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Cimentos
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 **St Marys Cement**

St Marys Community Meeting
May 15, 2018

- **We have been here and committed to the community since 1912**
- **The mechanism of cement manufacturing has not changed since then; processing raw limestone from the quarry through a cement kiln to form clinker, which is then further refined into the final cement product**



- In addition to employing men and women in the community and region, St Marys:
 - Operates in a highly regulated business environment; everyday over 69,000 points of data related to the proper and safe operation of our plant are collected and analyzed
 - Operates in a competitive sector of the economy
 - Makes a product that is essential to our way of life and key to the construction of the long lasting and durable things around us – bridges, roads, the CN Tower and even the Pyramid Centre where we are meeting today.



- **Extensive work was done by Perth District Public Health Unit and MOECC scientists to test the air quality in St. Marys.**
- **St Marys Cement is concerned about the health of people in our community young or old, this includes our neighbours and employees.**
- **We take compliance with the regulations that govern health and safety seriously – both at the plant and in the community.**
- **It is also important that the community is fully informed. We welcome your questions, and are committed to transparency and sharing what we know with you.**

- **There is a complexity to odour management that requires consideration of various factors including**
 - **Weather conditions**
 - **Other sources in the airshed**
 - **Individual tolerance and perception of odour**
- **St Marys Cement is the most high profile source, but other sources in town may be contributing to the overall odour issue in the community. In February 2018, several members of the community attributed odour detected to St Marys Cement -- while the plant was down for annual shutdown.**
- **Over the last 10 years, we have invested nearly \$1 million to find a long term solution to reduce odour emanating from the plant, beginning with identifying the source of the problem.**
- **Our new Odour Abatement Plan has been submitted to the MOECC and will guide St Marys Cements' efforts going forward.**
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Timeline

- **2009 – Chemical analysis of raw materials to look at organic matter which has the potential to create odorous compound.**
- **2011- St Marys removed portion of the raw material with organic matter with higher carbon content. This was not successful in reducing odour.**
- **2010-12 - Studied how the air dispersion would be impacted by an increased stack height. The studies indicated only an improvement, but not a full solution.**
- **2011- Conducted a one-week alternative fuel trial to see if there was a reduction in Sulfur Dioxide – no changes in other compounds. We have not used alternative fuels since.**
- **2013 and 2017 – Lime injection (which tends to work on sulfurous compounds, but not on odour)**
- **2015 – Engaged AMEC to do extensive testing at various points in the system under different operating conditions. Analysts found no conclusive results.**
- **2017 – Conducted source testing according to Ministry requirements and as per Ministry guidelines. Results were within compliance limits for odour and compounds.**

- **After ten years of examination of the most likely causes of the odour from the cement process, we gained valuable insights, but were unable to find or mitigate the direct source of the odour.**
- **Harnessing the knowledge gained from the tests and analysis, we developed a new Odour Abatement Plan, which was submitted to the MOECC in February 2018.**
- **The new approach calls for an examination of the raw materials used in the process.**
- **St Marys Cement is working with external consultants, who are experts in the following fields:**
 - **Zorix (Odour Management Consultant)**
 - **BCX Environmental (Environmental Consultants)**
 - **RWDI (Environmental Monitoring and Testing, Odour Surveying, and Air Modelling)**

- **Zorix is working to develop a methodology to evaluate different raw materials to analyze their odour contribution based on sensory characteristics.**
- **Sophisticated Equipment, including an olfactometer, will be installed in St Marys Cement for the duration of the study.**
- **Zorix will calculate odour emission potential of kiln feed and different raw materials that could be used to predict actual kiln odour rates.**
- **We will evaluate the feasibility of doing a full scale trial by including or excluding certain raw materials.**
- **If substitution of raw materials is not possible, an evaluation of control technologies will be considered.**

- **Options to improve air dispersion will be examined, including:**
 - **Increasing the height of the main stack**
 - **Increasing the velocity of the gases exiting the main stack by changing the diameter of the stack**
 - **Increasing the flow of the gases by adding an additional fan to inject fresh air**
- **Air modeling will be used to validate each option and evaluate if a single or combined solution is effective.**
- **St Marys Cement will continue to keep the community informed through our website, the media, and public meetings of our Community Liaison Committee.**

- **Dust can be a nuisance, and St Marys Cement understands that there are times when dust from our plant can settle on nearby vehicles. This can also occur with dust from construction sites, road sweeping or from agricultural operations.**
- **Last year, we instituted a new process to help us better respond and identify the impact from our operations, in order to gather useable data to support our efforts to minimize the impact on the community over the long term.**
- **When we receive a call:**
 - **A sample of the dust is collected.**
 - **It is examined in the lab to determine if the dust came from the plant.**
 - **In most cases, the testing is complete within one business day.**
 - **If the sample is not excluded as coming from the plant, we will have your car cleaned.**
- **St Marys Cement then reviews the sample results, the wind and weather conditions, and other potential contributions of dust in the area at the time, to help us find a long-term solution.**

- From the results of our most recent noise audit, St Marys Cement has developed a detailed ten-year noise reduction plan, including:
 - 2019 - Noise attenuation measures includes installation of sound deadening roller doors and enhanced foam insulation in buildings
 - 2021 - Silencer on the fan of the main stack
 - 2023 - 2025 Silencers and enclosures at various locations throughout the plant
 - 2027 - Additional silencers and enclosure, and noise mitigation for the conveyor

- Since 2017 working with the Town of St. Marys, and in response to community concerns, most St Marys Cement vehicles have been re-routed from a residential road to the current route on an industrial rated road, resulting in a sharp reduction from 60 trucks per day to 4 to 6 per day.

- In 2017, a committee was formed with representation from residents of St. Marys, St Marys Cement, the MOECC, and St. Marys Town Council.
- Residents joined the committee because they felt the need to form a collaborative forum where they could express their concerns and the concerns of fellow residents openly
- The Community Liaison Committee focuses on addressing these concerns while maintaining the legacy of the cement plant within St. Marys
- We have 5 residents from town.
- We meet quarterly
- Next meeting is June 1st in the town hall at 10am.

- Thank you for coming to hear about our plans to address our part of the odour, dust, noise and traffic in St. Marys.
- We appreciate that you understand that there are many sources of these concerns in our community, and some things are beyond our control— such as wind and weather.
- St Marys Cement is committed to improving the elements within our control, and we are compliant with the regulations that govern our operations.
- We want to hear from you. When you have a question or a concern, please do not hesitate to pick up the phone, or send us an email.
- Contact the Cement Plant:
 - Kara Terpstra, Environmental Coordinator – 519-284-1020 x 235, kara.terpstra@vcimentos.com