussions, SMC encourages residents to bring their medical concerns to their primary care providers.

SMC has provided resources and best available technology for testing which was conducted at the resident's home and has not detected any noise or vibration that is attributable to St Marys Cement Plant. St Marys Cement does have continuous vibration monitors that are connected to specific pieces of equipment on site, primarily the large pieces of equipment such as the raw mill, main ID fan, kiln, and finish mill. These sensors are used to detect vibration that could indicate malfunction of the equipment. These devices are beneficial for onsite monitoring but would not provide any assistance in the circumstances surrounding the resident's health concerns.

The facility has been shut down several times over the last few years and it was noted that the vibration was still present. As a result this and of the testing (of which reports have been shared with the resident), no correlation to St Marys Cement has been found.

The Community Liaison Committee was established as a way to discuss concerns of residents regarding Cement Plant operations. If other residents in town have concerns they wish to bring to the Committee or the plant they are encouraged to do so, as the plant has always strived to maintain open dialogue with residents.

Regards,

St Marys Cement

Questions Brought Forward in Advance

Would it be possible to get a year end summary of all the projects, what was the goal on each and where we stand?

Status	
Odour	Enviro-Suite software ongoing; potential new ambient monitor being reviewed by the plant
Noise	SMC is reviewing the requirements for Main ID fan Noise Abatement. 4 Other silencers have been installed on site for Phase 3, and more will be installed over the upcoming months.
Dust	SMC conducts ongoing dust control monitoring and improvements as required. As an initiative for dust improvement SMC is examining modifications that can be done to the main baghouse.
General Projects	SMC is installing a new roll crusher and a new hot gas system which will allow for improved efficiency on the finish mill system. The Alternative Low Carbon Fuels Permit (which was submitted on March 31 st , 2022) is still pending with the MECP.
Year Forecast	2023 is forecasted to be a busy year for cement production. Onsite projects include modifications for ALCF and material handling systems.

Round Table

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

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

6 Tips to Avoid Slips in the Winter

- 1 When outside wear shoes or boots with heavy treads for increased traction and avoid icy areas.
- 2 Keep walkways, stairways, and other work areas clear by removing hazards like snow immediately.
- 3 Look where you are going and have your hands ready to steady yourself should you slip.
- 4 Avoid carrying heavy loads that may compromise your balance.
- 5 Mark hazardous areas by using signs, cones, or barricades to warn pedestrians.
- 6 Make yourself visible to drivers by wearing a brightly colored jacket or clothing.