2012 Toxics Reduction Plan INVISTA (Canada) Company – Maitland Site

This Toxic Reduction Plan (TRP) Report is prepared under O.Reg. 455/09 for the **INVISTA** (**Canada**) **Company**, Maitland Site. This TRP Report reflects the current version of the INVISTA Maitland Site Toxic Reduction Plans dated December 19, 2012.

For further information regarding INVISTA's corporate responsibility statement and INVISTA's sustainability statement, please visit the following website www.invista.com/en/sustainability/index.html.

Certification Statement-Licensed Planner

As of December 19, 2012, I, Janet Payette certify that I am familiar with the processes at INVISTA Maitland Site 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 toxic substance reduction plans referred to below for the toxic substances and that the plans comply with that Act and Ontario Regulation 455/09 (general) made under that Act.

Plan Substance	Date of Plan
Methyl Alcohol (CAS # 67-56-1)	December 19, 2012
Hydrochloric Acid (CAS # 7647-01-0)	December 19, 2012
• Formaldehyde (CAS # 50-00-0)	December 19, 2012
HexachloroBenzene (118-74-1)	December 19, 2012
Dioxin &Furans,	,
 3,7,8-Tetrachlorodibenzo-p-dioxin (CAS#1746-01) 1,2,3,7,8-Pentachlorodibenzo-p-dioxin (CAS#403276-4) 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (CAS#3928-6) 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (CAS#19474-3) 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (CAS#5785-7) 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (CAS#35822-46-9) Octachlorodibenzo-p-dioxin (CAS#3268-87-9) 2,3,7,8-Tetrachlorodibenzofuran (CAS#57107-31-4) 2,3,4,7,8-Pentachlorodibenzofuran (CAS#57117-4) 1,2,3,7,8-Pentachlorodibenzofuran (CAS#70648-9) 1,2,3,4,7,8-Hexachlorodibenzofuran (CAS#70648-9) 1,2,3,7,8,9-Hexachlorodibenzofuran (CAS#57117-9) 2,3,4,6,7,8-Hexachlorodibenzofuran (CAS#60851-5) 1,2,3,4,6,7,8-Hexachlorodibenzofuran (CAS#60851-5) 1,2,3,4,6,7,8-Heptachlorodibenzofuran (CAS#675639-4) 1,2,3,4,7,8,9-Heptachlorodibenzofuran (CAS#556789-7) Octachlorodibenzofuran (CAS#39001-02-0) 	21- 227- 408- 553- December 19, 2012 9) 1-4) 1-6) 26- 21- 44- 34- 52-

Thougeth

FACILITY INFORMATION

Legal Name of Company: INVISTA (Canada) Company

Street address: Mailing address:

1400 County Road #2 East, P.O. Box 611,

Maitland, ON, K0E 1P0 Maitland, ON, K0E 1P0

The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) are:

Zone: 43 Easting: 547726 Northing: 4945469

In 2011 the site had approximately 98 full time equivalent employees.

The site NPRI ID number is 1207; the Site O.Reg 127/01 ID number was 5030.

The NAICS codes for this facility are:

- NAICS 2 Code: 32 Manufacturing
- NAICS 4 Code: 3251 Basic Chemical Mfg
- NAICS 6 Code: 325190 Other Basic Organic Chemical Mfg.

Canadian parent company of the facility (100% responsible for this facility):

INVISTA (Canada) Company 455 Front Road Kingston, Ontario Canada K7L4Z6

The Site Public Contact:

Paul Brown Manager of Government & Public Affairs INVISTA (Canada) Company 613-532-3624

Street address: Mailing address:
455 Front Road same as street address
Kingston, Ontario Canada
K7L4Z6

Planner License number for the planner who provided recommendations: TSRP 0162

Planner License number for the certifying planner: TSRP0162

Objectives of Toxics Reduction Plans

Toxic reduction plans have been prepared for all the substances listed in the planner certification statement.

Maitland Site's Toxic Reduction Plans are to reduce the use of methyl alcohol (methanol) and hydrochloric acid where technically and economically feasible. The objectives of these plans are to reduce the use and release of methanol by the end of 2015 and to reduce the use of hydrochloric acid by the end 2014.

Maitland Site objective is to operate its cogeneration facility and boiler units as efficiently as possible which reduces the use of natural gas and creation of formaldehyde. Maitland site will also continue to measure and monitor process fuel parameters to validate that there is no creation of hexachlorobenzene or dioxin/furans.

Evaluation of Plan Options and Recommendations

Methyl Alcohol

Methanol or Methyl Alcohol is used for two differing purposes;

- 1. It is added to compressed air lines to protect the moisture traps from freezing in the winter months as a significant portion of our compressed air distribution system is outside.
- 2. It is used as a supplementary feed for our biological wastewater treatment plant.

Maitland site intends to reduce the amount of methanol used where economically and technically feasible. INVISTA. Methanol is not created in any process at Maitland site and therefore this plan will not address reducing the creation of this substance.

