Plan Summary Pre	eview	
Company Details		
Company Legal Name		
Halton Chemical Inc.		The state of the s
Company Address		
840 Line, (Ontario)		
Report Details		
Facility Name		
Halton Chemical Inc. PLANT/WAREHO	USE	
Facility Address	•	
840 Line, (Ontario)		
Update Comments		
80		
Activities		
Contacts		
Facility Contacts		
Public Contact: *		
Jamie Dickens		
Highest Ranking Employee		
Jamie Dickens		
Person responsible for Toxic Substance	Reduction Plan preparation	
Karen McLean		
Organization Validation		
Company and Parent Comp	any Information	
Company Details		
Company Legal Name: *	Halton Chemical Inc.	
Company Trade Name: *	Halton Chemical Inc.	

Business Number: *	102253903		
Mailing Address			
Delivery Mode			
PO Box			
Rural Route Number			
Address Line 1			
City *			
Province/Territory **			
Postal Code: **			
Physical Address			
Address Line 1			
City			
Province/Territory			
Postal Code			
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 ld: *	000007106		

ON Reg 127/01 ld	356987			
Facility Mailing Address				
Delivery Mode				
PO Box				
Rural Route Number				
Address Line 1				
City *				
Province/Territory **				
Postal Code: **				
Physical Address				
Address Line 1				
City				
Province/Territory				
Postal Code				
Additional Information				
Land Survey Description				
National Topographical Description				
Geographical Address				
Latitude **				
Longitude **				
UTM Zone **				
UTM Easting **				
UTM Northing **				

Contact Validation	
Contacts	
Public Contact	
First Name: *	
Last Name: *	
Position: *	
Telephone: *	
Ext	
Fax	
Email: *	
Mailing Address	
Delivery Mode	
РО Вох	
Rural Route Number	
Address Line 1	
City *	
Province/Territory **	
Postal Code: **	
Highest Ranking Employee	
First Name: *	
Last Name: *	
Position: *	
Telephone: *	
Ext	

Fax	
Email: *	
Mailing Address	
Delivery Mode	
РО Вох	
Rural Route Number	
Address Line 1	
City *	
Province/Territory **	
Postal Code: **	
Person responsible for the Toxic Sub First Name: *	stance Reduction Plan preparation
Last Name: *	
Position: *	
Telephone: *	
Ext	
Fax	
Email: *	
Mailing Address	
Delivery Mode	
PO Box	
Rural Route Number	
Address Line 1	

City *	
Province/Territory **	
Postal Code: **	
Employees	
Employees	
Number of Full-time Employees: *	
9	
Substances	
100-41-4, Ethylbenzene	
Substances Section Data	
Statement of Intent	
Use	
Is there a statement that the owner or operator of the fundamental substance at the facility?: *	acility intends to reduce the use of the toxic
Yes	
If 'yes', exact statement of the intent that is included in substance at the facility: **	the facility's TRA Plan to reduce the use of the toxic
Halton Chemical Inc. is committed to protecting the en eliminate the use of Ethyl Benzene, which is a compor products we use. Toxic substance reduction will be ar No viable alternative product was found that would sig an option that was considered technically and financial this statement is due to the fact that Halton Chemical I use of Ethyl Benzene in the system, where further cha	nent introduced at the supplier level in a number of a ongoing effort at our facility. nificantly decrease the amount of Ethyl Benzene, nor lly feasible at this time. The rationale associated with no, has already implemented measures to reduce the
If 'no', reason in the facility's TRA Plan for no intent to I	
Creation	
Is there a statement that the owner or operator of the fasubstance at the facility?: *	acility intends to reduce the creation of the toxic
No	
156	

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: **

nvironment Canada					
If 'no', reason in facility: **	the facility	y's TRA Plan for i	no intent to reduce the	creation of the t	oxic substance at the
Halton Chemica	al Inc. does	s not create Ethyl	Benzene in their proc	ess as it is a sim	ple batch mixing process.
Objectives,	Target	ts and Desc	ription		
Objectives		-	•		
Objectives in pla	an: *				
Halton Chemica Benzene by det	al Inc. will t ermining t	o identify new red he flow of the che	duction options or alter emical through the prod	natives to producess of the Facil	cts containing for Ethyl ity.
Our plan will inv	olve continus	nually identifying the introduction	the greatest potential f of Ethyl Benzene into t	or reduction at t he Facility.	he raw materials level as
The Facility will materials will be each process.	use a com analyzed	bination of Produ by their MSDS a	uct-focused and Production area	ction area appro will be analyze	ach. The individual raw d to minimize loss within
Use Target	S				
What is the	targete	ed reduction	n in use of the to	xic substar	nce at the
facility? *					
No quantity target		Quantity		Unit	
×	or				
What is the	targete	ed timeframe	e for this reduct	ion? *	
No timeline targ	jet		years		
X		or			
Description of tar	rgets				
		1110			7
Creation Ta	rgets			200-200-2	
de la company		ed reduction	in creation of the	ne toxic sub	etance at the

