Plan Summary Preview

Company Details

Company Legal Name

Halton Chemical Inc.

Company Address

840 Appleby Line, Burlington (Ontario)

Report Details

Facility Name

Halton Chemical Inc. PLANT/WAREHOUSE

Facility Address

840 Appleby Line, Burlington (Ontario)

Update Comments

Activities

Contacts

Facility Contacts

Public Contact: *

Mike McLean

Highest Ranking Employee

Jamie Dickens

Person responsible for Toxic Substance Reduction Plan preparation

Karen McLean

Organization Validation

Company and Parent Company Information

Company Details

Company Legal Name: * Halton Chemical Inc.

Company Trade Name: * Halton Chemical Inc.

Business Number: *	102253903

Mailing Address

Delivery Mode	General Delivery
PO Box	
Rural Route Number	
Address Line 1	840 Appleby Line
City *	Burlington
Province/Territory **	Ontario
Postal Code: **	L7L2Y7

Physical Address

Address Line 1	840 Appleby Line
City	Burlington
Province/Territory	Ontario
Postal Code	L7L2Y7
Additional Information	
Land Survey Description	
National Topographical Description	

Parent Companies

Empty

Facility Validation

Facility Information

Facility Name: *	Halton Chemical Inc. PLANT/WAREHOUSE
NAICS Code: *	325520
NPRI Id: *	7106

ON Reg 127/01 Id	356987

Facility Mailing Address

Delivery Mode	General Delivery
PO Box	
Rural Route Number	
Address Line 1	
City *	Burlington
Province/Territory **	Ontario
Postal Code: **	L7L 2Y7

Physical Address

Address Line 1	840 Appleby Line
City	Burlington
Province/Territory	Ontario
Postal Code	L7L2Y7
Additional Information	
Land Survey Description	
National Topographical Description	

Geographical Address

Latitude **	43.37660
Longitude **	-79.76710
UTM Zone **	17
UTM Easting **	599876.83
UTM Northing **	4803376.29

Contact Validation

Contacts

Public Contact

First Name: *	Mike
Last Name: *	McLean
Position: *	Production Manager
Telephone: *	9056373613
Ext	
Fax	9056378918
Email: *	mmclean@haltonchemical.com

Mailing Address

Delivery Mode	General Delivery
PO Box	
Rural Route Number	
Address Line 1	840 Appleby Line
City *	Burlington
Province/Territory **	Ontario
Postal Code: **	L7L2Y7

Highest Ranking Employee

First Name: *	Jamie
Last Name: *	Dickens
Position: *	General Manager
Telephone: *	9056376313
Ext	

Fax	9056378918
Email: *	jdickens@haltonchemical.com

Mailing Address

Delivery Mode	General Delivery
PO Box	
Rural Route Number	
Address Line 1	840 Appleby Line
City *	Burlington
Province/Territory **	Ontario
Postal Code: **	L7L2Y7

Person responsible for the Toxic Substance Reduction Plan preparation

First Name: *	Karen
Last Name: *	McLean
Position: *	Regulatory Coordinator
Telephone: *	9056373613
Ext	
Fax	9056378918
Email: *	karen@haltonchemical.com

Mailing Address

Delivery Mode	General Delivery
PO Box	
Rural Route Number	
Address Line 1	840 Appleby Line

City *

Burlington

Province/Territory **

Ontario

Postal Code: **

L7L2Y7

Employees

Employees

Number of Full-time Employees: *

9

Substances

100-41-4, Ethylbenzene

100-41-4, Ethylbenzene

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Ethyl Benzene, which is a component introduced at the supplier level in a number of products we use. Toxic substance reduction will be an ongoing effort at our facility.

No viable alternative product was found that would significantly decrease the amount of Ethyl Benzene, nor an option that was considered technically and financially feasible at this time. The rationale associated with this statement is due to the fact that Halton Chemical Inc. has already implemented measures to reduce the use of Ethyl Benzene in the system, where further changes are detrimental to the end desired product.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Halton Chemical Inc. does not create Ethylbenzene in their process as it is a simple batch mixing process.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. will to identify new reduction options or alternatives to products containing for Ethylbenzene by determining the flow of the chemical through the process of the Facility.

