







Community Liaison Committee Meeting

Date: June 1st, 2018 Location: St Marys Town Hall Agenda



- Welcome and Introductions
- Review of May 15th Meeting
- Community Complaints
- Petcoke at St Marys Cement
- Odour Abatement Plan
- Round Table
- Closing Remarks



- Welcome
- Round Table Introductions
- Format of the Meeting









Month	Odour	Noise	Dust
January	0	0	0
February	9	0	1
March	9	1	1
April	3	0	0
Мау	10	0	1
June			
July			
August			
September			
October			
November			
December			



Petcoke in the Cement Industry

St Marys Cement and Odour Abatement



- 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.



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.



Round Table



Closing Remarks