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

No quantity target		Quantity	Unit
X	or		

What is the targeted	timeframe	for this reduction? *
No timeline target		years
\boxtimes	or	
Description of Target		
Reasons for Use		
Why is the toxic substance use	ed at the facility	?: *
As a formulation component		
Summarize why the toxic subs	stance is used a	t the facility: **
Ethyl Benzene is a unique ard	matic hydrocarl	oon with high Kauri Butanol "KB" levels.
is a scaleless index, usually reaggressive or active in the abi	overned by an A eferred to as the ility to dissolve o eeing intrinsic to	XVIene make ethyl henzene difficult to substitute. In order to
formulations.	ompletely chang	ge our current raw material base and our chemical
Reasons for Creation	1	
Why is the toxic substance cre	ated at the facil	ity?: *
This substance is not created	at the facility	
Summarize why the toxic subs	tance is created	I at the facility: **
This substance is not created	at this facility.	
Toxic Reduction Opti	ons for Imp	plementation
Description of the tox	ic reduction	n option(s) to be implemented
Is there a statement that no op		
Yes, we are not implementing		

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): *
TRSP0237
License Number of the toxic substance reduction planner who has certified the toxic substance reduction

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plan for this substance (format TSRPXXXX): *

TRSP0237
What version of the plan is this summary based on?: *
New 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?: *
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 Toluene. 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: **
Toluene is not created at this 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	3		
What is the facility? *	targete	ed reduction	on in use of the toxic substance at the
No quantity target		Quantity	Unit
X	or		
What is the	targete	d timefran	ne for this reduction? *
No timeline targe	et		years
X		or	
Description of targ	gets		
Creation Tar	rgets		
What is the facility? *	targete	d reductio	n in creation of the toxic substance at the
No quantity target		Quantity	Unit
\boxtimes	or		
What is the t	targete	d timefram	ne for this reduction? *
No timeline targe	et		years
X		or	
Description of Tar	get	The state of the s	

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: **

This substance is not created at the 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

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): *
TRSP0237
License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *
TRSP0237

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

New 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?: *
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 reduce or eliminate the use of Xylene, 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.
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 of the facility of the facilit
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 facility does not create Xylenes.
Objectives, Targets and Description
Objectives
Objectives in plan: *

Halton Chemical Inc. will to identify 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		W-14-10-		
What is the ta facility? *	argeted	d reduction	in use of the toxi	c substance at the
No quantity target		Quantity		Unit
\boxtimes	or			
What is the ta	argeted	timeframe	for this reduction	า? *
No timeline target			years	
×		or		
Description of targe	ets			
Creation Targ	gets			
What is the ta facility? *	argeted	I reduction i	n creation of the	toxic substance at the
No quantity target		Quantity		Unit
X	or			
What is the ta	rgeted	timeframe	for this reduction	1? *
No timeline target			years	
×		or		
Description of Targe	et			

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: **

This substance is not created at the 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

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): *
TRSP0237
License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *
TRSP0237
What version of the plan is this summary based on?: *
New 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?: *
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 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.
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: **
Halton Chemical Inc. does not create Formaldehyde in their 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.

ted reduction	n in use of the toxic substance at the
Quantity	Unit
ted timefram	ne for this reduction? *
	years
or	
ed reduction	n in creation of the toxic substance at the
Quantity	Unit
ed timefram	e for this reduction? *
	years
or	
	Quantity ed timefram or Quantity ed timefram

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: **

This substance is not created at the 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 Cood an anatom and the second in the
Good operator practice or training
Empty Defined to the first of
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?: *
New 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 statemen substance at the fa	t that the owner or ope cility?: *	rator of the fa	acility intends to reduce the creation of the toxic
No			
If 'yes', exact stater toxic substance at t	nent of the intent that is he facility; **	s included in	the facility's TRA Plan to reduce the creation of the
If 'no', reason in the facility: **	facility's TRA Plan for	no intent to r	reduce the creation of the toxic substance at the
The facility does no	t create methanol.		
Objectives, Ta	argets and Desc	cription	
Objectives		•	
Objectives in plan:	•		
Halton Chemical In Methanol by determ	c. will to identify new re nining the flow of the ch	eduction option	ons or alternatives to products containing for igh the process of the Facility.
Our plan will involve this is the main sou	e continually identifying rce for the introduction	the greatest of Methanol	t potential for reduction at the raw materials level as into the Facility.
The Facility will use materials will be an each process.	a combination of Prod alyzed by their MSDS a	luct-focused and the Prod	and Production area approach. The individual raw uction area will be analyzed to minimize loss within
Use Targets			
What is the ta	rgeted reduction	n in use d	of the toxic substance at the
facility? *			
No quantity target	Quantity	8)	Unit
	or 21203		kg
What is the ta	rgeted timefram	e for this	reduction? *
No timeline target		years	
	or	1.5	
Description of target	s		
The reduction will be the latest by Q4 of 2	e performed over three	(3) phases v	which will start in Q1 or Q2 of 2013 and completed at