Our plan will involve continually identifying the greatest potential for reduction at the raw materials level as this is the main source for the introduction of Ethyl Benzene into the Facility.

The Facility will use a combination of Product-focused and Production area approach. The individual raw materials will be analyzed by their MSDS and the Production area will be analyzed to minimize loss within each process.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Ethylbenzene is a unique aromatic hydrocarbon with high Kauri Butanol “KB” levels.

The Kauri-butanol value ("Kb value") is an international, standardized measure of solvent power for a hydrocarbon solvent, and is governed by an ASTM standardized test, ASTM D1133. The result of this test is a scaleless index, usually referred to as the "Kb value". A higher Kb value means the solvent is more aggressive or active in the ability to dissolve certain materials.

Specific attributes as well as being intrinsic to xylene make ethyl benzene difficult to substitute. In order to substitute we would have to completely change our current raw material base and our chemical formulations.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at this facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option.
Explanation of the reasons why no option will be implemented: **

Halton Chemical Inc. has reviewed their processes and formulation and have categorized them according to the seven (7) MOE's predetermined reduction areas. The following are the major reasons why no option was implemented which in summary involves the lack of technical and economical feasibility and due to the fact that Halton Chemical Inc. has already implemented measures in 2010 to reduce the use of Ethyl Benzene.

Replacing G240 will reduce Ethyl Benzene consumption by 134.7566 kg which constitutes a 1.067% reduction, however with an $85.68 increase per drum.

In 2010 when these procedures were implemented, production losses were (and still are) tracked on batch cards produced for each product and each batch made. Losses were reduced immediately by 50 – 60%.

Halton Chemical Inc. previously investigated in-house recycling. High installation and maintenance costs were associated with the equipment. As well, multiple ongoing regulations and permits were required. One of the main components in many of our products is not recyclable, and has a known tendency to damage recycling equipment.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

108-10-1, Methyl isobutyl ketone

108-10-1, Methyl isobutyl ketone

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Methyl Isobutyl Ketone. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Methyl Isobutyl Ketone is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Methyl Isobutyl Ketone. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This item is used in several formulations as it provides the required properties to the formula.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Methyl Isobutyl Ketone is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Methyl Isobutyl Ketone. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

108-65-6, Propylene glycol methyl ether acetate

108-65-6, Propylene glycol methyl ether acetate

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Propylene Glycol Methyl Ether Acetate. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Propylene Glycol Methyl Ether Acetate is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Propylene Glycol Methyl Ether Acetate, which is a solvent in a number of products we use. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the

facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Propylene Glycol Methyl Ether Acetate is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Propylene Glycol Methyl Ether Acetate is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Propylene Glycol Methyl Ether Acetate. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

108-88-3, Toluene

108-88-3, Toluene

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Toluene. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Toluene is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. will to identify new reduction options or alternatives to products containing for Toluene by determining the flow of the chemical through the process of the Facility.

Our plan will involve continually identifying the greatest potential for reduction at the raw materials level as this is the main source for the introduction of Toluene into the Facility.

The Facility will use a combination of Product-focused and Production area approach. The individual raw materials will be analyzed by their MSDS and the Production area will be analyzed to minimize loss within each process.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Toluene is a common solvent, able to dissolve paints, paint thinners, silicone sealants, many chemical reactants, rubber, printing ink, adhesives (glues), lacquers, leather tanners, and disinfectants. (Wikipedia)

Toluene is a unique aromatic hydrocarbon with high Kauri Butanol “KB” levels. (105 for Toluene)

The Kauri-butanol value ("Kb value") is an international, standardized measure of solvent power for a hydrocarbon solvent, and is governed by an ASTM standardized test, ASTM D1133. The result of this test is a scaleless index, usually referred to as the "Kb value". A higher Kb value means the solvent is more aggressive or active in the ability to dissolve certain materials. Mild solvents have low scores in the tens and twenties; powerful solvents like chlorinated solvents and "High Sol 10" or "High Sol 15" (naphthenic aromatic solvents) have ratings in that are in the low hundreds.

