**Rothsay – Moorefield**
**a division of Darling International Canada**

# TOXIC SUBSTANCE REDUCTION PLAN SUMMARY
# for
# Nitrogen Oxides (NOx)
# Total Particulate Matter (TPM)
# Particulate Matter <= 10 microns ($PM_{10}$)
# Particulate Matter <= 2.5 microns ($PM_{2.5}$)

**Submitted to:**
**Rothsay – Moorefield: Darling International Canada**
**8406 Wellington County Road**
**Moorefield, ON, N0G 2K0**

**Submitted by:**
**AMEC Environment & Infrastructure**
**900 Maple Grove Road, Unit 10**
**Cambridge ON, N3H 4R7**

**December 31st, 2013**

# Toxic Reduction Policy Statement of Intent

Rothsay – Moorefield a division of Darling International Canada – Rothsay Moorefield does not intend to reduce the creation of Nitrogen Oxides or Particulate Matter as it is a product of the combustion of natural gas. Combustion is the key heating source in Rothsay-Moorefield operations and natural gas is the most efficient environmentally responsible fuel source with currently no technically feasible alternative. Rothsay is committed to reducing the use, creation, or transfer of toxic substances in its process wherever it is found to be technically and economically feasible.

# Reduction Objectives

Rothsay-Moorefield is committed to having all employees to be actively involved in the reduction of toxic substance use, creation and releases. Nitrogen Oxides, Particulate Matter (TPM, PM10 and PM2.5) are all by-products from the combustion of natural gas and steam is an essential processing requirement for operations. The boiler system is operated with natural gas, one of the most efficient fuel sources. The system is optimized to achieve the greatest efficiency to reduce the natural gas requirements but still maintaining production steam demand. Currently there is no technically and economically feasible alternative for the boiler system or the use of natural gas.

# Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Nitrogen Oxides and Particulate Matter (TPM, $PM_{10}$ and $PM_{2.5}$) prepared on behalf of Rothsay-Moorefield dated 31 December 2013. There is no technically feasible option to reduce the creation of Nitrogen oxides, Particulate Matter (TPM, $PM_{10}$, $PM_{2.5}$) from the combustion of natural gas and there are no technically feasible option to reduce the creation of Particulate Matter (TPM, $PM_{10}$, $PM_{2.5}$) associated with vehicular traffic for Rothsay-Moorefield operations.

# Basic Facility Information

| | |
|---|---|
| Company Name: | Darling International<br>Rothsay<br>8406 Wellington County Rd<br>Moorefield, ON N0G 2K0 |
| Contact Information: | |

| | |
|---|---|
| Highest Ranking Employee: | Scott Henry<br>Plant Manager<br>519- 638-3081 x246 |
| Technical Contact: | Brad Shiell<br>Environmental Supervisor<br>519-638-3081 x271<br>brad.shiell@rothsay.ca |
| Certified Planner: | Beth Rhyno, P.Eng – TSRP#00273<br>Compliance Team Leader<br>AMEC Americas, Environment and Infrastructure<br>900 Maple Grove Road, Unit 10<br>Cambridge, ON, N3H 4R7<br>519-650-7100 ext. 6105<br>beth.rhyno@amec.com |
| Plant Location (UTM): | Zone 17<br>522897E; 4851298N |
| Canadian Head Office: | Darling International Canada<br>150 Research Lane, Suite 307<br>Guelph, ON<br>519-780-3342 |
| US Parent Company: | Darling Ingredients Inc.<br>251 O'Connor Ridge Blvd., Suite 300<br>Irving, TX 76034 |
| The facility's NPRI ID: | 2068 |
| NAICS Code: | 311614 |

In 2012 Rothsay-Moorefield employed about 90 full time employees (equivalent).

The site creates four (4) MOE prescribed Phase II Toxic compounds: Nitrogen Oxides, TPM, PM10, and PM2.5. Both the Nitrogen oxides and all forms of the Particulate Matter is a by-product created during the supporting operations of combustion. Additional particulate matter is created from activities associated with road dust and vehicle traffic.

As all four (4) of these substances follow a similar process, one collective TRA plan has been developed for nitrogen oxides, TPM, PM10 and PM2.5.

The CAS numbers for the MOE Toxic Compounds included in this plan are:

| | |
|---|---|
| Nitrogen oxides | 11104-93-1 |
| Total Particulate Matter (TPM) | NA-M08 |
| Particulate Matter <= 10 microns ($PM_{10}$) | NA-M09 |
| Particulate Matter <= 2.5 microns ($PM_{2.5}$) | NA-M10 |

**Certification by Highest Ranking Employee**

As of 31 December 2013, I, Scott Henry, certify that I have read the toxic substance reduction plan for toxic substances referred to below and am familiar with its content, and to my knowledge the plan is factually accurate and complies with the ***Toxic Reduction Act, 2009*** and ***Ontario Regulation 455/09 (General)*** made under that Act.

| | |
|---|---|
| Nitrogen oxides | 11104-93-1 |
| Particulate Matter – total | NA-M08 |
| Particulate Matter <= 10 microns ($PM_{10}$) | NA-M09 |
| Particulate Matter <= 2.5 microns ($PM_{2.5}$) | NA-M10 |

Scott Henry, Plant Manager
Rothsay, Darling International

31 December 2013
Date

**Toxics Substance Reduction Planner**

As of December 31, 2013, I, Beth Rhyno, P.Eng., certify that I am familiar with the process at Darling International - Rothsay's Moorefield facility that use or create the toxic substances referred to below, that I agree with the estimates referred to paragraph 7 iii, iv and v of subsection 4(1) of the ***Toxic Reduction Act, 2009*** that are set out in the plan dated May 31st, 2013 and that plan complies with that Act and ***Ontario Regulation 455/09 (General)*** made under that Act.

| | |
|---|---|
| Nitrogen oxides | 11104-93-1 |
| Particulate Matter – total | NA-M08 |
| Particulate Matter <= 10 microns ($PM_{10}$) | NA-M09 |
| Particulate Matter <= 2.5 microns ($PM_{2.5}$) | NA-M10 |

Beth Rhyno, P.Eng.
Compliance Team Leader
AMEC, Cambridge ON

TSRP#00273
License Number

31 December 2013
Date