



SUNCOR ENERGY INC.

ST. CLAIR ETHANOL PLANT
535 ROKEBY LINE
MOORETOWN, ONTARIO
N0N 1M0
TEL (519) 481-0454

2020 TOXICS REDUCTION ACT

Toxic Substance Reduction Plan Summaries

Suncor Energy Inc.
St. Clair Ethanol Plant
535 Rokeby Line
Mooretown, Ontario
N0N 1M0

June 1, 2021



Version Control

Version	Date Issued	Modifications
Update	June 1, 2021	Original version made available to the public and employees December 31, 2013

Table of Contents

INTRODUCTION	i
FACILITY INFORMATION	1
Facility Contact	1
Date of Summary	1
Phase 1 Toxic Substances Reported	1
Phase 2 Toxic Substances Reported	1
Copy of Certification	1
SUBSTANCE REPORTING	2-21
Acetaldehyde	3
Sulphuric Acid	4
Methanol (Methyl Alcohol, Wood Alcohol)	5
Naphthalene	6
Ethyl Benzene	7
Toluene	8
Xylenes (Mixed Isomers)	9
Ethyl Acetate	10
Propane	11
N-Hexane	12
Ammonia	13
1,2,4-Trimethylbenzene	14
Cyclohexane	15
Ethanol (Ethyl Alcohol)	16
PM	17
PM10	18
PM2.5	19
NOx	20
SO2	21
CO	22

INTRODUCTION

Suncor Energy Inc. (Suncor) operates an ethanol production plant, designated as the St. Clair Ethanol Plant, to supply ethanol for blending with their gasoline products. Ethanol provides a cleaner burning fuel blend and displaces gasoline for transportation.

Protection of the environment is a fundamental Suncor value. It is our responsibility to determine and manage the impacts of our business through programs like the Toxics Reduction Act.

These toxics substance reduction plan summaries have been prepared to meet the regulatory obligations specified in Section 8 of the Act and has been prepared in accordance with the requirements of Section 24 of Ontario Regulation (O. Reg.) 455/09, as amended from time to time. It meets the relevant reporting requirements and will be updated, as required by the Act and O. Reg. 455/09.

For more information on the Toxics Reduction Act and O. Reg. 455/09 visit: <https://www.ontario.ca/page/ontario-toxics-reduction-program-guide-regulated-facilities>.

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Facility Information

Company Name	Suncor Energy Inc.
Facility Name	St. Clair Ethanol Plant
Facility Physical Address	535 Rokeby Line, Mooretown, ON N0N 1M0
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	42.92940, -82.43810
Number of Employees	79
NPRI ID	11444
2 Digit NAICS Code	32
4 Digit NAICS Code	3251
6 Digit NAICS Code	325190

Facility Contact

Public Contact	Rheece De Veyra
Position	Environmental Advisor
Address	535 Rokeby Line, Mooretown, ON N0N 1M0
email	rdeveyra@suncor.com
Phone	519-333-4041
Fax	519-862-4008

Date of Summary

Reporting Year	2020
Summary Date	October 15, 2021

Phase 1 Toxics Substances Reported

Acetaldehyde, Sulphuric Acid, Methanol, Naphthalene, Ethyl Benzene, Toluene, Xylene

Phase 2 Toxics Substances Reported

Ethyl Acetate, N-Hexane, Propane, 1,2,4-Trimethylbenzene, Cyclohexane, Ethanol, PM, PM10, PM2.5, Nitrogen Oxides, Sulphur Dioxide, Carbon Monoxide

Copy of Certification:

As of October 15, 2021, 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: Micaela Streeter