The high KB levels along with specific hydrogen bonding attributes make toluene ideally suited as industrial solvents for paints, coatings and adhesives. Most of the resins, rubbers and plastic based polymers used in our formulas are centered around the specific parameters found in toluene. In order to substitute away from these raw materials we would have to completely change our current raw material base to polymers that exhibit solubility in non-aromatic solvents.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Toluene is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

Halton Chemical Inc. has reviewed the use of Toluene and summarize that there are no current technical and economical feasible solutions at this time that have not already been implemented in 2010. The following are some of the reasons:

Replacing G243 will reduce Toluene consumption by 14.8 kg and by 0.009%. Cost of replacement is unknown.

Replacing L72 will reduce Toluene consumption by 1.3855 kg and 0.00085% and would cost $107.27 more annually.

In 2010 when these procedures were implemented, production losses were (and still are) tracked on batch cards produced for each product and each batch made. Losses were reduced immediately by 50 – 60%.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

109-99-9, Tetrahydrofuran

109-99-9, Tetrahydrofuran

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Tetrahydrofuran. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Tetrahydrofuran is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Tetrahydrofuran. Toxic substance reduction will be an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Tetrahydrofuran is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Tetrahydrofuran is not created in the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Tetrahydrofuran. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use

and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

110-54-3, n-Hexane

110-54-3, n-Hexane

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of n-Hexane. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

n-Hexane is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Hexane. Toxic substance reduction is an ongoing effort at our facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity	Quantity	Unit

target

☒ or

What is the targeted timeframe for this reduction? *

No timeline target **years**

☒ or

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

n-Hexane is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

n-Hexane is not created in the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Hexane. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

111-76-2, 2-Butoxyethanol

111-76-2, 2-Butoxyethanol

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of 2-Butoxyethanol. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

2-Butoxyethanol is not created in the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of 2-butoxyethanol. Toxic substance reduction is an ongoing effort at our facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

2-Butoxyethanol is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

2-Butoxyethanol is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of 2-butoxyethanol. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use

and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

112-34-5, Diethylene glycol butyl ether

112-34-5, Diethylene glycol butyl ether

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Diethylene Glycol Butyl Ether. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created in the process.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Diethylene Glycol Butyl Ether. Toxic substance reduction will be an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the

facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Diethylene Glycol Butyl Ether is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

The substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

No viable substitution or alternative for this product has been identified. Halton Chemical Inc. will continue to implement changes to reduce the overall toxic substance use.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Amended Plan

117-81-7, Bis(2-ethylhexyl) phthalate

117-81-7, Bis(2-ethylhexyl) phthalate

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

Halton Chemical Inc. has reviewed the use of Bis(2-ethylhexyl)Phthalate in their facility and further reduction cannot be accomplished at this time. Halton Chemical Inc. is committed to searching for new and innovative ways to reduce the use of toxic substances.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created in the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Bis(2-ethylhexyl)Phthalate. Toxic substance reduction will be an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Bis(2-ethylhexyl)Phthalate is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Bis(2-ethylhexyl)Phthalate is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

No viable substitution or alternative for this product has been identified. Halton Chemical Inc. will continue to implement changes to reduce the overall toxic substance use.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Amended Plan

123-86-4, n-Butyl acetate

123-86-4, n-Butyl acetate

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of n-Butyl Acetate. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

n-Butyl Acetate is not created in the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of n-Butyl Acetate. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

n-Butyl Acetate is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

n-Butyl Acetate is not created in the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of n-butyl acetate. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

1330-20-7, Xylene (all isomers)

1330-20-7, Xylene (all isomers)

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Xylene. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Xylene is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. continues to search for new reduction options or alternatives to products containing for Xylene by determining the flow of the chemical through the process of the Facility.

Our plan will involve continually identifying the greatest potential for reduction at the raw materials level as this is the main source for the introduction of Xylene into the Facility.

