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- 2. Background
- 3. Site-Specific Standards
- 4. Actions to Reduce Emissions
- 5. Public Consultation Process
- 6. Your Feedback



### 1. Introductions





### **Presenters and Representatives**

People Presenting and Available to Respond to Questions at the End of the Presentation

- Carmeuse Lime (Canada) Limited
  - Chris Martin, Senior Environmental Manager, Northern Region
  - Chris Cooke, Plant Manager, Dundas Operations
  - Cem Gercek, P.Eng., Area Operations Manager
- Stantec Consulting Ltd.
  - Kim Ireland, Associate, Project Manager







# 2. Background



### Carmeuse

**Company Overview** 

 An international, leading producer of limestone and lime products

 Parent company is fifthgeneration, family-owned business based out of Belgium (160 years)

 Three facilities operating in Ontario for 70 years near Beachville, Blind River, and Dundas

- 180 employees in Ontario
- Financial and volunteer support for local charity organizations





### **OUR MARKETS AND APPLICATIONS**

Carmeuse products make steel stronger, air cleaner, water purer, and roadways last longer — a vital ingredient in the materials that build and renew infrastructure around the World.











**Environment** 

Iron & Steel

Chemicals

Civil Engineering & Construction

Agriculture











Pulp & Paper

Glass & Ceramic

Flue Gas Treatment

Non-Ferrous Metal

Building Materials



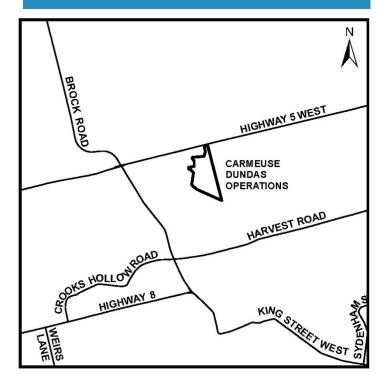
### **Carmeuse Dundas Operations**

**Site Location** 



### **Address:**

600 Hwy #5 West,
P.O. Box 2029,
Dundas, Ontario L8N 3S9
Site Telephone Number:
905-628-8800





### **Process Overview**

**Two Primary Processes** 

### **Limestone Quarry Process – Lafarge Canada**



Quarrying Limestone Rock Primary Crushing

Secondary Crushing

Sizing

### **Process to Produce Lime Products – Carmeuse Lime Dundas**



Calcination in Kilns

Refining and Resizing

Additional Processing for Some Products

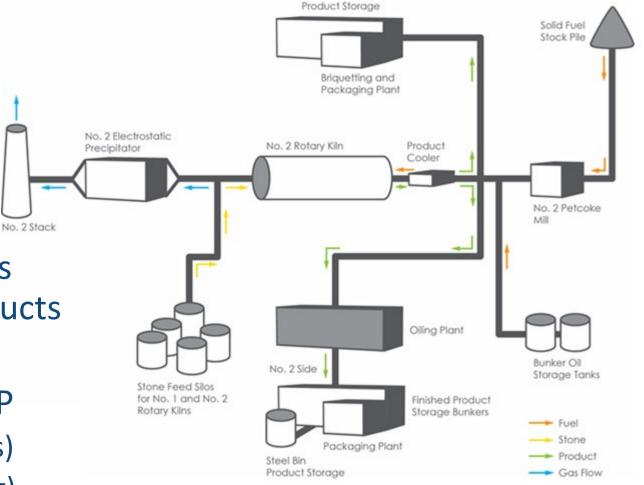
Storage and Shipping



### **Production Process**

### **Kiln Operation**

- Kilns operate 24 hrs/day for 365 days/year
  - Each Kiln equipment with an Electrostatic Precipitator
- Processing and handling activities transfer limestone and lime products
  - 23 baghouses control emissions
- Sources of Calcium Oxide and TSP
  - Point sources (Kilns and baghouses)
  - Fugitive Sources (material handling)





# 3. Site-Specific **Standards**



Ministry of and Climate

Change

Ministère de l'Environnement Environment et de l'Action en matière de changement climatique

Site-specific Standard Approval Issued Pursuant to s.35(1) of O. Reg. 419/05

Approval Number: 203-17-rv0 Reference Number: 6834-AHZIVN Issue Date: February 23, 2018 Expiry Date: February 23, 2028

Site-Specific Standard Approval issuedto:

Carmeuse Lime (Canada) Limited

Site Location:

600 Highway 5 West Dundas, Ontario L9H 3S9

**Existing Site-Specific Standard Approval for** Suspended Particulate Matter (Dust)



Ministry of and Climate Change

Ministère de l'Environnement Environment et de l'Action en matière de changement climatique

