2013 Toxics Reduction Plan

INVISTA (Canada) Company – Kingston Site

This Toxic Reduction Plan (TRP) Report is prepared under O.Reg. 455/09 for the **INVISTA (Canada) Company**, Kingston Site. This TRP Report reflects the current version of the INVISTA Kingston Site Toxic Reduction Plans dated December 20, 2013.

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.

FACILITY INFORMATION

Legal Name of Company: INVISTA (Canada) Company

Street address:	**Mailing address:**
455 Front Road	INVISTA (Canada) Company
Kingston, Ontario	P.O. Box 2100
K7L 4Z6	Kingston, ON, K7L 4Z6

The spatial coordinates of the facility expressed in Universal Transverse Mercator (UTM) within a North American Datum 83 (NAD83) are:
Zone: 18 Easting: 375702 Northing: 4897041

In 2012 the site had approximately 900 full time equivalent employees.

The site NPRI ID number is 003422; the Site O.Reg 127/01 ID number was 10793.

The NAICS codes for this facility are:

- NAICS 2 Code: 32 - Manufacturing
- NAICS 4 Code: 3252 - Resin, Synthetic Rubber, and Artificial and Synthetic Fibres and Filaments Manufacturing
- NAICS 6 Code: 325220 - Artificial and Synthetic Fibres and Filaments Manufacturing.

Canadian parent company of the facility (100% responsible for this facility):
INVISTA (Canada) Company
P.O. Box 2100
Kingston, ON, K7L 4Z6

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

Toxics Reduction Plan Summary

Toxic reduction plans have been prepared for the following phase 2 substances:

Adipic Acid CAS #124-04-9

Total Ammonia

Carbon Monoxide CAS #630-08-0

Ethylene Glycol CAS #107-21-1

Hexane CAS #110-54-3

Oxides of Nitrogen (NOx) CAS #11104-93-1

Total Particulate Matter (TPM)

Particulate Matter 10 micron (PM10)

Particulate Matter 2.5 micron (PM2.5)

Propane CAS #74-98-6

Carbon Monoxide (CO), Oxides of Nitrogen (NOx), Propane, Hexane, Total Particulate Matter (TPM), Particulate Matter - 10 micron (PM10), and Particulate Matter - 2.5 micron(PM2,5) – specific to fuel combustion:

Carbon Monoxide (CO), NOx, Propane, Hexane, TPM, PM10, and PM2,5 are combustion products created through the burning of fuel in the site vaporizers, boilers, burnout furnace and unit heaters. Particulate Matter is also created through the handling (unloading) of a raw material for the production process as well as a by-product of the production process itself. Since CO, NOx, Propane, Hexane, TPM, PM10, and PM2,5 are all products of combustion, the facility summary plan will present these substances together. Kingston site processes do not use these substances.

Kingston Site does not intend to reduce the creation of these substances. The facility does not plan to implement any of the options evaluated in the toxic reduction plan as there are separate initiatives being undertaken at the facility. One of these initiatives is a company wide energy reduction initiative with a goal to reduce energy intensity by 20% by the year 2020. Other initiatives should result in the reduction or more efficient burning of natural gas in the natural gas burning sources listed above. This will reduce the creation of CO, NOx, Propane, Hexane, TPM, PM10, and PM2.5.

Kingston Site's objective is to operate its vaporizers, boilers, burnout furnace and other natural gas burning sources as efficiently as possible which should result in the reduction or more efficient burning of natural gas which will reduce the creation of CO, NOx, Propane, Hexane, TPM, PM10, and PM2.5.

Ammonia:

Ammonia is created through sanitary sewer effluent contributions from the site operations which go to our waste pre-treatment unit (Trickling Filter). Ammonia is also created in the trickling filter from the biological conversion of organic nitrogen in sanitary effluent. Kingston site processes do not use ammonia.

The facility does not intend to reduce the creation of ammonia. No options were identified for implementation. Although the facility will not be implementing any options as a result of the planning process, it will continue to look for options that will reduce the long term creation of ammonia.

Adipic Acid:

Adipic acid is used as a raw material in the manufacturing process at the site. Kingston Site processes do not create adipic acid.

The facility does not intend to reduce the use of adipic acid. No options for adipic acid that were both technically and economically feasible were identified for implementation in the current plan. Although the facility will not be implementing any options as a result of the planning process, it will continue to look for options that will reduce the long term use of adipic acid.

Ethylene Glycol:

Ethylene glycol is used in the site's closed loop heat recovery system for heating purposes during the winter season. It is mixed with water to prevent freezing of the solution. The glycol heat recovery system is operated seasonally. Kingston Site processes do not create glycol.

The facility does not intend to reduce the use of glycol. No options for glycol were identified for implementation in the current plan. Although the facility will not be implementing any options as a result of the planning process, it will continue to look for options that will reduce the long term use of glycol.

Particulate (TPM, PM10, PM2.5):

In addition to being created as a by-product from fuel combustion, TPM, PM10, and PM2.5 are also created in the manufacturing operations process and adipic acid unloading process at the facility. Kingston Site processes do not use particulate matter.

The facility does not intend to reduce the creation of TPM, PM10, and PM2.5. No options for particulate were identified for implementation in the current plan. Although the facility will not be implementing any options as a result of the planning process, it will continue to look for options that will reduce the long term creation of particulate.

Certification Statement- Licensed Planner

As of December 20, 2013, I, Janet Payette certify that I am familiar with the processes at INVISTA Kingston 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
• Carbon Monoxide (CAS#630-08-0)	December 20, 2013
• Nitrogen Oxides (CAS#11104-93-1)	December 20, 2013
• Total Particulate Matter	December 20, 2013
• Particulate Matter <= 2.5 micron	December 20, 2013
• Particulate Matter <= 10 micron	December 20, 2013
• Ammonia	December 20, 2013
• Hexane (CAS #110-54-3)	December 20, 2013
• Propane (CAS #74-98-6)	December 20, 2013
• Ethylene Glycol (CAS #107-21-1)	December 20, 2013
• Adipic Acid (CAS#124-04-9)	December 20, 2013

Janet Payette
Licensed Planner
TSRP0162

Certification Statement- Highest Ranking Official

As of December 20, 2012, I Steve Kimpton 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.

- Adipic Acid CAS #124-04-9
- Total Ammonia
- Carbon Monoxide CAS #630-08-0
- Ethylene Glycol CAS #107-21-1
- Hexane CAS #110-54-3
- Oxides of Nitrogen (NOx) CAS #11104-93-1
- Total Particulate Matter (TPM)
- Particulate Matter 10 micron (PM10)
- Particulate Matter 2.5 micron (PM2.5)
- Propane CAS #74-98-6

Steve Kimpton

Site Manager

(613) 548-5070