The Facility will use a combination of Product-focused and Production area approach. The individual raw materials will be analyzed by their MSDS and the Production area will be analyzed to minimize loss within each process.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Xylene is used as a solvent. In this application, the mixture of isomers is often referred to as xylenes or xylol. Solvent xylene often contains a small percentage of ethylbenzene. Like the individual isomers, the mixture is colorless, sweet-smelling, and highly flammable. Areas of application include printing, rubber, and leather industries. It is a common component of ink, rubber, adhesive,[9] and leather industries. In thinning paints and varnishes, it can be substituted for toluene where slower drying is desired, and thus is used by conservators of art objects in solubility testing.[10] Similarly it is a cleaning agent, e.g., for steel, silicon wafers, and integrated circuits. (Wikipedia)

Xylene is a unique aromatic hydrocarbon with high Kauri Butanol “KB” levels. (93 for Xylene)

The Kauri-butanol value ("Kb value") is an international, standardized measure of solvent power for a hydrocarbon solvent, and is governed by an ASTM standardized test, ASTM D1133. The result of this test is a scaleless index, usually referred to as the "Kb value". A higher Kb value means the solvent is more aggressive or active in the ability to dissolve certain materials. Mild solvents have low scores in the tens and twenties; powerful solvents like chlorinated solvents and "High Sol 10" or "High Sol 15" (naphthenic aromatic solvents) have ratings in that are in the low hundreds.

The high KB levels along with specific hydrogen bonding attributes make Xylene ideally suited as industrial solvents for paints, coatings and adhesives. Most of the resins, rubbers and plastic based polymers used in our formulas are centered around the specific parameters found in Xylene. In order to substitute away from these raw materials we would have to completely change our current raw material base to polymers that exhibit solubility in non-aromatic solvents.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Xylene is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

Halton Chemical Inc. has reviewed the options in the seven (7) categorizes and have determined that at this time there are no technically and economically feasible solutions beyond what has been implemented in 2010.

For instance: Replacing G240 will reduce Xylene by 539.0265 kg and by 0.867%, but will cost $85.68 more per drum. The reduction in Xylenes would be minimal compared to the costs that would be incurred from the change.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

141-78-6, Ethyl acetate

141-78-6, Ethyl acetate

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Ethyl Acetate. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Ethyl Acetate is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Ethyl Acetate. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Ethyl Acetate is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Ethyl Acetate is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Ethyl Acetate. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

50-00-0, Formaldehyde

50-00-0, Formaldehyde

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic

substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Formaldehyde, which is a component introduced at the supplier level in a number of products we use. Toxic substance reduction will be an ongoing effort at our facility.

No viable alternative product was found that would significantly decrease the amount of Formaldehyde, nor an option that was considered technically and financially feasible at this time. The rationale associated with this statement is due to the fact that Halton Chemical Inc. has already implemented measures to reduce the use of Formaldehyde in the system, where further changes are detrimental to the end desired product.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Formaldehyde is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. will to identify new reduction options or alternatives to products containing for Formaldehyde by determining the flow of the chemical through the process of the Facility.

Our plan will involve continually identifying the greatest potential for reduction at the raw materials level as this is the main source for the introduction of Formaldehyde into the Facility.

The Facility will use a combination of Product-focused and Production area approach. The individual raw materials will be analyzed by their MSDS and the Production area will be analyzed to minimize loss within each process.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target	Quantity	Unit

☒ or

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Formaldehyde runs parallel (cannot be separately distinguished by other chemicals as it has been added by the suppliers) with the other chemicals within the facility and is a small component of the raw materials used. Halton Chemical Inc. intends to reduce their use of Formaldehyde by attempting to substitute the raw material to be potentially Formaldehyde-free.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Formaldehyde is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

While Halton Chemical Inc. is constantly pursuing alternatives, the current market does not provide technically and economically feasible substitutions at this time.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

64-17-5, Ethyl Alcohol

64-17-5, Ethyl Alcohol

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Ethyl Alcohol. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Ethyl Alcohol is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Ethyl Alcohol. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Ethyl Alcohol is a formulation component mixed with other substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Ethyl Alcohol is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Ethyl Alcohol. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

