

# St Marys Cement Community Relations Committee

## Meeting Minutes

Tuesday December 3<sup>rd</sup>, 2019

5:00 p.m. – St Marys Cement, Bowmanville Plant

**Attendees:** Amy Burke, *Senior Planner*, Municipality of Clarington  
Cherisse Diaram, *Quarry EIT*, St Marys Cement  
David Veenstra, Port Darlington Community Association  
Jim Grimley, Wilmot Creek Homeowners Association  
Jim Storey, *Operations Manager*, St Marys Cement  
Joe Neal, *Councilor*, Municipality of Clarington  
Luis Urbina, *Environmental Manager*, St Marys Cement  
Pauline Witzke, Port Darlington Community Association  
Ruben Plaza, *Environmental Manager*, St Marys Cement  
Tanya Pardy, *Human Resources Manager*, St Marys Cement  
Yhon Downie, *Quarry Manager*, St Marys Cement

**Guests:** Bridget Mills, BCX  
Don Hoff, Eco Strategy  
Sarah Schmied, Golder Associates

**Regrets:** Kim Lendvay, *Senior Environmental Officer*, MOECC

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### 1. Low Carbon Fuels

- Requesting approval for use of ALCF under Ontario Regulation 79/15: ALTERNATIVE LOW-CARBON FUELS
- Goal is 30% thermal replacement of fuel, increasing alternate low carbon fuel usage from 100 tpd to 400 tpd
- Alternative low carbon fuels (ALCF)
  - CO<sub>2</sub> intensity (unit of energy emitted per weight of material) is less than coal or pet coke
  - Material that are not to be recycled
- Site already operates with two compliance approvals for
  - For using low carbon fuel – woody materia
- Process to apply for approval to use alternative fuels
  - Demonstration project
  - Meeting with MECP
  - Environmental Studies
  - Public meeting #1 September 5<sup>th</sup>
  - Public meeting #2 December 17<sup>th</sup>
  - After meeting will address concerns raised
  - Comments until January 2020

- Will submit application following this process, Spring 2020
- Questions from 1<sup>st</sup> public meeting
  - Source of materials, emissions monitoring, air quality impacts of burning plastics, consultation with governments,
- Studies required:
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- Air quality study
  - Requirement
    - ❖ Prompted by community interest and concerns over impact on community and cumulative impacts from other industry in the area and 401
    - ❖ Compliance approval still required for emissions at the property line
  - Identified major community areas in 10km radius and 123 contaminants of particular concern (CoPCs) to study
    - ❖ Included PM2.5, NOx, SOx, HCl, Dioxins, Benzene, Lead, Mercury, etc.
    - ❖ Compared to regulatory limits and Ambient Air Quality Criteria (for Ontario and Canada)
  - Cummulative Effects
    - ❖ Background data gathered from local station at Courtice Rd. and Rundle Rd., 2008 site study and Newcastle station
    - ❖ Considered current background and future background (including projected increase from Energy from Waste Process)
    - ❖ Did not remove SMC contribution from background to create more conservative model
  - What was assessed
    - ❖ Assessed key plant property operations (quarry, CBM, dock, plant)
    - ❖ Did not assess mobile operations
  - Emissions Model
    - ❖ Incorporated lake effect (fumigation effect) which can increase contaminant concentration
  - Cumulative effects
    - ❖ Some contaminants were higher than Ambient Air Quality Standards in background measurements so impact of operation on those contaminant was assessed
- Question: Where is the background information from? They say that PM2.5 is below limits
  - Answer: 2 years of data from two locations included
  - PM2.5 in development, based on past 3 years of data
- How conservative was the study?
  - Some CoPCs decreased, some stayed the same and some increased
  - The highest values of the background data and the study data, were used for generating the model (none of the decreased CoPC levels were included)
- What were the results?
  - No significant change expected, but decrease in CO<sub>2</sub> emissions expected
  - Results by community areas will be available for different CoPCs
- Why do we anticipate lower impacts in the future?

- Tail pipe emissions will continue to go down (due to changing regulations, push for more efficient equipment and vehicles across the site and area over time)
- Annual source testing will continue (will show emissions a result of kiln operations rather than ALCF particularly)
- Scrubber expected to reduce emissions but was not included in the model, currently scheduled for 2021

b) Acoustic Noise Study

- One residential property at NW corner of site may be impacted
- Negligible additional impact due to ALCF

c) Traffic Study

- 5 trucks per day expected
- No additional impact on traffic expected from ALCF project

d) Storage

- Alternative Fuels building already in place, plan is to continue to use this and expand in adjacent area
- Fuel stored must be reasonable expected to be used within 6 months

e) Next Steps

- Public meeting
- Address concerns from public meetings
- Finalize studies
- Submit application

f) Questions

- Would these materials end up at landfill or at incinerator?
  - Materials used would not be recycled
  - There may be suppliers that overlap with suppliers for incinerator
- Is burning in cement plant better than burning in incinerator?
  - Process is much higher temperature
  - Gasses have a longer residency time and interacts with raw materials which acts like a dry scrubber
  - No ash is produced
  - Require more consistent, less variable material
- Is there a cost benefit?
  - The operation is sustainable because of the cost considerations and environmental impacts
- What makes this economical now more than 10 years ago?
  - The application has been in progress for 10 years
  - Already in place all over the world but the regulations in Ontario changed in 2015 to allow this to happen

