

INEOS Styrolution Canada Limited - Sarnia Facility

Toxics Reduction Public Summary Report

Facility Information

Company Name	INEOS Styrolution Canada Limited	
Facility Name	Styrolution Canada Limited	
Facility Physical Address	872 Tashmoo Blvd.	
Facility Mailing Address	P.O. Box 3078, Sarnia ON N7T 8A3	
Spatial Coordinates of Facility	42.93850 Latitude; -82.41370 Longitude	
Number of Employees	80	
NPRI ID	1785	
2 Digit NAICS Code	none	
4 Digit NAICS Code	3251	
6 Digit NAICS Code	325110	

Parent Company Information

Parent Company Name	None	
Address		
Percent Ownership (if available)		

Facility Contact

Public Contact	Ms. Michelle McKay	
Position	Environmental Technologist	
Address	872 Tashmoo Blvd., Sarnia ON	
email	michelle.mckay@styrolution.com	
Phone	(519) 339-7331	
Fax	(519) 339-7300	

Date of Summary

Reporting Year	2015
Summary Date	June 1, 2016

Phase 1 Toxics Substances Reported

Benzene, Ethylbenzene, Toluene

Phase 2 Toxics Substances Reported

Ethylene, Styrene, PM10, PM2.5, Carbon monoxide, Nitrogen Oxides, VOCs

Copy of Certification:

As of June 1, 2016, I certify that I have read the report on the toxic substance reduction plan(s) for the toxics listed above and am familiar with their contents and to my knowledge the information contained in the report(s) is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

The original version of this report is signed off by:

Highest Ranking Employee: Martin Kazmir

Title: Site Director - Styrolution

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Substance Information and Plan Objective

Substance Name	Benzene
CAS #	71-43-2
Report Date:	June 1, 2016
Plan Date:	31-Dec-12
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the use of benzene the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce benzene emissions through current and future pollution prevention and best management practices

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>100,000 to 1,000,000	>100,000 to 1,000,000	>-10,000 to -100,000	-4%
C - Created	0	0	0	NA
P - In a product that leaves the process	>10 to 100	>10 to 100	>1 to 10	8%
Summary of reasons for changes between current year and previous year.	insignificant change			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	none
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	none
Summary of differences between steps taken and those set out in the plan.	none
Description of amendments to the plan.	none

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Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	ETHYL BENZENE
CAS #	100-41-4
Report Date:	June 1, 2016
Plan Date:	31-Dec-12
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the use of ethyl benzene the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce ethyl benzene emissions through current and future pollution prevention and best management practices

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>100,000 to 1,000,000	>100,000 to 1,000,000	>-10,000 to -100,000	-4%
P - In a product that leaves the process	>100 to 1000	>100 to 1000	> -10 to -100	-22%
Summary of reasons for changes between current year and previous year.	insignificant change; decrease in EB product trucked (EB is either sent out as product or used onsite to make styrene)			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	none
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	none
Summary of differences between steps taken and those set out in the plan.	none
Description of amendments to the plan.	none

INEOS Styrolution Canada Limited - Sarnia Facility

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Toluene
CAS #	108-88-3
Report Date:	June 1, 2016
Plan Date:	31-Dec-12
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the creation of toluene the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce toluene emissions through current and future pollution prevention and best management practices

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>1000 to 10,000	>1000 to 10,000	>100 to 1000	8%
P - In a product that leaves the process	>1000 to 10,000	>1000 to 10,000	>100 to 1000	8%
Summary of reasons for changes between current year and previous year.	insignificant change			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	Not Applicable
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	Not Applicable
Summary of differences between steps taken and those set out in the plan.	Not Applicable
Description of amendments to the plan.	Not Applicable

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Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Ethylene
CAS #	74-85-1
Report Date:	June 1, 2016
Plan Date:	17-Dec-13
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the use of ethylene the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce ethylene emissions through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>10,000 to 100,000	>10,000 to 100,000	> -1000 to -10,000	-4%
C - Created	0	0	0	NA
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	insignificant change			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	Not Applicable
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	Not Applicable
Summary of differences between steps taken and those set out in the plan.	Not Applicable
Description of amendments to the plan.	Not Applicable