64742-47-8, Hydrotreated light distillate

64742-47-8, Hydrotreated light distillate

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic

substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Hydrotreated Light Distillate. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Hydrotreated Light Distillate is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Hydrotreated Light Distillate. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Hydrotreated Light Distillate is a formulation component mixed with substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Hydrotreated Light Distillate is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you

answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Hydrotreated Light Distillate. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction

plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

64742-48-9, Hydrotreated heavy naphtha

64742-48-9, Hydrotreated heavy naphtha

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Hydrotreated Heavy Naphtha. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Hydrotreated Heavy Naphtha is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Hydrotreated Heavy Naphtha. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Hydrotreated Heavy Naphtha is a formulation component mixed with substances to produce the desired end product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Hydrotreated Heavy Naphtha is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Hydrotreated Heavy Naphtha. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

64742-89-8, Solvent naphtha light aliphatic

64742-89-8, Solvent naphtha light aliphatic

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

No substitution and alternatives were identified at this time. Halton Chemical Inc. continues to implement new changes to reduce their use of toxic substances.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Solvent Naphtha Light Aliphatics. Toxic substance reduction will be an ongoing effort at our facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This substance is used as part of the formulation process for the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Solvent Naphtha Light Aliphatics. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

64742-94-5, Heavy aromatic solvent naphtha

64742-94-5, Heavy aromatic solvent naphtha

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

No substitutions and alternatives were identified at this time. Halton Chemical Inc. continues to implement new measures to reduce their use of toxic substances.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Heavy Aromatic Solvent Naphtha. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This substance is used as part of the formulation process to produce the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Heavy Aromatic Solvent Naphtha. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

64742-95-6, Light aromatic solvent naphtha

64742-95-6, Light aromatic solvent naphtha

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

No substitutions and alternatives were identified at this time. Halton Chemical Inc. continues to implement new measures to reduce their use of toxic substances.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Light Aromatic Solvent Naphtha. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the

facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This substance is used for the formulation process to produce the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Light Aromatic Solvent Naphtha. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

67-56-1, Methanol

67-56-1, Methanol

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

Yes

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will eliminate, or reduce the use of Methanol. Toxic substance reduction will be an ongoing effort at our facility.

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

The facility does not create methanol.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is continually searching for new reduction options or alternatives to products containing for Methanol by determining the flow of the chemical through the process of the Facility.

Our plan will involve continually identifying the greatest potential for reduction at the raw materials level as this is the main source for the introduction of Methanol into the Facility.

The Facility will use a combination of Product-focused and Production area approach. The individual raw materials will be analyzed by their MSDS and the Production area will be analyzed to minimize loss within each process.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☐	or	21203	kg

What is the targeted timeframe for this reduction? *

No timeline target		years
☐	or	1.5

Description of targets

The reduction will be performed over three (3) phases which will start in Q1 or Q2 of 2013 and completed at the latest by Q4 of 2014.

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Methanol is a common solvent that is used for coatings, strippers and reducers. It is also used as a denaturing product for ethanol.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

No, we are implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

Materials or feedstock substitution

Substituted materials

Which activities will be undertaken to implement these reduction options?

Which activities will be undertaken to implement these reduction options?: *

Substituted materials

Describe the option: *

Substituting Methanol/Alcohol DAG 2A Anhydrous with Denatured Ethanol 2I
As a direct addition product, methanol has a number of benefits.
·Low cost
·Fast dry
·High solubility
·Broad compatibility
·Pot life extension

In most cases, we cannot simply eliminate a primary alcohol from the formulation. Our only option is to replace the usage percent with another primary alcohol. The obvious choice is ethanol, which is not listed as a toxin or potential toxin on the Toxic Reduction Act. This substitution presents a number of problems from both the functional and economic sides.

Estimates

N/A	tonnes	%

Estimate of the amount by which the use of the toxic substance at the facility will be reduced as a result of implementing the option:

☐	21.20	87.2

Estimate of the amount by which the creation of the toxic substance at the facility will be reduced as a result of implementing the option:

☒		

Estimate of the amount by which the toxic substance contained in the product leaving the facility will be reduced as a result of implementing the option:

☐	21.20	87.2

Estimate of the amount by which the total releases to air of the toxic substance at the facility will be reduced as a result of implementing the option:

☒		

Estimate of the amount by which the total releases to water of the toxic substance at the facility will be reduced as a result of implementing the option:

☒		

Estimate of the amount by which the total releases to land of the toxic substance at the facility will be reduced as a result of implementing the option:

☒		

Estimate of the amount by which the disposals on-site (including tailing and waste rock) of the toxic substance at the facility will be reduced as a result on implementing this option:

☒		

Estimate of the amount by which the disposals off-site of the toxic substance at the facility will be reduced as a result on implementing this option:

☒

Estimate of the amount by which total recycling off-site of the toxic substance at the facility will be reduced as a result on implementing this option:

☒

Timelines

N/A	years

Anticipated timelines for achieving the estimated reduction of the use of the toxic substance:

☐ 1.5

Anticipated timelines for achieving the estimated reduction of the creation of the toxic substance:

☒

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

67-63-0, Isopropyl alcohol

67-63-0, Isopropyl alcohol

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

No substitutions and alternatives were identified at this time. Halton Chemical Inc. continues to reduce their use of toxic substances.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Isopropyl Alcohol. Toxic substance reduction will be an ongoing effort at our facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Isopropyl Alcohol is used for the formulation process to produce the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Isopropyl Alcohol. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

67-64-1, Acetone

67-64-1, Acetone

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic

substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Acetone. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Acetone is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Acetone. Toxic substance reduction is an ongoing effort at our facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This substance is used for the formulation process to produce the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you

answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Acetone. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction

plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

71-36-3, n-Butyl alcohol

71-36-3, n-Butyl alcohol

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of n-Butyl Alcohol. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of n-Butyl Alcohol. Toxic substance reduction is an ongoing effort at our facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This substance is used for the formulation process to produce the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of n-Butyl Alcohol. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

78-83-1, i-Butyl alcohol

78-83-1, i-Butyl alcohol

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of i-Butyl Alcohol. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created in the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of i-Butyl Alcohol. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity	Quantity	Unit

target

☒ or

What is the targeted timeframe for this reduction? *

No timeline target **years**

☒ or

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

i-Butyl Alcohol is a formulation component mixed with other substances to produce the final desired product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

The substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

No viable substitution or alternative for this product has been identified. Halton Chemical Inc. will continue to implement changes to reduce the overall toxic substance use.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Amended Plan

78-93-3, Methyl ethyl ketone

78-93-3, Methyl ethyl ketone

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic

substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

Halton Chemical Inc. has already implemented measures to reduce their use of Methyl Ethyl Ketone. Currently, there are no viable substitutions and alternatives at this time to further reduce their use. Halton Chemical Inc. continues to implement new measures to reduce their use of toxic substance reductions.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Methyl Ethyl Ketone, which is a solvent in a number of products we use. Toxic substance reduction will be an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target	years

☒ or

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This substance is used in the formulation process to produce the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Methyl Ethyl Ketone. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

79-01-6, Trichloroethylene

79-01-6, Trichloroethylene

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Trichloroethylene. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

Trichloroethylene is not created in the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Trichloroethylene. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

Trichloroethylene is a formulation component mixed with other substances to produce the desired product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

Trichloroethylene is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

No viable substitution or alternative for this product has been identified. Halton Chemical Inc. will continue to implement changes to reduce the overall toxic substance use.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Amended Plan

8052-41-3, Stoddard solvent

8052-41-3, Stoddard solvent

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

No viable substitutions and alternatives were identified at this time. Halton Chemical Inc. continues to implement new changes to reduce their use of toxic substances.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Stoddard Solvent. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity	Quantity	Unit

target

☒ or

What is the targeted timeframe for this reduction? *

No timeline target **years**

☒ or

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This substance is used in the formulation process to produced the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Stoddard Solvent. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

95-63-6, 1,2,4-Trimethylbenzene

95-63-6, 1,2,4-Trimethylbenzene

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of 1,2,4-Trimethylbenzene. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

1,2,4-Trimethylbenzene is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of 1,2,4-Trimethylbenzene. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the

facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

1,2,4-Trimethylbenzene is a formulation component mixed with other substances to produce the desired product as specified by the client.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

1,2,4-Trimethylbenzene is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

No viable substitution or alternative for this product has been identified. Halton Chemical Inc. will continue to implement changes to reduce the overall toxic substance use.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

License Number of the toxic substance reduction planner who made recommendations in the toxic

substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Amended Plan

NA - 31, Heptane (all isomers)

NA - 31, Heptane (all isomers)

Substances Section Data

Statement of Intent

Use

Is there a statement that the owner or operator of the facility intends to reduce the use of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the use of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the use of the toxic substance at the facility: **

No viable substitutions and alternatives were identified at this time. Halton Chemical Inc. continues to implement new changes to reduce their use of toxic substances.