Title: _____

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Acetaldehyde
CAS #	75-07-0
Report Date:	September 30, 2021
Plan Date:	31-Dec-12
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of acetaldehyde, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of acetaldehyde through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>10 to 100	>10 to 100	> -10 to -100	-16%
P - In a product that leaves the process	>10 to 100	>10 to 100	> -1 to -10	-16%
Summary of reasons for changes between current year and previous year.	Decrease in production			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Sulphuric Acid
CAS #	7664-93-6
Report Date:	September 30, 2021
Plan Date:	31-Dec-12
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the use of sulphuric acid, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of sulphuric acid through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>1000 to 10,000	>1000 to 10,000	> -100 to -1000	-18%
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.	Reduced consumption of Sulphuric Acid used at the facility			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Methanol (Methyl Alcohol, Wood Alcohol)
CAS #	67-56-1
Report Date:	September 30, 2021
Plan Date:	31-Dec-12
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation or use of methanol, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of methanol through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-15%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decrease in production			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Naphthalene
CAS #	91-20-3
Report Date:	September 30, 2021
Plan Date:	31-Dec-12
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the use of naphthalene, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of naphthalene through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>10 to 100	>10 to 100	> -10 to -100	-15%
C - Created	0	0	0	NA
P - In a product that leaves the process	>10 to 100	>10 to 100	> -10 to -100	-16%
Summary of reasons for changes between current year and previous year.	Decreased use of denaturant and waste materials shipped containing substance			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Ethyl Benzene
CAS #	100-41-4
Report Date:	September 30, 2021
Plan Date:	31-Dec-12
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the use of ethyl benzene, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of ethyl benzene through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>100 to 1000	>10 to 100	> -10 to -100	-14%
C - Created	0	0	0	NA
P - In a product that leaves the process	>100 to 1000	>10 to 100	> -10 to -100	-14%
Summary of reasons for changes between current year and previous year.	Decreased use of denaturant and waste materials shipped containing substance			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Toluene
CAS #	108-88-3
Report Date:	September 30, 2021
Plan Date:	31-Dec-12
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the use of toluene, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of toluene through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>100 to 1000	>100 to 1000	> -100 to -1000	-15%
C - Created	0	0	0	NA
P - In a product that leaves the process	>100 to 1000	>100 to 1000	> -100 to -1000	-16%
Summary of reasons for changes between current year and previous year.	Decreased use of denaturant and waste materials shipped containing substance			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Xylenes (Mixed Isomers)
CAS #	1330-20-7
Report Date:	September 30, 2021
Plan Date:	31-Dec-12
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the use of xylenes, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of xylenes through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>100 to 1000	>100 to 1000	> -100 to -1000	-15%
C - Created	0	0	0	NA
P - In a product that leaves the process	>100 to 1000	>100 to 1000	> -100 to -1000	-15%
Summary of reasons for changes between current year and previous year.	Decreased use of denaturant and waste materials shipped containing substance			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Ethyl Acetate
CAS #	141-78-6
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of Ethyl Acetate, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of Ethyl Acetate through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-16%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decrease in production			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Propane
CAS #	74-98-6
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of Propane, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of Propane through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-15%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decreased natural gas usage at the facility			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	N-Hexane
CAS #	110-54-3
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of N-Hexane, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of N-Hexane through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>10 to 100	>10 to 100	> -10 to -100	-15%
C - Created	>1 to 10	>1 to 10	>0 to -1	-15%
P - In a product that leaves the process	>10 to 100	>10 to 100	> -10 to -100	-15%
Summary of reasons for changes between current year and previous year.	Decreased denaturant use and decrease in 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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Ammonia
CAS #	7664-41-7
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the use of Ammonia, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of Ammonia through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	>0 to -1	-94%
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.	Ammonia is no longer used at the facility			

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.	Eliminated within the process with no plans to reintroduce
Summary of differences between steps taken and those set out in the plan.	not applicable
Description of amendments to the plan.	not applicable

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	1,2,4-Trimethylbenzene
CAS #	95-63-6
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the use of 1,2,4-Trimethylbenzene, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of 1,2,4-Trimethylbenzene through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>10 to 100	>10 to 100	> -10 to -100	-15%
C - Created	0	0	0	NA
P - In a product that leaves the process	>10 to 100	>10 to 100	> -10 to -100	-16%
Summary of reasons for changes between current year and previous year.	Decreased use of denaturant			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Cyclohexane
CAS #	110-82-7
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the use of Cyclohexane, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of Cyclohexane through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	>100 to 1000	>100 to 1000	> -10 to -100	-15%
C - Created	0	0	0	NA
P - In a product that leaves the process	>100 to 1000	>100 to 1000	> -10 to -100	-16%
Summary of reasons for changes between current year and previous year.	Decreased use of denaturant			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	Ethanol (Ethyl Alcohol)
CAS #	64-17-5
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of Ethanol (Ethyl Alcohol), the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of Ethanol (Ethyl Alcohol) through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	Delta	Delta %
Units reported	tonnes	tonnes		
U - Enters the Process (Raw Materials)	0	0	0	NA
C - Created	>10 to 100	>10 to 100	> -10 to -100	-15%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decrease in production			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	PM
CAS #	N/A - M08
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of PM, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of PM through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-12%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decreased production (DDGS and corn received decreased)			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	PM10
CAS #	N/A - M09
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of PM10, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of PM10 through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-14%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decreased production (DDGS and corn received decreased)			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	PM2.5
CAS #	N/A - M10
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of PM2.5, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of PM2.5 through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-15%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decreased production (DDGS and corn received decreased)			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	NOx
CAS #	10102-44-0
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of NOx, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of NOx through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-16%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decreased natural gas usage at the facility			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	SO2
CAS #	7446-09-5
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of SO2, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of SO2 through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-15%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decreased natural gas usage at the facility			

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

Suncor Energy Inc. - St. Clair Ethanol Plant

Toxics Reduction Public Summary Report

Substance Information and Plan Objective

Substance Name	CO
CAS #	124-38-9
Report Date:	September 30, 2021
Plan Date:	18-Dec-13
Plan Objectives and Targets	While the St. Clair Ethanol Plant does not intend to reduce the creation of CO, the plan was developed with the following objectives - we will continue to operate in compliance with all applicable environmental regulations; and we will continue to manage releases of CO through current and future pollution prevention and best management practices.

Toxics Substance Accounting and Comparison

Pathways	2019	2020	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	-18%
P - In a product that leaves the process	0	0	0	NA
Summary of reasons for changes between current year and previous year.	Decreased natural gas usage at the facility			

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