ENVIRO – STEWARDS
engineering change

Toyota Boshoku Woodstock

Jason Dittburner
Toyota Boshoku Canada
230 Universal Road
Woodstock, ON N4S 7W3

June 1, 2018
Ref. No. 3126-20

RE: 2017 NPRI & TRA letter report for Toyota Boshoku Woodstock

1. Introduction

The following report presents a summary of the facility's NPRI & TRA inventory report for the 2017 reporting year:

- Table 1 – 2017 NPRI & TRA Substances Summary
- Table 2 – Part 5 Speciated Substance Summary
- Table 3 – 2017 NPRI Part 4 Substance Emission Summary
- Table 4 – Welding Emissions
- Table 5 – Emissions from Natural Gas Consumption
- Table 6 – 2017 VOC Emissions

Updated input-output balance tables and process flow diagrams are included in Attachment A, and a copy of the Single Window Information Manager (SWIM) report is included in Attachment B.

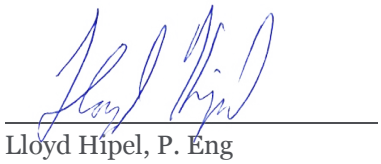
2. Summary of results

The facility exceeded the NPRI Part 1 threshold for cyclohexane; Part 5 thresholds were exceeded for methanol, ethyl acetate, heptane, xylene, and toluene; and Part 4 thresholds were exceeded for PM2.5, PM10, and Total VOCs. Now new NPRI substances were exceeded in 2017.

If you have any questions or comments regarding this report, please feel free to contact us.

Respectfully submitted,

Enviro-Stewards Inc.



Lloyd Hipel, P. Eng
Applied Solutions, Director

Table 1 – NPRI & TRA emissions summary for the 2017 reporting year

SUBSTANCE	CAS #	STAGE	PROCESS	PROCESS INPUTS				PROCESS OUTPUTS (KG/YEAR)			
				Used	Created	In product	Total Inputs	Air	Water	Land	Total Outputs
Ethyl acetate	7664-41-7	Manufacturing	Door trim assembly	25,904	0	0	25,904	25,904	0	0	25,904
Heptane	142-82-5	Manufacturing	Door trim assembly	10,361	0	0	10,361	10,361	0	0	10,361
Methanol	67-56-1	Manufacturing	Door trim assembly	1,295	0	0	1,295	1,295	0	0	1,295
Cyclohexane	110-82-7	Manufacturing	Door trim assembly	10,361	0	0	10,361	10,361	0	0	10,361
Xylene	1330-20-7	Manufacturing	Injection & spray booth	3,420	0	0	3,420	3,420	0	0	3,420
Toluene	108-88-3	Manufacturing	Injection & spray booth	4,788	0	0	4,788	4,788	0	0	4,788
PM10	n/a	Manufacturing	Welding	0	578	0	578	578	0	0	578
		Manufacturing	Plastic injection moulding	0	55	0	55	55	0	0	55
		Ancillary	Cooling tower	0	387	0	387	387	0	0	387
		Ancillary	Space heating	0	56	0	56	56	0	0	56
		Manufacturing	Carpet assembly	0	12	0	12	12	0	0	12
PM2.5	n/a	Ancillary	Welding	0	325	0	325	325	0	0	325
		Manufacturing	Plastic injection moulding	0	55	0	55	55	0	0	55
		Ancillary	Cooling tower	0	3	0	3	3	0	0	3
		Ancillary	Space heating	0	56	0	56	56	0	0	56
		Manufacturing	Carpet assembly	0	12	0	12	12	0	0	12
Total VOCs	n/a	-	-	60,233	0	0	60,233	60,233	0	0	60,233

Table 2 – 2017 NPRI Part 5 Speciated Substance Summary

Part 1: Reporting Threshold (kg) **10,000**
Part 5: Reporting Threshold (kg) **1,000**

CONTAMINANT	CAS #	TOTAL EMISSIONS	PART 1 SUBSTANCE?	REPORTABLE?	PART 5 SUBSTANCE?	REPORTABLE?
		KG/Y	Y/N	Y/N	Y/N	Y/N
Methyl ethyl ketone	78-93-3	684	Y	N	Y	N
Cyclohexane	110-82-7	**10,361**	Y	**Y**	N	N
Methylcyclohexane *	108-87-2	-	N	N	N	N
Methyl alcohol	67-56-1	**1,295**	Y	N	Y	**Y**
Ethyl acetate	141-78-6	**25,904**	N	N	Y	**Y**
Heptane	142-82-5	**10,361**	N	N	Y	**Y**
Xylene	1330-20-7	**3,420**	Y	N	Y	**Y**
Toluene	108-88-3	**4,788**	Y	N	Y	**Y**
n-butanol	71-36-3	684	Y	N	N	N
Ethyl benzene	100-41-4	1,368	Y	N	N	N
Iso-propanol	67-63-0	684	Y	N	Y	N
Iso-butyl alcohol	78-83-1	684	Y	N	N	N

Table 3 – 2017 NPRI Part 4 Emission Summary

PROCESS & SUBSTANCE	MATERIAL	QUANTITY	EMISSION FACTOR	ANNUAL EMISSIONS	% PM-10	PM-10	% PM 2.5	PM-2.5
					%	KG	%	KG
PARTICULATES								
Welding[1]	GMAW ER70S-6	111,111 kg/yr	See Note #1	578 kg/yr	100%	578	75%	325
Plastic injection moulding	Plastic	2,071,440 kg/yr	0.0266 g/kg plastic	55 kg/yr	100%	55	100%	55
Cooling tower (7,700ppm)[2]	Circulated water	468,720 1000gpy	0.0122 lb/1000gal	2,597 kg/yr	15%	387	0%	3.4
Heating	Natural gas	458,033 m^3/yr	0.1220 g/m^3	56 kg/yr	100%	56	100%	56
Carpet assembly	Natural gas	100,544 m^3/yr	0.1220 g/m^3	12 kg/yr	100%	12	100%	12
Total				**3,298 kg/yr**		**1,088**		**452**
Reporting Threshold				20,000 kg/yr		500		300
VOCs								
Plastic injection moulding	Plastic	2,071,440 kg/yr	0.0307 g/kg plastic	64 kg/yr	-	-	-	-
Assembly booths	Adhesive	47,921 kg/yr	- -	47,921 kg/yr	-	-	-	-
Touch-up paint booth	Paint	12,312 kg/yr	- -	12,312 kg/yr	-	-	-	-
Heating	Natural gas	458,033 m^3/yr	- -	49 kg/yr	-	-	-	-
Total				**60,346 kg/yr**				
Reporting Threshold				10,000 kg/yr				

Table 4 – 2017 Welding Emissions

GMAW Electrode type E70S: **111,111** kg

PART 4 RELEASES	QUANTITY
	TONNES
TPM	0.578
PM10	0.578
PM2.5	0.433

NOTES.

All welding fume is considered to be PM-10 (particles < 10 µm aerodynamic diameter)

since the particle size is less than 10 micron (PM-10), all PM-10 emissions are assumed to be the same as TPM

PM2.5 emissions are assumed as 75% of PM-10 emissions since 50% to 75% of the particles have diameters i

range of 0.4 to 0.8 micron size.