Creation

Is there a statement that the owner or operator of the facility intends to reduce the creation of the toxic substance at the facility?: *

No

If ‘yes’, exact statement of the intent that is included in the facility’s TRA Plan to reduce the creation of the toxic substance at the facility: **

If ‘no’, reason in the facility’s TRA Plan for no intent to reduce the creation of the toxic substance at the facility: **

This substance is not created at the Halton Chemical Facility.

Objectives, Targets and Description

Objectives

Objectives in plan: *

Halton Chemical Inc. is committed to protecting the environment. Whenever feasible, we will reduce or eliminate the use of Heptane. Toxic substance reduction is an ongoing effort at our Facility.

Use Targets

What is the targeted reduction in use of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of targets

Creation Targets

What is the targeted reduction in creation of the toxic substance at the facility? *

No quantity target		Quantity	Unit
☒	or		

What is the targeted timeframe for this reduction? *

No timeline target		years
☒	or	

Description of Target

Reasons for Use

Why is the toxic substance used at the facility?: *

As a formulation component

Summarize why the toxic substance is used at the facility: **

This substance is used in the formulation process to produce the desired end product.

Reasons for Creation

Why is the toxic substance created at the facility?: *

This substance is not created at the facility

Summarize why the toxic substance is created at the facility: **

This substance is not created at the Halton Chemical Facility.

Toxic Reduction Options for Implementation

Description of the toxic reduction option(s) to be implemented

Is there a statement that no option will be implemented?: *

Yes, we are not implementing

If you answered “No” to this question, please add the option(s) under the appropriate Toxic Substance Reduction Categories (e.g. Materials or feedstock substitution, Product design or reformulation, etc.). If you answered “Yes” please provide an explanation below why your facility is not implementing an option. Explanation of the reasons why no option will be implemented: **

After review of the Toxic Substance Reduction Plan, no current available options listed were viable for the reduction of Heptane. Halton Chemical Inc. is continuing to exercise good practices to reduce loss of the material throughout the process.

Materials or feedstock substitution

Empty

Product design or reformulation

Empty

Equipment or process modifications

Empty

Spill or leak prevention

Empty

On-site reuse, recycling or recovery

Empty

Improved inventory management or purchasing techniques

Empty

Good operator practice or training

Empty

Rationale for why the listed options were chosen for implementation

General description of any actions undertaken by the owner and operator of the facility to reduce the use and creation of the toxic substance at the facility that are outside of the plan

Halton Chemical Inc. currently has:

Spill prevention training
Fugitive emission/VOC training
Procedures for proper handling of materials and wastes to prevent spills
Run times as short as possible written exactly on batch cards
Dedicate equipment to a single product
Procedures to ensure all containers are covered/closed with tight-fitting lids and bungs
Procedures to ensure drums/containers/batch mixers are drained as much as possible
Written equipment procedures in plain language given to each operator with each batch
Regularly scheduled maintenance for operating equipment
Regularly scheduled maintenance for all scales to ensure weights of raw materials are exact
Weekly production meetings to review the above and address any new issues

License Number of the toxic substance reduction planner who made recommendations in the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *

TSRP0237

What version of the plan is this summary based on?: *

Reviewed Plan

2013

Certification for the submission of the Toxics Substance Reduction Plan due December 31, 2014 for the Year 2013.

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 31, 2014, I, Jamie Dickens, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Jamie Dickens
Manager
Halton Chemical Inc.

DEC 31 2014
Date

CERTIFICATION BY LICENSED PLANNER

As of December 31, 2014, I, Winston Lew, certify that I am familiar with the processes at Halton Chemical Inc. that use or create the toxic substance 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 plan dated October 10, 2012 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Winston Lew, P. Eng.
Certified TSRP Planner TSRP0237

December 31, 2014
Date