

**CARGILL LIMITED**  
**GUELPH BEEF DIVISION**  
165 DUNLOP DRIVE, GUELPH, ONTARIO N1L 1P4

**TOXICS REDUCTION ACT**  
**TOXIC SUBSTANCE REDUCTION PLAN SUMMARIES**  
**2013**

REPORT PREPARED BY:  
*O2E INC.*

REPORT PREPARED FOR:  
CARGILL LIMITED

DECEMBER 27, 2013

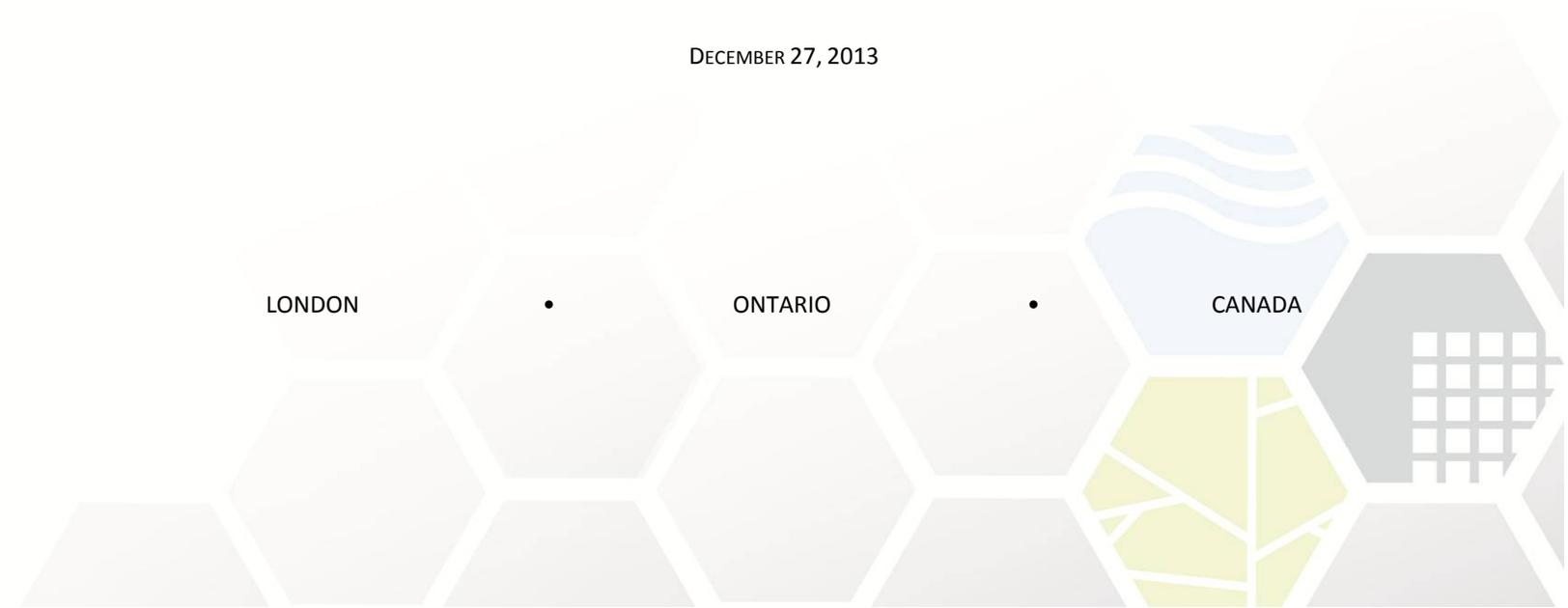
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## 1. PLAN SUMMARY – AMMONIA (TOTAL)

<b>Name and CASRN of Substance</b>	Ammonia (total)	NA-16
<b>Substances for which other plans have been prepared</b>	Particulate Matter $\leq 2.5$ Microns	NA-10
	Particulate Matter $\leq 10$ Microns	NA-09

### 1.1 Basic Facility Information

Basic facility information has been included in Section 4 of this document.

### 1.2 Toxic Reduction Policy Statement of Intent

When Cargill began in 1865, our business was founded on the belief that “our word is our bond.” Today, as a diversified global company still grounded in a culture of trust and respect, this remains the standard by which we do business. We operate with integrity and accountability. We are committed to feeding the world in a responsible way; reducing our environmental impact; and improving the communities where we live and work. We are passionate about our goal to be the global leader in nourishing people and operating responsibly across the agricultural, food, industrial and financial markets we serve.