Table 5 – 2017 Emissions from Natural Gas Combustion

2017 Natural Gas Consumption **558,577** m^3

COMPOUND	CAS #	EMISSION FACTOR	DATA SOURCE	DATA QUALITY	ANNUAL EMISSIONS	REPORTING TRESHOLD
		lb/10^6 ft^3			kg/y	kg/y
Carbon Dioxide	124-38-9	1.20E+05	USEPA	A	558,577	100,000,000
Carbon Monoxide	630-08-0	8.40E+01	USEPA	B	751	20,000
HFC-134A	811-97-2	NA	NA		NA	10.0
Methane	74-82-8	2.30E+00	USEPA	B	20.6	5,000,000
Nitrous Oxide (N_2O)	10024-97-2	2.20E+00	USEPA	E	19.7	2,700
Oxides of Nitrogen (as NO_2)	NA	1.00E+02	USEPA	B	894	NA
Oxides of Nitrogen (as NO)[1]	10102-43-9				583	14,000
PM - Total Particulate Matter	NA	7.60E+00	USEPA	D	68	20,000
PM10[2]	NA	7.60E+00	USEPA	D	68	500
PM2.5[2]	NA	7.60E+00	USEPA	D	68	300
Sulphur Dioxide	7446-09-5	6.00E-01	USEPA	A	5.4	20,000
Volatile Organic Compounds (VOC)[3]	NA	5.50E+00	USEPA	C	49	10,000

NOTES

1. Based on ratio of molecular weights of NO to NO_2
2. Assumes that all particulate matter is less than 1 um
3. Sum of VOC from combustion and Other VOCs

ASSUMPTIONS

Annual consumption for carpet oven:	18%
Annual consumption for space heating (AMUs):	82%

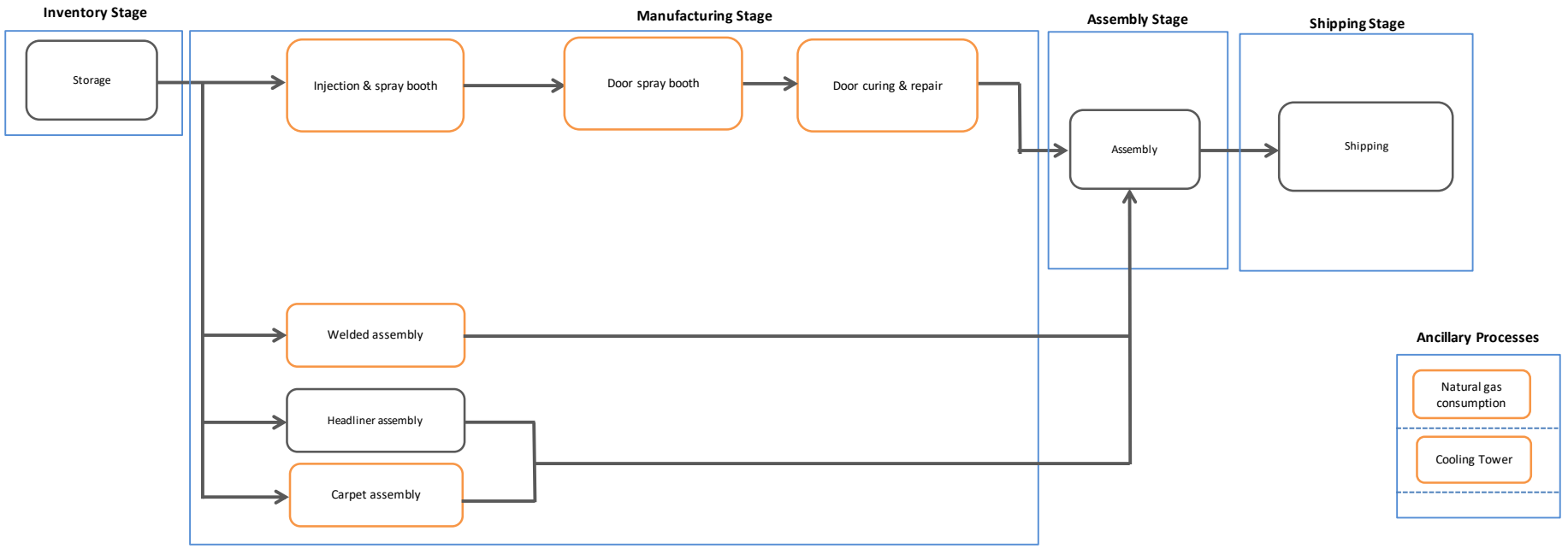
Table 6 – 2017 VOC Emissions Summary

SOURCE ACTIVITY	PRODUCT NAME	USAGE	EXPECTED CONTAMINANTS	CAS #	COMPOSITION	
		KG			%	KG
Backboard Component Assembly	Assembly of seat back component using adhesive Bostik LADH1211	0	Methyl ethyl ketone	78-93-3	5%	0
			Cyclohexane	110-82-7	20%	0
			Methylcyclohexane *	108-87-2	20%	0
			Methyl alcohol	67-56-1	3%	0
Door Trim Assembly	Assembly of Door Trim ornament using adhesive Sunnex Penguin Cement 321 LH	51,807	Ethyl acetate	141-78-6	50%	25,904
			Heptane	142-82-5	20%	10,361
			Cyclohexane	110-82-7	20%	10,361
			Methyl alcohol	67-56-1	3%	1,295
Touch-up Paint Booth	Painting interior components using Red Spot Paint & Varnish Co. Black (136B-TT-1) PM paint	13,680	Methyl ethyl ketone	78-93-3	5%	684
			Xylene	1330-20-7	25%	3,420
			Toluene	108-88-3	35%	4,788
			n-butanol	71-36-3	5%	684
			Ethylbenzene	100-41-4	10%	1,368
			Iso-propanol	67-63-0	5%	684
			Iso-butyl alcohol	78-83-1	5%	684
	Total use	**65,487**			**Total VOC**	**60,233**

Appendix A

Input-Output Balance Table & Process Flow Diagrams

Overall Process Flow Diagram



TITLE:	Overall PFD
DATE:	01-Jun-15

PM2.5 & PM10 balance.