- Will there be 2 additional truckloads each hour? How much of the process of acquiring the material is being calculated in?
  - The local emissions are being considered, not the impact of hauling the material to site
  - Material would likely be trucked to landfill
- Where is benzene and benzoate pyrene from? Is this from burning of fuels?
  - This is from the burning of all fuels; stack emissions and tail pipe emissions from all vehicles and all other processes
- Difference between what is coming out of tail pipes and stack?
  - Contribution broken down by background and by area in table, with values and percentages
  - Based on source testing and background data
- Predictions from source testing vs data
  - Was pretty close
- Benzoate pyrene
  - Standard changed in 2015
  - Previous approach in setting standard was based on toxicology and economics but now based on toxicology
- What about PM10?
  - Didn't assess PM10
  - It used to be considered an indicator of health impacts but better indicator of nuisance dust
  - PM2.5 is a health based standard
- They're [SMC] always bumping against NO<sub>x</sub> limit but presentation shows that this is ok
  - There are different regulations – compliance based on point of impingement and ambient quality standard
  - NO<sub>x</sub> reporting is based on province wide initiative to reduce level, not compliance requirement, similar to carbon tax
- If plastics is burning, how is biological carbon intensity lower? If a tonne of carbon is burned, how much carbon is emitted?
  - Wood and other biological materials would be sources of biological carbon
  - Emissions included in table
- If temperature was lower, would that number [emissions] go up or go down?
  - The temperature would not be lower, ALCF would not be used at startup and shutdown of kiln, only while running
  - Not certain what the impact would be at lower temperatures
  - St Marys, ON site carried out trial using film plastics
- Are the fuels and results similar to other facilities?
  - Woods and plastics are common, tires also common but not likely at this stage to be allowed in Ontario
  - Results similar in other sites, limited impact of burning ALCF
  - Previously, limited interest in greenhouse gas consumption

## 2. Community Concerns

- a) Two concerns received

- Recent concern from resident on Cove Rd.
  - Visited by Yhon and Luis during a blast and Golder is working on report for specific location
- Municipality of Clarington received complaint about truck traffic and damage to hydro pole
  - Investigated and determined this was likely salt truck traffic that are being directed to Cedar Crest Beach Road when using the old 400 Waverly Road address
  - Communication sent previously to vendors and now requested that salt vendors be updated
  - There have been a small number of other trucks trying use Cedar Crest Beach Road in the past few months
  - Limited ability to improve signage

### 3. St Marys Operations Report

#### a) Monitoring Station Locations

- The monitoring station locations were reviewed and are as follows:



- PM 10 stands for particulate matter which is less than 10 microns in size
- Dust fall jars take a sample over 30 days which is sent for testing, PM 10 BAM monitors take an hourly sample and PM 10 hi-vol monitors take a sample for a 24H period, every 6 days

#### b) New permanent seismograph in progress with Municipality

#### c) PM10 Results

- No exceedances in PM10 in continuous monitoring stations

#### d) Dust Fall Monitoring

- No exceedences

e) SO<sub>x</sub> emissions

- Exceeding allowance for 2019 already, since late summer
- Will transfer credits from St Marys, ON operation for 2019 to comply
- Scrubber project has been delayed and is scheduled for March 2021 and is expected to reduce emissions below the allowance levels
  - Further benefit in production of gypsum through scrubber

f) NO<sub>x</sub> emissions

- Below limits and expect to be below limits at end of year
- Will transfer credits for 2019 to St Marys, ON operations

g) Dock Operations – continuing practices to minimize impacts

h) Quarry Operation

- Producing 2,3,5 until March
- Overburden stripping, screening and stockpiling
  - Will resume in 2020, weather permitting

i) Vibration Results

- No ground or air vibration exceedances for 2019

#### 4. Community Outreach

- Bowmanville Hospital Foundation
- Clarington Big Brothers & Sisters
- Clarington Sports Hall of Fame
- Clarington Schools – safety booklets in classes
- Bowmanville and Courtice Santa Clause Parades

#### 5. Other items

- Request from Gord Weir
  - Drive through of detour route
  - Tentatively booked for Saturday December 14<sup>th</sup>
  - Gord Weir was planning to check with residents that this date works
  - Site is accommodating for date in 2020 or more than one day
  - Road network to east is upgraded and should be available for use – this is the default emergency route and SMC route would be open under consultation with fire chief
  - Municipality may re-issue detour route notice
- Future meeting
  - Invitation to fire chief or deputy to discuss detour route
- Tour of facility
  - PDCA interested in touring the plant (8 people), to contact Tanya
- Annual Report

- Almost completed, will be sent for review in next few days

## **6. Next Meeting**

- Meeting for ALCF consultation December 17<sup>th</sup>, 2019
- February 4<sup>th</sup> @ 5pm