Maitland Site plans on making equipment and process modifications by June 30, 2014 to reduce the use of methanol by 9.8 % (or 46 tonnes). Maitland Site also plans on implementing operating practices improvements by June 30, 2015 to reduce methanol emissions by 20 % (or 1.7 tonnes) and further reduce the use of methanol by 0.3 % (or 1.7 tonnes). Implementation of these options will not reduce the amount of methanol created, disposed, transferred or contained in product. There is no methanol in any of INVISTA's products and Maitland Site processes do not create methanol. Maitland Site does not dispose or transfer methanol.

Hydrochloric Acid

Hydrochloric acid is used to aid in treating boiler feedwater; specifically it is used to regenerate ion exchange resin beds where impurities are removed from water prior to the water being used to make steam.

Maitland Site intends to reduce the use of hydrochloric acid. Maitland Site plans on implementing operating practices improvements by June 30, 2014 to reduce use of hydrochloric acid by 5 % (3.9 tonnes).

This plan will not reduce the amount of hydrochloric acid created, disposed, transferred, released or contained in product. There is no hydrochloric acid in any of INVISTA's products and Maitland Site processes do not create hydrochloric acid. Maitland Site does not dispose or transfer hydrochloric acid.

Dioxin/Furans & HexachloroBenzene

Dioxins and Furans along with Hexachlorobenzene are included in this report as the Site carries out an activity indicated in the National Pollutant Release Inventory (NPRI) Notice which requires reporting any emissions of these substances. Maitland Site incinerates a process by-product stream that is classified as hazardous waste. Neither the waste stream nor the prime fuel (natural gas) used in the boilers where the combustion takes place contain any chlorine or chlorine compounds so there is no potential for generation of Dioxins, Furans or Hexachlorobenzene.

Maitland site does not intend to reduce the amount of dioxin, furans or hexachlorobenzene used, released, created, disposed, transferred or contained in product. Maitland Site intends to continue to monitor parameters in process fuels which could potentially leads to the creation of these substances. None of these substances are in any of INVISTA's products and Maitland Site processes do not create these substances. Maitland Site does not use, dispose, transfer or release these substances. For this reason no reduction options will be implemented.

Formaldehyde

Formaldehyde is neither used nor intentionally produced at this site; it is included as a product of combustion of natural gas in a stationary combustion turbine and natural gas steam boilers. There is a theoretical quantity of formaldehyde produced in natural gas combustion based on conservative emission factors.

This plan will not reduce the amount of formaldehyde used, disposed, released, transferred or contained in product. Formaldehyde is not used in any of Maitland Site processes and not contained in INVISTA's products. Formaldehyde is not disposed or transferred from Maitland Site. Maitland Site is not aware of any technological changes that can be made to specifically reduce the quantity of formaldehyde produced as a by-product of combustion in gas turbine. For these reasons, no reduction options will be implemented.

Certification Statement- Highest Ranking Official

As of December 19, 2012, I, Joe Hendriks 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 information contained in the report is factually accurate and the report complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under the Act.

- Methyl Alcohol (CAS # 67-56-1)
- Hydrochloric Acid (CAS # 7647-01-0)
- Formaldehyde (CAS # 50-00-0)
- Dioxin &Furans.
 - ➤ 3,7,8-Tetrachlorodibenzo-p-dioxin (CAS#1746-01-6)
 - > 1,2,3,7,8-Pentachlorodibenzo-p-dioxin (CAS#40321-76-4)
 - > 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (CAS#39227-28-6)
 - > 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (CAS#19408-74-3)
 - > 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (CAS#57653-85-7)
 - > 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (CAS#35822-46-9)
 - Octachlorodibenzo-p-dioxin (CAS#3268-87-9)
 - ≥ 2,3,7,8-Tetrachlorodibenzofuran (CAS#51207-31-9)
 - > 2,3,4,7,8-Pentachlorodibenzofuran (CAS#57117-31-4)
 - > 1,2,3,7,8-Pentachlorodibenzofuran (CAS#57117-41-6)
 - > 1,2,3,4,7,8-Hexachlorodibenzofuran (CAS#70648-26-9)
 - > 1,2,3,7,8,9-Hexachlorodibenzofuran (CAS#72918-21-9)
 - ➤ 1,2,3,6,7,8-Hexachlorodibenzofuran (CAS#57117-44-9)
 - > 2,3,4,6,7,8-Hexachlorodibenzofuran (CAS#60851-34-5)
 - > 1,2,3,4,6,7,8-Heptachlorodibenzofuran (CAS#67562-39-4)
 - > 1,2,3,4,7,8,9-Heptachlorodibenzofuran (CAS#55673-89-7)
 - Octachlorodibenzofuran (CAS#39001-02-0)
- HexachloroBenzene (118-74-1)

Joe Hendriks

Mr. Joe Hendriks Site Manager

(613) 348-4011