At Cargill, environmental stewardship is a part of everyday life. It is engrained in our way of thinking and doing business and is supported by employees at every level and location.

When it comes to environmental issues, Cargill believes in continuous improvement. While protection of our water, air, soil and vegetation is certainly paramount, maintaining the status quo is not enough. We are confident that, with increased innovation, creativity, and teamwork, it will be possible to revitalize our natural resources and surroundings. This is a responsibility we all share — governments, businesses, communities and individuals.

Wherever feasible, Cargill will reduce the use and release of Ammonia in full compliance with all federal and provincial regulations. Toxic substance reduction will be an ongoing effort at Cargill, and we will continue to monitor technological advancements to ensure that options that are both technologically and financially viable are implemented at our facility.

### 1.3 Reduction Objectives

The reduction of toxic substance use, creation and releases is a priority for Cargill forming part of our sustainability programs and EMS. Our goal is to reduce the use and release of Ammonia (total) where technically and economically feasible. At the present time there are no reduction options that are both technically and economically feasible for this substance. However, we will continue to explore new options as they arise as part of our sustainability programs.

#### **1.4 Description of Substance**

Once the cattle has been slaughtered and processed it must remain cooled to prevent spoiling. Once the meat is removed from the cow the remaining processes take place in a refrigerated environment until the product has left the Facility on a refrigerated truck. The ammonia system at the Facility is uses liquid Ammonia and recycles the substance. The Facility records the amount of Ammonia added annually to top up the refrigeration system. A small amount of fugitive emissions is released to the atmosphere by the refrigeration system.

#### **1.5 Toxic Substance Reduction Option to be Implemented**

There are currently no reduction options that have been identified as being both technically and economically feasible for this substance.

#### **1.6 Plan Summary Statement**

This plan accurately reflects the content of the toxic substance reduction plan for Ammonia, dated November 25, 2013.

#### **1.7 Copy of Plan Certification**

A copy of the plan certification is presented in Section 5 of this document.

## 2. PLAN SUMMARY – PARTICULATE MATTER ≤2.5 MICRONS (PM<sub>2.5</sub>)

<b>Name and CASRN of Substance</b>	Particulate Matter ≤2.5 Microns	NA-10
<b>Substances for which other plans have been prepared</b>	Ammonia (total)	NA-16
	Particulate Matter ≤10 Microns	NA-09

### 2.1 Basic Facility Information

Basic facility information has been included in Section 4 of this document.

### 2.2 Toxic Reduction Policy Statement of Intent

When Cargill began in 1865, our business was founded on the belief that “our word is our bond.” Today, as a diversified global company still grounded in a culture of trust and respect, this remains the standard by which we do business. We operate with integrity and accountability. We are committed to feeding the world in a responsible way; reducing our environmental impact; and improving the communities where we live and work. We are passionate about our goal to be the global leader in nourishing people and operating responsibly across the agricultural, food, industrial and financial markets we serve.

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Wherever feasible, Cargill will reduce the creation and release of Particulate Matter ≤2.5 microns in size (PM<sub>2.5</sub>) in full compliance with all federal and provincial regulations. Toxic substance reduction will be an ongoing effort at Cargill, and we will continue to monitor technological advancements to ensure that options that are both technologically and financially viable are implemented at our facility.

### 2.3 Reduction Objectives

The reduction of toxic substance use, creation and releases is a priority for Cargill forming part of our sustainability programs and EMS. Our goal is to reduce the creation and release of PM<sub>2.5</sub> where technically and economically feasible. At the present time there are no reduction options that are both technically and economically feasible for this substance. However, we will continue to explore new options as they arise as part of our sustainability programs.

## **2.4 Description of Substance**

PM<sub>2.5</sub> is created by the combustion of natural gas in the facility's boilers, hot water heaters and general heating equipment. Estimates of quantities of PM<sub>2.5</sub> created and released is based on the amount of natural gas burned on an annual basis and emission factors published by the U.S. EPA in AP-42 Chapter 1.4 "Natural Gas Combustion".

## **2.5 Toxic Substance Reduction Option to be Implemented**

There are currently no reduction options that have been identified as being both technically and economically feasible for this substance.

## **2.6 Plan Summary Statement**

This plan accurately reflects the content of the toxic substance reduction plan for PM<sub>2.5</sub>, dated November 25, 2013.

## **2.7 Copy of Plan Certification**

A copy of the plan certification is presented in Section 5 of this document.