Creation T	argets		
What is th	e target	ed reductio	n in creation of the toxic substance at the
facility? *			
No quantity target		Quantity	Unit
×	or		
What is the	e targete	ed timefram	ne for this reduction? *
No timeline ta	rget		years
X		or	
Description of	Target		
Reasons f	or Use		
Why is the toxic	c substance	used at the faci	lity?: *
As a formulation	n compone	nt	
Summarize why	y the toxic s	ubstance is use	d at the facility: **
Methanol is a denaturing production	common sol duct for etha	vent that is used	I for coatings, strippers and reducers. It is also used as a
Reasons fo	or Creat	ion	
Why is the toxic	substance	created at the fa	acility?: *
This substance	is not crea	ted at the facility	
Summarize why	the toxic s	ubstance is crea	ated at the facility: **
This substance	is not creat	ted at the facility	
Toxic Redu	uction O	ptions for Ir	mplementation
			ion option(s) to be implemented
		option will be in	
No, we are imp	lementing		

Matchai	s or feedstock substitu	ution	
Substitu	ited materials		
Which a	ctivities will be undert	aken to implement the	se reduction options?
Which activ	ities will be undertaken to imple	ment these reduction options?: *	
Substituted	materials		
Describe the	e option: *		
As a direct ·Low cost ·Fast dry ·High solub ·Broad com ·Pot life ext In most cas replace the as a toxin o	addition product, methanol has ility ipatibility ension es, we cannot simply eliminate usage percent with another prir	a primary alcohol from the formul mary alcohol. The obvious choice eduction Act. This substitution pro	lation. Our only option is to
	es		
Estimate			
1/A	tonnes	%	
N/A Estimate of		g>use of the toxic subs	tance at the facility will be

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:

 \boxtimes

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:

X

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:

\boxtimes	
Estimate of the am facility will be reduced	ount by which the total releases to land of the toxic substance at the ced as a result of implementing the option:
\boxtimes	
Estimate of the am of the toxic substar	ount by which the disposals on-site (including tailing and waste rock) nce at the facility will be reduced as a result on implementing this option:
\boxtimes	
Estimate of the am will be reduced as	ount by which the disposals off-site of the toxic substance at the facility a result on implementing this option:
X	
Estimate of the am facility will be reduced	ount by which total recycling off-site of the toxic substance at the ced as a result on implementing this option:
X	
Timelines	
N/A	years
Anticipated timeline substance:	es for achieving the estimated reduction of the use of the toxic
	1.5
Anticipated timeline substance:	es for achieving the estimated reduction of the creation of the toxic
X	
Product design	n or reformulation
Empty	
Equipment or Empty	process modifications
Spill or leak p	revention
5.00	roovaling or roopyon.
Empty	, recycling or recovery

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): *
TRSP0237
License Number of the toxic substance reduction planner who has certified the toxic substance reduction plan for this substance (format TSRPXXXX): *
TRSP0237
What version of the plan is this summary based on?: *
New Plan

As of December 20, 2012

- #1 I, Jamie Dickens certify that I am familiar with the processes at Halton Chemical Inc. that use or create the toxic substance referred to below,
- #2 that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxic Reduction Act, 2009 that are set out in the plan dated December 20, 2012.
- #3 and that the plan complies with that act and Ontario Regulation 455/09 (General) made under the act.

Ethyl Benzene Toluene Xylene Methanol Formaldehyde

Ramie Dishers	DEC 2 0 2012	
Signature Signature	Date	

As of December 20, 2012

- #1 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,
- #2 that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxic Reduction Act, 2009 that are set out in the plan dated December 20, 2012.
- #3 and that the plan complies with that act and Ontario Regulation 455/09 (General) made under the act.

Ethyl Benzene Toluene Xylene Methanol Formaldehyde

	DEC 2 0 2012
Signature TRSP 0237	Date