



 **Votorantim**  
Cimentos  
Life is made to last

## Community Liaison Committee

February 27, 2018

- 1. Welcome**
- 2. Minutes from November**
- 3. Recent Activity**
- 4. Finalization of CLC Terms of Reference & Discussion about Open Meeting with the Public**
- 5. Source Testing Results and Next steps**
- 6. Round Table**
- 7. Closing Remarks**

## Minutes from November 17, 2017

- **CBC Article**
  - December 4, 2017
- **Meeting with MOECC in December**
  - December 4, 2017
- **Newspaper Articles in the St Marys Independent**
  - December 11, 2017
- **Results from MOECC Mobile testing conducted in Summer 2016**
  - Published on Town Website Feb 5, 2018
  
- **Shutdown at St Marys Cement**
  - January 1<sup>st</sup> – February 23<sup>rd</sup>

# **Finalization of CLC Terms of Reference & Discussion about Open Meetings with Public**

## Source Testing Results and Next Steps

## Source Testing Results and Next Steps

- **Source Testing Plan**
- Outline of how and when source testing will be done at St Marys Cement.
- **Submitted to the MOECC and accepted in October 2017.**

- **Source Testing**
- **Nov 27-29, 2017**
- Sampling of gases directly from the main stack using MOECC testing standards
- Analysis was done to get concentrations of MOECC agreed upon compounds (Nitrogen Oxides, Sulphur Dioxides, Ammonia, Total Reduced Sulphur, Carbon Disulphide, Carbonyl Sulphide)
- Analysis of Odour

- **Air Modelling**
- Using the results of the source testing to

- Two Parts:
  - Stack Testing
    - November 28-29, 2017
    - Completed by RWDI – Air Testing company
    - RWDI extracted gas samples from the stack on two different days.
    - Methods of extraction and analysis were all done according to MOECC Standardization testing.
    - Analysis was done to get concentrations of MOECC agreed upon compounds (Nitrogen Oxides, Sulphur Dioxides, Ammonia, Total Reduced Sulphur, Carbon Disulphide, Carbonyl Sulphide)
    - Analysis was also done to get Odour Units (OU /m<sup>3</sup>) 1 OU/m<sup>3</sup> is the level at which 50% of the population can detect an odour.
  - Air Modelling
    - Completed by BCX Environmental Consultants
    - BCX took the analysis results from RWDI and modelled them using AERMOD, which is a computer program used for complex modelling of air dispersion. AERMOD is the computer model requested by the MOECC.
    - We can use the AERMOD to determine ‘odour contours’ in town which indicate where the wind would show less dispersion, and higher concentrations of odour.





- **Odour Contours look at:**
- Terrain data: Wind moves differently around buildings, through forests, hills and rivers.
- Predominant winds: Weather data for the past 5 years demonstrates SW wind as the prevailing wind (both winter and summer)
- Source Testing Data : Values from the Source Testing which indicate what is coming out of the stack
- Production Values: The plant is producing under normal operating conditions
- AERMOD plots 'odour contours' which show which areas are expected to experience higher levels of odour (diagram- according to the colour scale the yellow areas are higher than the green).
- AERMOD also calculates what the dispersion levels are at 'Sensitive Receptors' (pink dots) which are located in high contours. These calculated levels are how we determine whether we are within our compliance limits.
- The blue boxes on this map are the buildings at St Marys Cement.
- The yellow dot (in the middle of the blue buildings) is the main stack

- **AERMOD calculates the levels of dispersion using Ministry approved calculations and compares them to Point of Impingement regulatory limits.**
  
- The final results of our source testing indicated that we are within limits.
  - The limits for chemicals are very specific: ppm or mass/m<sup>3</sup>.
    - **We are within the regulatory limits.**
  - The limits for odour are based off of time weighted odour units.
    - The MOECC guideline for odour is: the 10 minute odour concentration greater than 1ou/m<sup>3</sup> for no more than 0.5% of the time in a 5 year span.
    - **We are within the regulatory limits.**

### Odour Abatement Plan

- Due at the end of April 2018
- Requires the plant to look at the the main sources of odour emissions and the causes for odour emissions resulting from these sources
- Requires the plant to put measures and procedures in place or under development to minimize the discharge of odour
- Requires an implementation schedule for odour abatement measures

## Round Table

- **Upcoming meetings**

- Meeting organized by the MOECC open to Citizens, Town Council, and St Marys Cement in April

- **Next CLC meeting to be held in May 2018**