INPUT TYPE	QUANTITY KG/Y	QUANTITY Method	DATA QUALITY	PROCESS	OUTPUT TYPE	QUANTITY KG/Y	ESTIMATION METHOD Method	DATA QUALITY	COMMENTS
$C_{2.5}$ **Creation of PM2.5**	325	EE	A	Welding	$A_{2.5}$ **Release to air**	325	MB	A	
C_{10} **Creation of PM10**	578	EE	A		A_{10} **Release to air**	578	MB	A	
					Subtotal	903			
					Input-Output balance	0.0			Reasonable balance.
$C_{2.5}$ **Creation of PM2.5**	55	EE	A	Plastic injection molding	A_1 **Release to air**	55	MB	A	
C_{10} **Creation of PM10**	55	EE	A		A_{10} **Release to air**	55	MB	A	
					Subtotal	110			
					Input-Output balance	0.0			Reasonable balance.
$C_{2.5}$ **Creation of PM2.5**	3.4	EE	A	Cooling tower	A_1 **Release to air**	3.4	MB	A	
C_{10} **Creation of PM10**	387	EE	A		A_{10} **Release to air**	387	MB	A	
					Subtotal	390			
					Input-Output balance	0.0			Reasonable balance.
$C_{2.5}$ **Creation of PM2.5**	56	EE	A	Space heating	A_1 **Release to air**	56	MB	A	
C_{10} **Creation of PM10**	56	EE	A		A_{10} **Release to air**	56	MB	A	
					Subtotal	112			
					Input-Output balance	0.0			Reasonable balance.
$C_{2.5}$ **Creation of PM2.5**	12	EE	A	Carpet assembly	A_1 **Release to air**	12	MB	A	
C_{10} **Creation of PM10**	12	EE	A		A_{10} **Release to air**	12	MB	A	
					Subtotal	24			
					Input-Output balance	0.0			Reasonable balance.
Total inputs	**1,540**				**Total outputs**	**1,540**			
Overall input/output balance	**0**		**Reasonable?**	**Yes**					

DATA QUALITY LEVEL	
H	High
AA	Above average
A	Average
U	Uncertain

NOMENCLATURE	
A	On-site release of toxic substance to *Air*
DIS	On-site or off-site *disposal* of toxic substance
C	*Creation* of a toxic substance
Int	*Intermediate* step containing substance
TR	*Transfer* of substance off-site
EE	Engineering Estimate
MB	Mass Balance
EF	Emission Factor

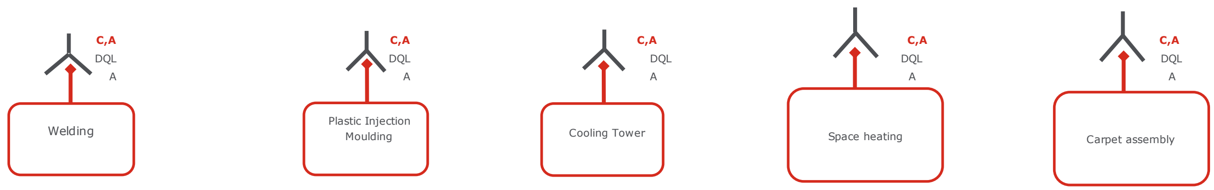
NOTES

Rationale for Estimation Method Used

Engineering Estimate — Based on NPRI report, as it is the most accurate data source.

Process Description: Particulate matter (PM2.5 & PM10).

PM2.5 & PM10 are created in the wedling, plastic injection moulding, cooling tower, and heating (natural gas combustion) processes. Quantities of PM2.5 & PM10 created are shown in the table below the process flow diagrams. The 2017 combined natural gas consumption for space heating and the carpet assembly was 558,577 m^3; and it is assumed that 82% of the natural gas consumption was used for space heating and 18% for the carpet dryer.



Process	PM2.5 Created (kg/yr)	PM10 Created (kg/yr)
Welding	325	578
Plastic injection moulding	55	55
Cooling tower	3	387
Space heating	56	56
Carpet oven	12	12

LEGEND.

(dashed arrow)	**Absence** of toxic substance
(solid arrow)	Onsite or offsite release, or offsite transfer of a toxic substance, either in its original form or in another form
(red arrow)	**Presence** of toxic substance
D	*Destruction* of toxic substance
A	Onsite release of toxic substance to *Air*
C	*Creation* of toxic substance
DIS	Onsite or offsite *disposal* of toxic substance
U	*Use* of a toxic substance
I	*Input* of a toxic substance from another process
O	Output of a toxic substance to another process
t	*Transfer* of a toxic substance within this process
DQL	Data Quality Level
AA	Above average
A	Average

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TOXIC SUBSTANCE(S):	PM 2.5 & PM 10
DRAWING TITLE:	PM2.5 & PM10 Processes
DATE OF ISSUE:	1-Jun-18

VOC balance.

INPUT TYPE	QUANTITY KG/Y	QUANTITY Method	DATA QUALITY	PROCESS	OUTPUT TYPE	QUANTITY KG/Y	ESTIMATION METHOD Method	DATA QUALITY	COMMENTS
U_m **Use of methanol**	1,295	EE	AA	Door trim	A_m **Release to air**	1,295.2	MB	A	
U_{ea} **Use of ethyl acetate**	25,904	EE	AA		A_{ea} **Release to air**	25,903.5	MB	A	
U_h **Use of heptane**	10,361	EE	AA		A_h **Release to air**	10,361.4	MB	A	
U_c **Use of cyclohexane**	10,361	EE	AA		A_c **Release to air**	10,361.4	MB	A	
					Inputs subtotal	47,921			
					Outputs subtotal	47,921			
					Input-Output balance	0.0			Reasonable balance.
U_x **Use of xylene**	3,420	EE	AA	Injection spray booth	A_x **Release to air**	3,420.0	MB	A	
U_t **Use of toluene**	4,788	EE	AA		A_t **Release to air**	4,788.0	MB	A	
					Inputs subtotal	8,208			
					Outputs subtotal	8,208			
					Input-Output balance	0.0			Reasonable balance.
					Total inputs	**56,129**			
					Total outputs	**56,129**			
					Overall input/output balanc	**0**	**Reasonable? Yes**		

DATA QUALITY LEVEL	
H	High
AA	Above average
A	Average
U	Uncertain

NOMENCLATURE	
A	On-site release of toxic substance to *Air*
DIS	On-site or off-site *disposal* of toxic substance
U	*Use* of a toxic substance
Int	*Intermediate* step containing substance
TR	*Transfer* of substance off-site
EE	Engineering Estimate
MB	Mass Balance
EF	Emission Factor

NOTES

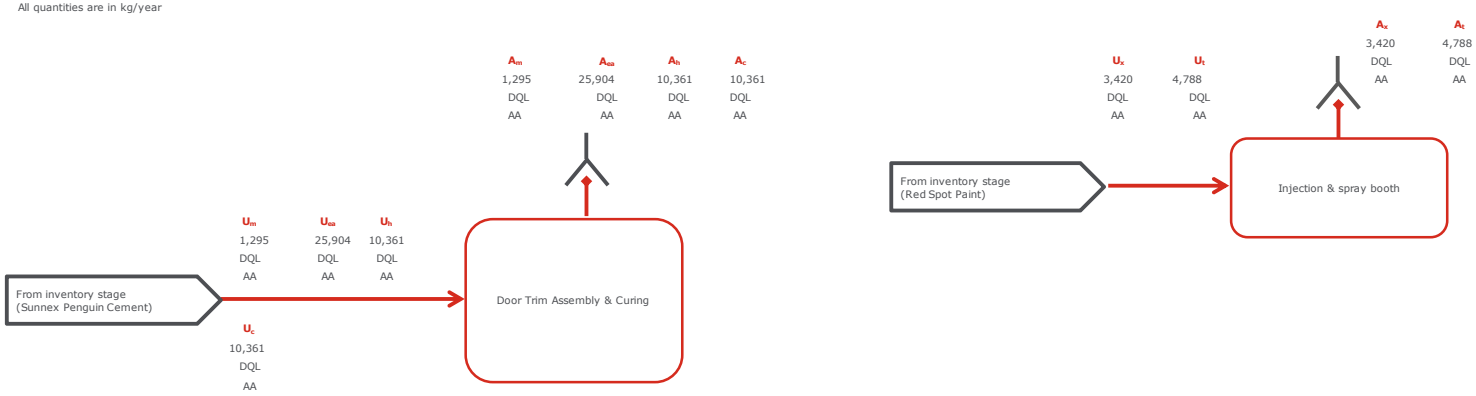
Rationale for Estimation Method Used

Engineering Estimate	Based on NPRI report, as it is the most accurate data source.