### 3. PLAN SUMMARY – PARTICULATE MATTER ≤10 MICRONS (PM<sub>10</sub>)

<b>Name and CASRN of Substance</b>	Particulate Matter ≤10 Microns	NA-09
<b>Substances for which other plans have been prepared</b>	Ammonia (total)	NA-16
	Particulate Matter ≤2.5 Microns	NA-10

#### 3.1 Basic Facility Information

Basic facility information has been included in Section 4 of this document.

#### 3.2 Toxic Reduction Policy Statement of Intent

When Cargill began in 1865, our business was founded on the belief that “our word is our bond.” Today, as a diversified global company still grounded in a culture of trust and respect, this remains the standard by which we do business. We operate with integrity and accountability. We are committed to feeding the world in a responsible way; reducing our environmental impact; and improving the communities where we live and work. We are passionate about our goal to be the global leader in nourishing people and operating responsibly across the agricultural, food, industrial and financial markets we serve.

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Wherever feasible, Cargill will reduce the creation and release of Particulate Matter ≤10 microns in size (PM<sub>10</sub>) in full compliance with all federal and provincial regulations. Toxic substance reduction will be an ongoing effort at Cargill, and we will continue to monitor technological advancements to ensure that options that are both technologically and financially viable are implemented at our facility.

#### 3.3 Reduction Objectives

The reduction of toxic substance use, creation and releases is a priority for Cargill forming part of our sustainability programs and EMS. Our goal is to reduce the creation and release of PM<sub>10</sub> where technically and economically feasible. At the present time there are no reduction options that are both technically and economically feasible for this substance. However, we will continue to explore new options as they arise as part of our sustainability programs

### **3.4 Description of Substance**

PM<sub>10</sub> is created by the combustion of natural gas in the facility's boilers, hot water heaters and general heating equipment. Estimates of quantities of PM<sub>10</sub> created and released is based on the amount of natural gas burned on an annual basis and emission factors published by the U.S. EPA in AP-42 Chapter 1.4 "Natural Gas Combustion".

### **3.5 Toxic Substance Reduction Option to be Implemented**

There are currently no reduction options that have been identified as being both technically and economically feasible for this substance.

### **3.6 Plan Summary Statement**

This plan accurately reflects the content of the toxic substance reduction plan for PM<sub>2.5</sub>, dated November 25, 2013.

### **3.7 Copy of Plan Certification**

A copy of the plan certification is presented in Section 5 of this document.

#### 4. BASIC FACILITY INFORMATION

Facility Identification and Site Address		
Company Name	Cargill Limited	
Facility Name	Cargill Limited – Beef Division	
Facility Address	Physical Address:	Mailing Address:
	165 Dunlop Drive Guelph, ON N1L 1P4	165 Dunlop Drive Guelph, ON N1L 1P4
Spatial Coordinates (UTM)	564486.63 (Easting)	(Northing) 4822579.99
Datum	UTM 17	
Number of Employees	950 (Full time equivalents)	
NPRI ID	11105	
ON MOE ID	-	
Parent Company Information		
Parent Company Name & Address	Cargill Limited 165 Dunlop Drive Guelph, ON N1L 1P4	
Percent Ownership	100%	
CRA Business Number	100494855	
Primary North American Industrial Classification System Code (NAICS)		
2 Digit NAICS Code	31	
4 Digit NAICS Code	3116	
6 Digit NAICS Code	311611	
Company Contact Information		
Facility Public Contact	John Cunningham, Engineering Associate	Contact Address:
	John_J_Cunningham@cargill.com	<b>Cargill Limited</b> <b>165 Dunlop Drive Guelph ON,</b> <b>N1L 1P4</b>
	Phone: (519)-823-5200	
	Fax: (519)-823-5451	

## 5. COPY OF PLAN CERTIFICATION

### Certification by the Highest Ranking Employee

As of December 9, 2013, I, Matt Gibney, certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substances:

Ammonia (total)

Particulate Matter  $\leq 2.5$  Microns

Particulate Matter  $\leq 10$  Microns



Matt Gibney  
General Manager  
Cargill Limited – Guelph Beef Division

### Certification by Licensed Planner

As of December 9, 2013, I, Tim Logan certify that I am familiar with the processes at Cargill's Guelph facility that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxics Reduction Act, 2009 that are set out in the plans dated November 25, 2013 and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substances:

Ammonia (total)

Particulate Matter  $\leq 2.5$  Microns

Particulate Matter  $\leq 10$  Microns



Tim Logan (License No. TSRP0003)  
President  
O2E Inc. Environmental Consultants