INEOS Styrolution Canada Limited - Sarnia Facility

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Styrene
CAS #	100-42-5
Report Date:	June 1, 2016
Plan Date:	17-Dec-13
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the creation of styrene, the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce styrene emissions through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>100,000 to 1,000,000	>100,000 to 1,000,000	>-10,000 to -100,000	-5%
P - In a product that leaves the process	>100,000 to 1,000,000	>100,000 to 1,000,000	>-10,000 to -100,000	-5%
Summary of reasons for changes between current year and previous year.	insignificant change			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	Not Applicable
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	Not Applicable
Summary of differences between steps taken and those set out in the plan.	Not Applicable
Description of amendments to the plan.	Not Applicable

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Substance Information and Plan Objective

Substance Name	PM10
CAS #	N/A - M09
Report Date:	June 1, 2016
Plan Date:	17-Dec-13
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the creation of Particulate Matter (including PM10 and PM2.5), the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce Particulate Matter (including PM10 and PM2.5) emissions through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>10 to 100	>10 to 100	> -1 to -10	-6%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	insignificant change			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	Not Applicable
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	Not Applicable
Summary of differences between steps taken and those set out in the plan.	Not Applicable
Description of amendments to the plan.	Not Applicable

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Substance Information and Plan Objective

Substance Name	PM2.5
CAS #	N/A - M10
Report Date:	June 1, 2016
Plan Date:	17-Dec-13
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the creation of Particulate Matter (including PM10 and PM2.5), the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce Particulate Matter (including PM10 and PM2.5) emissions through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>1 to 10	>1 to 10	>0 to 1	6%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	insignificant change			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	Not Applicable
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	Not Applicable
Summary of differences between steps taken and those set out in the plan.	Not Applicable
Description of amendments to the plan.	Not Applicable

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Substance Information and Plan Objective

Substance Name	NOx
CAS #	10102-44-0
Report Date:	June 1, 2016
Plan Date:	17-Dec-13
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the creation of Nitrogen Oxides (NOx), the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce NOx emissions through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>100 to 1000	>100 to 1000	>10 to 100	7%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	insignificant change			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	Not Applicable
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	Not Applicable
Summary of differences between steps taken and those set out in the plan.	Not Applicable
Description of amendments to the plan.	Not Applicable

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Substance Information and Plan Objective

Substance Name	CO
CAS #	630-08-0
Report Date:	June 1, 2016
Plan Date:	17-Dec-13
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the creation of Carbon Monoxide, the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce Carbon Monoxide emissions through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>100 to 1000	>100 to 1000	>10 to 100	19%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	increased natural gas usage			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	Not Applicable
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	Not Applicable
Summary of differences between steps taken and those set out in the plan.	Not Applicable
Description of amendments to the plan.	Not Applicable

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Substance Information and Plan Objective

Substance Name	n-Hexane (Part5 VOC)
CAS #	110-54-3
Report Date:	June 1, 2016
Plan Date:	17-Dec-13
Plan Objectives and Targets	<p>While Styrolution does not intend to reduce the creation of n-hexane, the plan was developed with the following objectives:</p> <ul style="list-style-type: none"> • we will continue to operate in full compliance with all applicable environmental regulations; and • we will continue to reduce n-hexane emissions through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2014	2015	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>1 to 10	>1 to 10	>0 to 1	26%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	increased natural gas usage			

On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <http://www.ec.gc.ca/inrp-npri/default.asp?lang=en>

Progress in Implementing Plan

Summary of steps taken during the previous calendar year to implement the plan and a summary of the toxics reductions achieved as a result of the steps taken.	Not Applicable
Summary of additional actions taken during the previous calendar year that impacted the toxic, and a summary of the steps and toxics reductions achieved as a result of those actions.	Not Applicable
Summary of differences between steps taken and those set out in the plan.	Not Applicable
Description of amendments to the plan.	Not Applicable