Process Description: Methanol, ethyl acetate, heptane, cyclohexane, toluene, and xylene.

Methanol, ethyl acetate, heptane , and cyclohexane are all ingredients in Sunnex Penguin Cement 321 LH, which is an adhesive used to join parts in the door trim assembly process. Based on the facility's 2017 usage of this product, the amount of each of these substances is listed in the diagram below. Following assembly, the parts are cured in an oven, where it is assumed that 100% of these substance is emitted to air. Toluene and xylene are contained in Red Spot paint, which is sprayed onto to the edges of doors following injection. It is 100% of the toluene and xylene volatilize to air.

All quantities are in kg/year



LEGEND.

- - - →	**Absence** of toxic substance
⟶	Onsite or offsite release, or offsite transfer of a toxic substance, either in its original form or in another form
→	**Presence** of toxic substance
D	*Destruction* of toxic substance
A_x	Onsite release of toxic substance to *Air* (***Am*** = *methanol*, ***Aea*** = *ethyl acetate*, ***Ah*** = *heptane*, ***Ac*** = *cyclohexane*, ***Ax*** = *xylene*, ***At*** = *toluene*)
C	*Creation* of toxic substance
DIS	Onsite or offsite *disposal* of toxic substance
U_x	*Use* of a toxic substance (***U_m*** = *methanol*, ***U_{ea}*** = *ethyl acetate*, ***U_h*** = *heptane*, ***Uc*** = *cyclohexane*, ***Ux*** = *xylene*, ***Ut*** = *toluene*)
I	*Input* of a toxic substance from another process
O	Output of a toxic substance to another process
t	*Transfer* of a toxic substance within this process
DQL	Data Quality Level
AA	Above average
A	Average

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TOXIC SUBSTANCE(S):	VOCs
DRAWING TITLE:	Door trim assembly & Spray/repair process
DATE OF ISSUE:	1-Jun-18

Appendix B

2107 SWIM Summary Report

Report Preview

Report Details

Report Year	2017
Report Type:	NPRI,ON MOE TRA
Report Status:	Submitted
Modified Date/Time:	01/06/2018 10:04 AM

Company and Facility Details

Company Name:	Toyota Boshoku Canada Inc.
Business Number:	850793365
Mailing Address:	Address Line 1: 230 Universal Road City, Province/Territory, Postal Code: Woodstock Ontario N4S 7W3 Country: Canada
Facility Name:	Toyota Boshoku Canada
NAICS Code:	332999
NPRI ID:	11773
Physical Address:	Address Line 1: 230 Universal Road City, Province/Territory, Postal Code: Woodstock Ontario N4S7W3 Country: Canada Latitude: 43.1277 Longitude: -80.7105 UTM Zone: 17 UTM Easting: 523547 UTM Northing: 4775036

Contacts Details

Contact Type	Technical Contact, Certifying Official
Name:	Jason Dittburner
Position:	Plant Specialist
Telephone:	5196022121
Fax:	5194219958
Email:	Jason.Dittburner@tbamerica.com
Contact Type	Highest Ranking Employee
Name:	Norimichi Adachi
Position:	President
Telephone:	5194217556
Email:	norimichi.adachi@tbamerica.com

Mailing Address:	Address Line 1: 230 Universal Road City, Province/Territory, Postal Code: Woodstock Ontario N4S7W3 Country: Canada
Contact Type	Person who prepared the report
Name:	Lloyd Hipel
Position:	Project Manager
Telephone:	5195785100
Email:	lhipel@enviro-stewards.com
Mailing Address:	Delivery Mode: GeneralDelivery Address Line 1: 1 Union Street City, Province/Territory, Postal Code: Elmira Ontario N3B 3J9 Country: Canada

General Information

Number of employees:	475
Activities for Which the 20,000-Hour Employee Threshold Does Not Apply:	None of the above
Activities Relevant to Reporting Dioxins, Furans and Hexacholorobenzene:	None of the above
Activities Relevant to Reporting of Polycyclic Aromatic Hydrocarbons (PAHs):	Wood preservation using creosote: No
Is this the first time the facility is reporting to the NPRI (under current or past ownership):	No
Is the facility controlled by another Canadian company or companies:	No
Did the facility report under other environmental regulations or permits:	No
Is the facility required to report one or more NPRI Part 4 substances (Criteria Air Contaminants):	Yes
Was the facility shut down for more than one week during the year:	No
Operating Schedule - Days of the Week:	Mon, Tue, Wed, Thu, Fri
Usual Number of Operating Hours per day:	16
Usual Daily Start Time (24h) (hh:mm):	07:00

Substance List

CAS RN	Substance Name	Releases	Releases (Speciated VOCs)	Disposals	Recycling	Unit
110-82-7	Cyclohexane	10.4000	N/A	N/A	N/A	tonnes
67-56-1	Methanol	1.3000	N/A	N/A	N/A	tonnes
NA - M09	PM10 - Particulate Matter <= 10 Microns	1.9000	N/A	N/A	N/A	tonnes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	0.4520	N/A	N/A	N/A	tonnes
108-88-3	Toluene	4.8000	N/A	N/A	N/A	tonnes
NA - M16	Volatile Organic Compounds (VOCs)	60.2000	45.8000	N/A	N/A	tonnes
1330-20-7	Xylene (all isomers)	3.4000	N/A	N/A	N/A	tonnes

Applicable Programs

CAS RN	Substance Name	NPRI	ON MOE TRA	ON MOE Reg 127/01	First report for this substance to the ON MOE TRA
110-82-7	Cyclohexane	Yes	Yes		No
67-56-1	Methanol	Yes	Yes		No
NA - M09	PM10 - Particulate Matter <= 10 Microns	Yes	Yes		No
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Yes	Yes		No
108-88-3	Toluene	No	No		No
NA - M16	Volatile Organic Compounds (VOCs)	Yes	Yes		No
1330-20-7	Xylene (all isomers)	No	No		No

CAS RN	Substance Name	NPRI	ON MOE TRA	ON MOE Reg 127/01	First report for this substance to the ON MOE TRA

General Information about the Substance - Releases and Transfers of the Substance

CAS RN	Substance Name	Was the substance released on-site	The substance will be reported as the sum of releases to all media (total of 1 tonne or less)	1 tonne or more of a Part 5 Substance (Speciated VOC) was released to air
110-82-7	Cyclohexane	Yes	No	No
67-56-1	Methanol	Yes	No	No
108-88-3	Toluene	Yes	No	No
NA - M16	Volatile Organic Compounds (VOCs)		No	Yes
1330-20-7	Xylene (all isomers)	Yes	No	No

General Information about the Substance - Disposals and Off-site Transfers for Recycling

