Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Particulate Matter (Total) and CAS # N/A
Substances for which other plans have been prepared	Particulate Matter (PM10), Particulate Matter (PM2.5), NOx, Carbon Monoxide, Nitric Acid, Ammonia, Nitrate Ion, N-Hexane, Propane, Butane, Pentane, Formaldehyde, Methanol, Copper, Nickel, Hexavalent Chromium, Zinc, Sulphuric Acid, Chlorine, Asbestos
Beneficial Uses at Facility	None
Reasons for Use	Substance is not used at the facility.
Reasons for use - summary statement (mandatory)	N/A
Reasons for Creation	As a by-product
Reasons for creation - summary statement (mandatory)	The substance is a by-product of key reactions within the processes at the site.

Facility Information

Company Name	Terra International (Canada) Inc.
Facility Name	CF Industries Courtright Nitrogen Complex
Facility Physical Address	161 Bickford Line, Courtright, ON, Canada, N0N 1H0
Facility Mailing Address	P.O. Box 1900, Courtright, ON, Canada, N0N 1H0
Spatial Coordinates of Facility	381104 Easting; 4735453 Northing
Number of Employees	158
NPRI ID	2233
Ontario MOE (R.127)ID Number	If assigned
2 Digit NAICS Code	31-33
4 Digit NAICS Code	3253
6 Digit NAICS Code	325313

Parent Company Information

Parent Company Name	CF Industries Holdings Inc.
Address	Suite 400 - 4 Parkway North, Deerfield, IL, USA, 60015-2590
Percent Ownership (if available)	100%

Facility Contact

Public Contact	Joe Lasowski
Position	Environmental Engineer
Address	P.O. Box 1900, Courtright, ON, Canada, N0N 1H0
email	jlasowski@cfindustries.com
Phone	519-867-2739 x1605
Fax	519-867-3173

Date of Plan: December 1, 2015

Statement of Intent

Terra International (Canada) Inc. - CF Industries Courtright Nitrogen Complex is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, CF Industries Courtright Nitrogen Complex will not be implementing any options to reduce the creation of particulate matter in its operations because it is a by-product of key reactions within the current processes at the site. Whenever feasible, we will eliminate, or reduce the discharge of particulate matter in full compliance with all Federal and Provincial Regulations.

Plan Objectives

While CF Industries Courtright Nitrogen Complex does not intend to reduce the creation of particulate matter, the plan was developed with the following objectives:

- we will continue to operate in full compliance with all applicable environmental regulations;
 and
- we will continue to manage and prevent releases of particulate matter through current and future pollution prevention and best management practices.

Description of Substance (Reason for Use and/or Creation)

Particulate Matter is created as a by-product in the processes associated with the manufacture of nitrogen products.

Toxic Substance Reduction Option(s) To Be Implemented

For the purposes of the Toxics Reduction Act, CF Industries Courtright Nitrogen Complex will not be implementing any options to reduce the creation of particulate matter in its operations because it is a product of key reactions within the current processes at the site. In the past, CF Industries Courtright Nitrogen Complex has implemented multiple programs that minimize losses of particulate matter. There were no further feasible reduction options identified.

Description of Previously Implemented Reduction Opportunities:

- The process and equipment are continuously monitored and optimized to prevent and minimize loss potential
- Specific training for operations handling of materials to prevent upset/spills/losses
- Engineering standards for pipe seal design etc. has been continuously improved to reduce leaks
- Mandated/scheduled operator rounds (visual inspection etc.)
- Incident Investigation process continuous improvement
- Safeguarding Reviews and Pressured Equipment Integrity Programs in place

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for particulate matter, prepared by Terra International (Canada) Inc. - CF Industries Courtright Nitrogen Complex, dated December 1, 2015.

Date of Plan: December 1, 2015

Certification by Highest Ranking Employee

As of December 15, 2015, I, Amanda Pascavage, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Particulate Matter

Amanda Pascavage

Plant Manager

Terra International (Canada) Inc. - CF Industries Courtright Nitrogen Complex

Certification by Licensed Planner

As of December 1, 2015, I, Melanie Hockin certify that I am familiar with the processes at Terra International (Canada) Inc. - CF Industries Courtright Nitrogen Complex that use or create the toxic substance 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 plan dated **December 1, 2015** and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Particulate Matter

Melanie Hockin

Toxic Substance Reduction Planner

License Number: TSRP0140

M Hockin

LEHDER Environmental Services Limited