Site-specific Standard Approval Issued Pursuant to s.35(1) of O. Reg. 419/05

Approval Number: 204-17-rv0 Reference Number: 6834-AHZJVN Issue Date: February 23, 2018 Expiry Date: February 23,2028

Site-Specific Standard Approval issuedto:

Carmeuse Lime (Canada) Limited

**Existing Site-Specific Standard Approval for** Calcium Oxide (Lime)

Site Location:

600 Highway 5 West Dundas, Ontario

L9H 3S9

### Ontario Regulation 419/05 Air Pollution – Local Air Quality

reduce emissions

**Section 32 – Site-Specific Standards** 

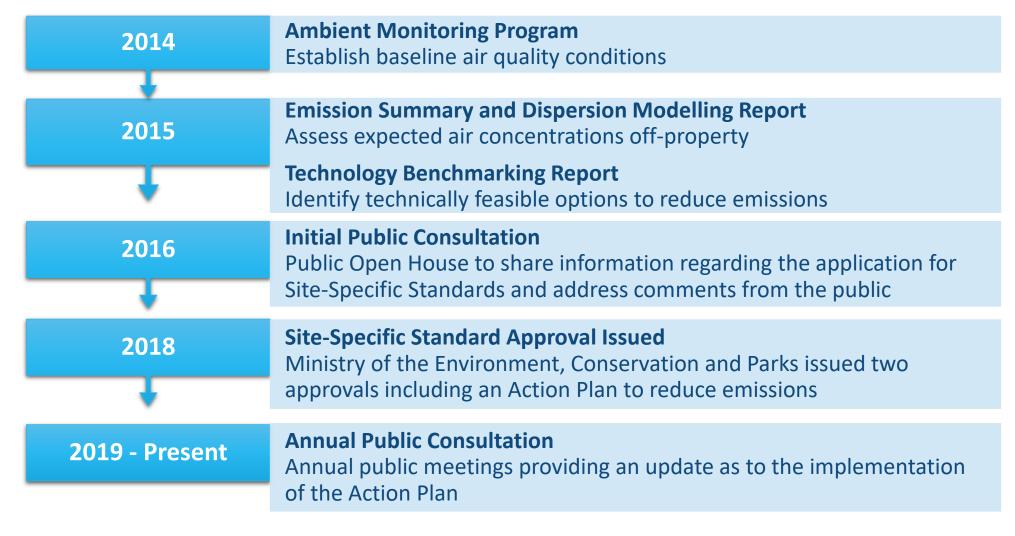


CARMEUSE

Specific Standard

### Timeline

#### **Key Milestones**





### **Site-Specific Standards for Carmeuse Dundas Operations**

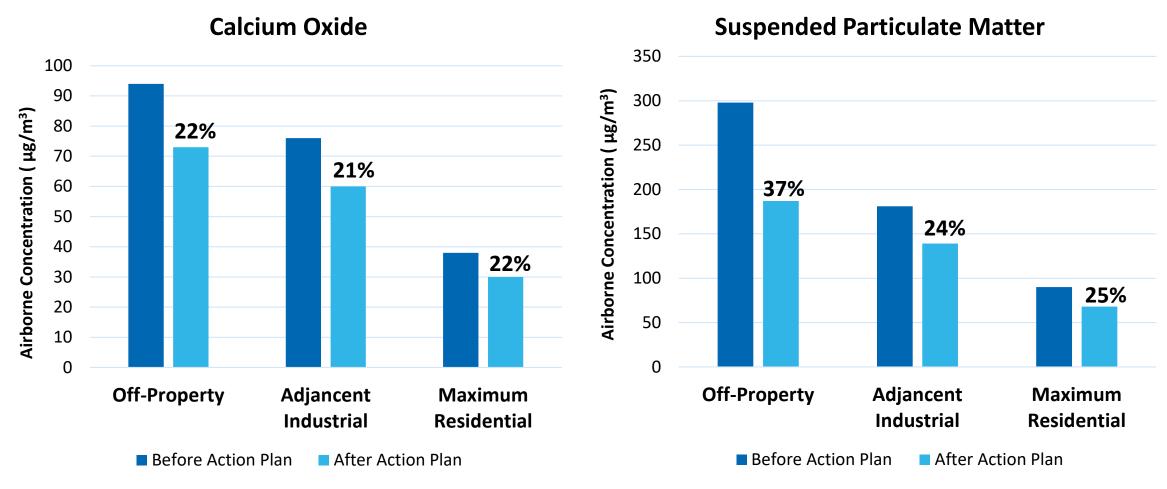
**Approved Limits for Calcium Oxide and Suspended Particulate Matter** 