CAS RN	Substance Name	Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposal	Is the facility required to report on disposals of tailings and waste rock for the selected reporting period	Was the substance transferred off-site for recycling
110-82-7	Cyclohexane	No	No	No
67-56-1	Methanol	No	No	No
108-88-3	Toluene	No	No	No
NA - M16	Volatile Organic Compounds (VOCs)			
1330-20-7	Xylene (all isomers)	No	No	No

General Information about the Substance - Nature of Activities

CAS RN	Substance Name	Manufacture the Substance	Process the Substance	Otherwise Use of the Substance
110-82-7	Cyclohexane			As a physical or chemical processing aid
67-56-1	Methanol			As a physical or chemical processing aid
108-88-3	Toluene			As a physical or chemical processing aid
NA - M16	Volatile Organic Compounds (VOCs)			
1330-20-7	Xylene (all isomers)			As a physical or chemical processing aid

TRA Quantifications

CAS RN	Substance Name	Use, Creation, Contained in Product	Quantity	Use ranges for public reporting
110-82-7	Cyclohexane	Use	10.4 tonnes	Yes
110-82-7	Cyclohexane	Creation	0 tonnes	No
110-82-7	Cyclohexane	Contained in Product	0 tonnes	No
67-56-1	Methanol	Use	1.3 tonnes	Yes
67-56-1	Methanol	Creation	0 tonnes	No
67-56-1	Methanol	Contained in Product	0 tonnes	No
NA - M09	PM10 - Particulate Matter <= 10 Microns	Use	0 tonnes	No
NA - M09	PM10 - Particulate Matter <= 10 Microns	Creation	1.9 tonnes	Yes
NA - M09	PM10 - Particulate Matter <= 10 Microns	Contained in Product		
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Use	0 tonnes	No
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Creation	0.452 tonnes	Yes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Contained in Product		
108-88-3	Toluene	Use	4.8 tonnes	Yes
108-88-3	Toluene	Creation	0 tonnes	No
108-88-3	Toluene	Contained in Product	0 tonnes	No
NA - M16	Volatile Organic Compounds (VOCs)	Use	60.2 tonnes	Yes
NA - M16	Volatile Organic Compounds (VOCs)	Creation	0 tonnes	No
NA - M16	Volatile Organic Compounds (VOCs)	Contained in Product		
1330-20-7	Xylene (all isomers)	Use	3.4 tonnes	Yes
1330-20-7	Xylene (all isomers)	Creation	0 tonnes	No
1330-20-7	Xylene (all isomers)	Contained in Product	0 tonnes	No

TRA Quantifications - VOC Breakdown List

CAS RN	Substance Name	Use, Creation, Contained in Product	Quantity
141-78-6	Ethyl acetate	Use	25.9 tonnes
141-78-6	Ethyl acetate	Creation	0 tonnes

CAS RN	Substance Name	Use, Creation, Contained in Product	Quantity
NA - 31	Heptane (all isomers)	Use	10.4 tonnes
67-56-1	Methanol	Use	1.3 tonnes
108-88-3	Toluene	Use	4.8 tonnes
1330-20-7	Xylene (all isomers)	Use	3.4 tonnes

TRA Quantifications - Total Speciated VOCs

Use, Creation, Contained in Product	Quantity
Use	45.8 tonnes
Creation	0 tonnes

TRA Quantifications - Others

CAS RN	Substance Name	Change in Method of Quantification	Reasons for Change	Description of how the change impact tracking and quantification of the substance	Description of how an incident(s) affected quantifications	Significant Process Change
110-82-7	Cyclohexane					No
67-56-1	Methanol					No
NA - M09	PM10 - Particulate Matter <= 10 Microns					No
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns					No
108-88-3	Toluene					No
NA - M16	Volatile Organic Compounds (VOCs)					No
1330-20-7	Xylene (all isomers)					No

On-site Releases - Releases to air

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
110-82-7	Cyclohexane	Stack or Point Releases	O - Engineering Estimates		10.4 tonnes
67-56-1	Methanol	Stack or Point Releases	O - Engineering Estimates		1.3 tonnes
NA - M09	PM10 - Particulate Matter <= 10 Microns	Stack or Point Releases	O - Engineering Estimates		1.9 tonnes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Stack or Point Releases	O - Engineering Estimates		0.452 tonnes
108-88-3	Toluene	Stack or Point Releases	O - Engineering Estimates		4.8 tonnes
NA - M16	Volatile Organic Compounds (VOCs)	Stack or Point Releases	O - Engineering Estimates		60.2 tonnes
NA - M16	Volatile Organic Compounds (VOCs)	Other Sources - Speciated VOCs	NA - Not Applicable		60.2 tonnes
1330-20-7	Xylene (all isomers)	Stack or Point Releases	O - Engineering Estimates		3.4 tonnes

On-site Releases - Releases to air - Total

CAS RN	Substance Name	Total - Releases to Air
110-82-7	Cyclohexane	10.4 tonnes
67-56-1	Methanol	1.3 tonnes
NA - M09	PM10 - Particulate Matter <= 10 Microns	1.9 tonnes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	0.452 tonnes
108-88-3	Toluene	4.8 tonnes
NA - M16	Volatile Organic Compounds (VOCs)	60.2 tonnes
1330-20-7	Xylene (all isomers)	3.4 tonnes

On-site Releases - Releases to air - VOC Breakdown List

Category	CAS RN	Substance Name	Quantity
Other Sources - Speciated VOCs	141-78-6	Ethyl acetate	25.9 tonnes
Other Sources - Speciated VOCs	NA - 31	Heptane (all isomers)	10.4 tonnes
Other Sources - Speciated VOCs	67-56-1	Methanol	1.3 tonnes
Other Sources - Speciated VOCs	108-88-3	Toluene	4.8 tonnes
Other Sources - Speciated VOCs	1330-20-7	Xylene (all isomers)	3.4 tonnes

On-site Releases - Total

CAS RN	Substance Name	Total releases
110-82-7	Cyclohexane	10.4 tonnes
67-56-1	Methanol	1.3 tonnes
108-88-3	Toluene	4.8 tonnes

CAS RN	Substance Name	Total releases
1330-20-7	Xylene (all isomers)	3.4 tonnes

On-site Releases - Quarterly Breakdown of Annual Releases

CAS RN	Substance Name	Quarter 1	Quarter 2	Quarter 3	Quarter 4
110-82-7	Cyclohexane	25	25	25	25
67-56-1	Methanol	25	25	25	25
108-88-3	Toluene	25	25	25	25
1330-20-7	Xylene (all isomers)	25	25	25	25

On-site Releases - Monthly Breakdown of Annual Releases

CAS RN	Substance Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
NA - M09	PM10 - Particulate Matter <= 10 Microns	8.33	8.33	8.34	8.33	8.33	8.34	8.33	8.33	8.34	8.33	8.33	8.34
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	8.33	8.33	8.34	8.33	8.33	8.34	8.33	8.33	8.34	8.33	8.33	8.34
NA - M16	Volatile Organic Compounds (VOCs)	8.33	8.33	8.34	8.33	8.33	8.34	8.33	8.33	8.34	8.33	8.33	8.34

On-site Releases - Reasons for Changes in Quantities Released from Previous Year

CAS RN	Substance Name	Reasons for Changes in Quantities from Previous Year	Comments
108-88-3	Toluene	Changes in production levels	
110-82-7	Cyclohexane	No significant change (i.e. < 10%) or no change	
1330-20-7	Xylene (all isomers)	Changes in production levels	
67-56-1	Methanol	No significant change (i.e. < 10%) or no change	
NA - M09	PM10 - Particulate Matter <= 10 Microns	Changes in production levels	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Changes in production levels	
NA - M16	Volatile Organic Compounds (VOCs)	Changes in production levels	

Disposals - Reasons and Comments

CAS RN	Substance Name	Reasons Why Substance Was Disposed	Reasons for Changes in Quantities from Previous Year	Comments
108-88-3	Toluene		Other (specify in On-site Releases comment field)	Not disposed.
110-82-7	Cyclohexane		Other (specify in On-site Releases comment field)	Not disposed.
1330-20-7	Xylene (all isomers)		Other (specify in On-site Releases comment field)	Not disposed.
67-56-1	Methanol		Other (specify in On-site Releases comment field)	Not disposed.

Recycling - Reasons and Comments

CAS RN	Substance Name	Reasons Why Substance Was Recycled	Reasons for Changes in Quantities Recycled from Previous Year	Comments
108-88-3	Toluene		Other (specify in recycling comments field)	Not disposed.
110-82-7	Cyclohexane		Other (specify in recycling comments field)	Not disposed.
1330-20-7	Xylene (all isomers)		Other (specify in recycling comments field)	Not disposed.
67-56-1	Methanol		Other (specify in recycling comments field)	Not disposed.

Comparison Report - Enters, Creation, Contained in Product

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
110-82-7	Cyclohexane	No	Enters the facility (Use)	10.4 tonnes	10.8 tonnes	2016	-0.4	-3.70
110-82-7	Cyclohexane	No	Creation	0 tonnes	0 tonnes	2016	0	
110-82-7	Cyclohexane	No	Contained in Product	0 tonnes	0 tonnes	2016	0	
141-78-6	Ethyl acetate	Yes	Enters the facility (Use)	25.9 tonnes	27.1 tonnes	2016	-1.2	-4.43
141-78-6	Ethyl acetate	Yes	Creation	0 tonnes	0 tonnes	2016	0	
NA - 31	Heptane (all isomers)	Yes	Enters the facility (Use)	10.4 tonnes	10.84 tonnes	2016	-0.44	-4.06
67-56-1	Methanol	No	Enters the facility (Use)	1.3 tonnes	1.4 tonnes	2016	-0.1	-7.14
67-56-1	Methanol	No	Creation	0 tonnes	0 tonnes	2016	0	

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
67-56-1	Methanol	No	Contained in Product	0 tonnes	0 tonnes	2016	0	
67-56-1	Methanol	Yes	Enters the facility (Use)	1.3 tonnes	1.36 tonnes	2016	-0.06	-4.41
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Enters the facility (Use)	0 tonnes	0 tonnes	2016	0	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Creation	1.9 tonnes	0.697 tonnes	2016	1.203	172.60
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Enters the facility (Use)	0 tonnes	0 tonnes	2016	0	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Creation	0.452 tonnes	0.283 tonnes	2016	0.169	59.72
108-88-3	Toluene	No	Enters the facility (Use)	4.8 tonnes	3.534 tonnes	2016	1.266	35.82
108-88-3	Toluene	No	Creation	0 tonnes	0 tonnes	2016	0	
108-88-3	Toluene	No	Contained in Product	0 tonnes	0 tonnes	2016	0	
108-88-3	Toluene	Yes	Enters the facility (Use)	4.8 tonnes	3.86 tonnes	2016	0.94	24.35
1330-20-7	Xylene (all isomers)	No	Enters the facility (Use)	3.4 tonnes	2.52 tonnes	2016	0.88	34.92
1330-20-7	Xylene (all isomers)	No	Creation	0 tonnes	0 tonnes	2016	0	
1330-20-7	Xylene (all isomers)	No	Contained in Product	0 tonnes	0 tonnes	2016	0	
1330-20-7	Xylene (all isomers)	Yes	Enters the facility (Use)	3.4 tonnes	2.52 tonnes	2016	0.88	34.92

Comparison Report - Enters, Creation, Contained in Product : Reason(s) for Change

CAS RN	Substance Name	Reason(s) for Change	Other Reason
110-82-7	Cyclohexane	No reasons - quantities approximately the same	
67-56-1	Methanol	No reasons - quantities approximately the same	
NA - M09	PM10 - Particulate Matter <= 10 Microns	Increase in production levels	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Increase in production levels	
108-88-3	Toluene	Increase in production levels	
NA - M16	Volatile Organic Compounds (VOCs)	No reasons - quantities approximately the same Increase in production levels	
1330-20-7	Xylene (all isomers)	Increase in production levels	

Comparison Report - On-site Releases

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
110-82-7	Cyclohexane	No	Total Releases to Air	10.4 tonnes	10.8 tonnes	2016	-0.4	-3.70
110-82-7	Cyclohexane	No	Total Releases to Water	0 tonnes	0 tonnes	2016	0	
110-82-7	Cyclohexane	No	Total Releases to Land	0 tonnes	0 tonnes	2016	0	
110-82-7	Cyclohexane	No	Total Releases to All Media	0 tonnes	0 tonnes	2016	0	
141-78-6	Ethyl acetate	Yes	Total Releases to Air	25.9 tonnes	27.1 tonnes	2016	-1.2	-4.43
NA - 31	Heptane (all isomers)	Yes	Total Releases to Air	10.4 tonnes	10.84 tonnes	2016	-0.44	-4.06
67-56-1	Methanol	No	Total Releases to Air	1.3 tonnes	1.4 tonnes	2016	-0.1	-7.14
67-56-1	Methanol	No	Total Releases to Water	0 tonnes	0 tonnes	2016	0	
67-56-1	Methanol	No	Total Releases to Land	0 tonnes	0 tonnes	2016	0	
67-56-1	Methanol	No	Total Releases to All Media	0 tonnes	0 tonnes	2016	0	
67-56-1	Methanol	Yes	Total Releases to Air	1.3 tonnes	1.36 tonnes	2016	-0.06	-4.41
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Total Releases to Air	1.9 tonnes	0.697 tonnes	2016	1.203	172.60
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Total Releases to Water	0 tonnes	0 tonnes	2016	0	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Total Releases to Land	0 tonnes	0 tonnes	2016	0	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Total Releases to All Media	0 tonnes	0 tonnes	2016	0	