Contaminant	Applicable Dates	Site-Specific Standard (µg/m³)	Averaging Period
Calcium Oxide (Lime)	February 23, 2018 to June 1, 2023	94	24-hour
	June 1, 2023 to February 2028	73	
Suspended Particulate Matter (Dust)	February 23, 2018 to June 1, 2023	298	24-hour
	June 1, 2023 to February 2028	187	



### **Air Dispersion Modelling Results**

Maximum Predicted Airborne Concentrations of Calcium Oxide and Suspended Particulate Matter at Ground-Level Before and After Implementation of the Action Plan





# 4. Actions to Reduce Emissions



### **Action Item A: Low-Grade Lime Storage Pile**

Reduce wind erosion from storage piles – Completed in 2018



December 2015: Long-term storage of lime in various locations



December 2018: Short-term storage of a small quantity of lime in a designated enclosure



### **Action Item B: Bunker Loadout**

- Enclosure of Bunker Loadout Completed in 2018
- Mitigative actions including reduced loadout frequency and increased operation supervision



December 2015: Bunker Loadout area open and pile of lime



December 2018: Bunker Loadout area enclosed with metal sheeting and pile of lime removed



### **Action Item C: Bin Loadouts**

Upgrades to Loadout Areas - Completed in 2018



December 2015: Bin 12/13 Loadout with damaged dust curtain (plastic strips)



February 2021: Bin 12/13 Loadout area dust curtains



### **Action Items D and E: Kiln Smoke Chambers**

- Enclosure of Kiln #1 and Kiln #3 fallout area Completed in 2018
- Creation of chute and fallout bin for Kiln #3 Completed in 2018



December 2015: Kiln #2 Smoke Chamber Fallout area open



December 2018: Kiln #2 Smoke Chamber Fallout area enclosed



### **Action Item F: General Production Area**

- Increasing concrete / paved areas of facility
- Completed in 2020



December 2015: Accumulated material in production area and gravel surface



December 2018: Removal of accumulated material and new concrete and pavement

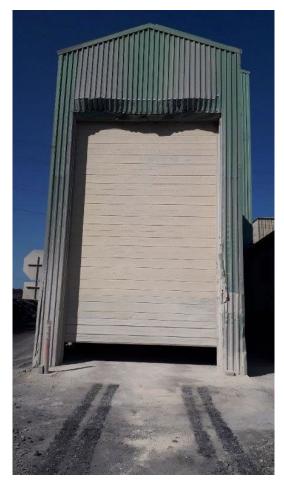


### **Action Item G: Screening Plant Hoppers**

- Enclosure of screening plant hoppers
- Completed in 2020



**December 2018: Screening Plant Hopper** 



September 2020: New door on Screening Plant Hopper Building



### **Action Item H: Buggy Hopper**

- Partial enclosure of the Buggy Hopper
- Scheduled to be completed in 2021



**December 2018: Buggy Hopper** 



### **Action Item I: Stone Intake**

- Full enclosure of stone intake building by installing a roll-up door
- Scheduled to be completed in 2021



**December 2018: Stone Intake** 

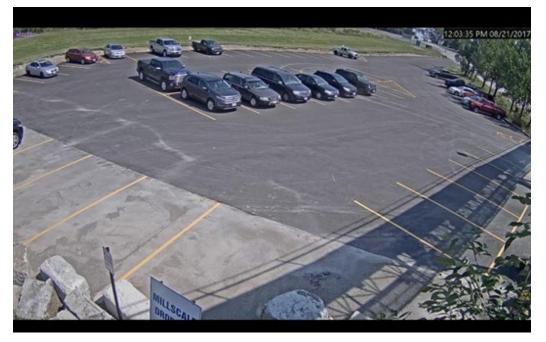
### **Additional Voluntary Initiatives**

### **Employee Parking Lot**

- Employee parking lot paved to reduce fugitive emissions and allow for cleaning
- Completed in 2017



July 2017—Gravel Lot



**August 2017— Paved Lot** 



### **Additional Voluntary Initiatives**

### **Truck Overfilling**

- Automated and administrative controls implemented
- Designated area for load adjustments
- Improved operation of Buggy Hopper for recycling lime
- Completed in 2018



**December 2018 - Designated Area for Overloads** 



December 2018 - Buggy Hopper and Conveyor



# 5. Public Consultation Process



### **Key Elements**

Due to concerns and restrictions related to the COVID-19 pandemic, a virtual public information meeting was convened rather than an in-person public open house.

Website with information which would have been provided on storyboards at an inperson meeting

Opportunity for public comments through Carmeuse's website and email address

Virtual public meeting where information is being presented and address comments

Public Consultation
Report to be
prepared overviewing
the process and how
public comments
addressed

Submit comments before May 31, 2021 through Website: carmeuse.com/na-en/dundas-operations OR

**Email Address: CarmeuseProjects@stantec.com** 



## 6. Feedback