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Total Releases to Air	0.452 tonnes	0.283 tonnes	2016	0.169	59.72
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Total Releases to Water	0 tonnes	0 tonnes	2016	0	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Total Releases to Land	0 tonnes	0 tonnes	2016	0	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Total Releases to All Media	0 tonnes	0 tonnes	2016	0	
108-88-3	Toluene	No	Total Releases to Air	4.8 tonnes	3.534 tonnes	2016	1.266	35.82
108-88-3	Toluene	No	Total Releases to Water	0 tonnes	0 tonnes	2016	0	
108-88-3	Toluene	No	Total Releases to Land	0 tonnes	0 tonnes	2016	0	
108-88-3	Toluene	No	Total Releases to All Media	0 tonnes	0 tonnes	2016	0	
108-88-3	Toluene	Yes	Total Releases to Air	4.8 tonnes	3.53 tonnes	2016	1.27	35.98
1330-20-7	Xylene (all isomers)	No	Total Releases to Air	3.4 tonnes	2.52 tonnes	2016	0.88	34.92
1330-20-7	Xylene (all isomers)	No	Total Releases to Water	0 tonnes	0 tonnes	2016	0	
1330-20-7	Xylene (all isomers)	No	Total Releases to Land	0 tonnes	0 tonnes	2016	0	
1330-20-7	Xylene (all isomers)	No	Total Releases to All Media	0 tonnes	0 tonnes	2016	0	
1330-20-7	Xylene (all isomers)	Yes	Total Releases to Air	3.4 tonnes	2.52 tonnes	2016	0.88	34.92

Comparison Report - On-site Releases - Reason(s) for Change

CAS RN	Substance Name	Reason(s) for Change	Other Reason
110-82-7	Cyclohexane	No reasons - quantities approximately the same	
67-56-1	Methanol	No reasons - quantities approximately the same	
NA - M09	PM10 - Particulate Matter <= 10 Microns	Increase in production levels	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Increase in production levels	
108-88-3	Toluene	Increase in production levels	
NA - M16	Volatile Organic Compounds (VOCs)	No reasons - quantities approximately the same Increase in production levels	
1330-20-7	Xylene (all isomers)	Increase in production levels	

Pollution Prevention

Does the facility have a documented pollution prevention plan?	No
Did the facility complete any pollution prevention activities in the current NPRI reporting year	No

Progress on TRA Plan - Objectives

CAS RN	Substance Name	Objectives
110-82-7	Cyclohexane	Toyota Boshoku Woodstock intends to reduce the use of cyclohexane through product design, equipment modification, and improved inventory techniques, and training and improved operating practices.
141-78-6	Ethyl acetate	Toyota Boshoku Woodstock intends to reduce the use of ethyl acetate through improved inventory techniques, improved operating practices.
NA - 31	Heptane (all isomers)	Toyota Boshoku Woodstock intends to reduce the use of heptane through improved inventory techniques, improved operating practices.
67-56-1	Methanol	Toyota Boshoku Woodstock intends to reduce the use of methanol through product design, improved inventory techniques, improved operating practices.
NA - M09	PM10 - Particulate Matter <= 10 Microns	Toyota Boshoku Woodstock intends to reduce the use of PM10 through product design, equipment modification, and training and improved operating practices.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Toyota Boshoku Woodstock intends to reduce the creation of PM2.5 through product design, equipment modification, and training and improved operating practices.
108-88-3	Toluene	Toyota Boshoku Woodstock intends to reduce the use of xylene and toluene through feedstock substitution, product design, process modification, improved inventory techniques, and training and improved operating practices.
1330-20-7	Xylene (all isomers)	Toyota Boshoku Woodstock intends to reduce the use of xylene and toluene through feedstock substitution, product design, process modification, improved inventory techniques, and training and improved operating practices.

Progress on TRA Plan - Use Targets

CAS RN	Substance Name	Quantity	Years	Description of Target

CAS RN	Substance Name	Quantity	Years	Description of Target
110-82-7	Cyclohexane	No quantity target	No timeline target	
141-78-6	Ethyl acetate	No quantity target	No timeline target	
NA - 31	Heptane (all isomers)	No quantity target	No timeline target	
67-56-1	Methanol	No quantity target	No timeline target	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No quantity target	No timeline target	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No quantity target	No timeline target	
108-88-3	Toluene	No quantity target	No timeline target	
1330-20-7	Xylene (all isomers)	No quantity target	No timeline target	

Progress on TRA Plan - Creation Targets

CAS RN	Substance Name	Quantity	Years	Description of Target
110-82-7	Cyclohexane	No quantity target	No timeline target	
141-78-6	Ethyl acetate	No quantity target	No timeline target	
NA - 31	Heptane (all isomers)	No quantity target	No timeline target	
67-56-1	Methanol	No quantity target	No timeline target	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No quantity target	No timeline target	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No quantity target	No timeline target	
108-88-3	Toluene	No quantity target	No timeline target	
1330-20-7	Xylene (all isomers)	No quantity target	No timeline target	

Progress on TRA Plan - Toxic Reduction Options Implemented

CAS RN	Substance Name	Activity	Steps that were taken in the reporting period to implement the toxic reduction option	Public summary of the description of the steps	Comparison of the steps that were described in the plan for implementation with the actual steps taken during the reporting period	Public summary of the comparison of the steps
110-82-7	Cyclohexane	Improved application techniques	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.
110-82-7	Cyclohexane	Other	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.
110-82-7	Cyclohexane	Changed product specifications	Cancelled due to product design constraints	Cancelled due to product design constraints	Followed per the plan; however measure was cancelled.	Followed per the plan; however measure was cancelled.
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.
141-78-6	Ethyl acetate	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
141-78-6	Ethyl acetate	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
NA - 31	Heptane (all isomers)	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
NA - 31	Heptane (all isomers)	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
67-56-1	Methanol	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
67-56-1	Methanol	Changed product specifications	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
67-56-1	Methanol	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.

CAS RN	Substance Name	Activity	Steps that were taken in the reporting period to implement the toxic reduction option	Public summary of the description of the steps	Comparison of the steps that were described in the plan for implementation with the actual steps taken during the reporting period	Public summary of the comparison of the steps
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	Already completed per plan.	Already completed per plan.	Already completed per plan.	Already completed per plan.
108-88-3	Toluene	Other	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.
108-88-3	Toluene	Instituted improved purchasing procedures	Team discussed the shipment interval change with PC manager, but because this a shipment with mixed vendors and products on the same truck, this measure is not practically feasible.	Team discussed the shipment interval change, but shipments include mixed vendors and products on the same truck, this measure is not practically feasible.	Steps were followed per plan, but measure was cancelled because it is not practically feasible due to the reasons above.	Steps were followed per plan, but measure was cancelled because it is not practically feasible due to the reasons above.
108-88-3	Toluene	Substituted materials	Followed per the plan; however measure was cancelled.	Cancelled due to product design constraints	Followed per the plan; however measure was cancelled.	Followed per the plan; however measure was cancelled.
108-88-3	Toluene	Modified design or composition	Followed per the plan; however measure was cancelled.	Cancelled due to product design constraints	Followed per the plan; however measure was cancelled.	Followed per the plan; however measure was cancelled.
108-88-3	Toluene	Training related to toxics substance reduction	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.
108-88-3	Toluene	Other	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	Team discussed the shipment interval change with PC manager, but because this a shipment with mixed vendors and products on the same truck, this measure is not practically feasible.	Team discussed the shipment interval change, but shipments include mixed vendors and products on the same truck, this measure is not practically feasible.	Steps were followed per plan, but measure was cancelled because it is not practically feasible due to the reasons above.	Steps were followed per plan, but measure was cancelled because it is not practically feasible due to the reasons above.
1330-20-7	Xylene (all isomers)	Substituted materials	Cancelled due to product design constraints.	Cancelled due to product design constraints	Followed per the plan; however measure was cancelled.	Followed per the plan; however measure was cancelled.
1330-20-7	Xylene (all isomers)	Other	Cancelled due to product design constraints.	Cancelled due to product design constraints.	Followed per the plan; however measure was cancelled.	Followed per the plan; however measure was cancelled.
1330-20-7	Xylene (all isomers)	Other	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.	Already completed per the plan.

CAS RN	Substance Name	Activity	Will the timelines in the current version of the plan will be met	Comments:
110-82-7	Cyclohexane	Improved application techniques	Yes	Already completed per the plan.
110-82-7	Cyclohexane	Other	Yes	Already completed per the plan.
110-82-7	Cyclohexane	Changed product specifications	No	Followed per the plan; however measure was cancelled.
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	Yes	Already completed per the plan.
141-78-6	Ethyl acetate	Other	Yes	Already completed per plan.
141-78-6	Ethyl acetate	Other	Yes	Already completed per plan.
NA - 31	Heptane (all isomers)	Other	Yes	Already completed per plan.
NA - 31	Heptane (all isomers)	Other	Yes	Already completed per plan.
67-56-1	Methanol	Other	Yes	Already completed per plan.
67-56-1	Methanol	Changed product specifications	Yes	Already completed per plan.
67-56-1	Methanol	Other	Yes	Already completed per plan.
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	Yes	Already completed per plan.
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	Yes	Already completed per plan.
	PM10 - Particulate			

CAS RN	Substance Name	Activity	Will the timelines in the current version of the plan will be met	Comments:
NA - M09	Matter <= 10 Microns	Other	Yes	Already completed per plan.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	Yes	Already completed per plan.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	Yes	Already completed per plan.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	Yes	Already completed per plan.
108-88-3	Toluene	Other	Yes	Already completed per the plan.
108-88-3	Toluene	Instituted improved purchasing procedures	No	Steps were followed per plan, but measure was cancelled because it is not practically feasible due to the reasons above.
108-88-3	Toluene	Substituted materials	No	
108-88-3	Toluene	Modified design or composition	No	
108-88-3	Toluene	Training related to toxics substance reduction	Yes	Already completed per the plan.
108-88-3	Toluene	Other	Yes	Already completed per the plan.
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	Yes	Already completed per the plan.
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	No	Steps were followed per plan, but measure was cancelled because it is not practically feasible due to the reasons above.
1330-20-7	Xylene (all isomers)	Substituted materials	No	Followed per the plan; however measure was cancelled.
1330-20-7	Xylene (all isomers)	Other	No	Followed per the plan; however measure was cancelled.
1330-20-7	Xylene (all isomers)	Other	No	Already completed per the plan.
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	No	Already completed per the plan.

Progress on TRA Plan - Reductions due to Options Implemented - Equipment or process modifications

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved application techniques	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Modified equipment, layout or piping	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Reductions due to Options Implemented - Improved inventory management or purchasing

techniques

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
110-82-7	Cyclohexane	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
110-82-7	Cyclohexane	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount

techniques

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Instituted improved purchasing procedures	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Instituted improved purchasing procedures	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Reductions due to Options Implemented - Materials or feedstock substitution

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
108-88-3	Toluene	Substituted materials	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Substituted materials	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Substituted materials	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Substituted materials	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Substituted materials	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Substituted materials	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
108-88-3	Toluene	Substituted materials	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Substituted materials	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Substituted materials	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Substituted materials	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Reductions due to Options Implemented - Product design or reformulation

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Changed product specifications	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Changed product specifications	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified design or composition	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified design or composition	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Modified design or composition	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Reductions due to Options Implemented - Good operator practice or training

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
		procedures	described:	
110-82-7	Cyclohexane	Improved maintenance scheduling, record keeping or procedures	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
141-78-6	Ethyl acetate	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 31	Heptane (all isomers)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
67-56-1	Methanol	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Training related to toxics substance reduction	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
108-88-3	Toluene	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
108-88-3	Toluene	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
1330-20-7	Xylene (all isomers)	Training related to toxics substance reduction	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Additional Actions

CAS RN	Substance Name	Were there any additional actions outside the plan taken during the reporting period to reduce the use and/or creation of the substance?	Describe any additional actions that were taken during the reporting period to achieve the plan's objectives	Provide a public summary of the description of the additional action taken
110-82-7	Cyclohexane	No		
141-78-6	Ethyl acetate	No		
NA - 31	Heptane (all isomers)	No		
67-56-1	Methanol	No		
NA - M09	PM10 - Particulate Matter <= 10 Microns	No		
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No		
108-88-3	Toluene	No		
1330-20-7	Xylene (all isomers)	No		

Progress on TRA Plan - Reductions due to additional actions taken

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
110-82-7	Cyclohexane	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
110-82-7	Cyclohexane	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
110-82-7	Cyclohexane	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
110-82-7	Cyclohexane	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
110-82-7	Cyclohexane	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
110-82-7	Cyclohexane	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
110-82-7	Cyclohexane	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
110-82-7	Cyclohexane	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
110-82-7	Cyclohexane	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
141-78-6	Ethyl acetate	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - 31	Heptane (all isomers)	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
67-56-1	Methanol	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
67-56-1	Methanol	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
67-56-1	Methanol	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
67-56-1	Methanol	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
67-56-1	Methanol	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
67-56-1	Methanol	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
67-56-1	Methanol	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
67-56-1	Methanol	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
67-56-1	Methanol	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
108-88-3	Toluene	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
108-88-3	Toluene	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
108-88-3	Toluene	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
108-88-3	Toluene	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
108-88-3	Toluene	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
108-88-3	Toluene	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
108-88-3	Toluene	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
108-88-3	Toluene	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
108-88-3	Toluene	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
1330-20-7	Xylene (all isomers)	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	

Progress on TRA Plan - Amendments

CAS RN	Substance Name	Were any amendments made to the toxic substance reduction plan during the reporting period	Description any amendments that were made to the toxic substance reduction plan during the reporting period	Provide a public summary of the description of any amendments that were made to the toxic substance reduction plan during the reporting period
110-82-7	Cyclohexane	No		
141-78-6	Ethyl acetate	No		
NA - 31	Heptane (all isomers)	No		
67-56-1	Methanol	No		
NA - M09	PM10 - Particulate Matter <= 10	No		

CAS RN	Substance Name	Were any amendments made to the toxic substance reduction plan during the reporting period	Description any amendments that were made to the toxic substance reduction plan during the reporting period	Provide a public summary of the description of any amendments that were made to the toxic substance reduction plan during the reporting period
	Microns			
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No		
108-88-3	Toluene	No		
1330-20-7	Xylene (all isomers)	No		

Report Submission and Electronic Certification

NPRI - Electronic Statement of Certification

Specify the language of correspondence

English

Comments (optional)

I hereby certify that I have exercised due diligence to ensure that the submitted information is true and complete. The amounts and values for the facility(ies) identified below are accurate, based on reasonable estimates using available data. The data for the facility(ies) that I represent are hereby submitted to the programs identified below using the Single Window Reporting Application.

I also acknowledge that the data will be made public.

Note: Only the person identified as the Certifying Official or the authorized delegate should submit the report(s) identified below.

Company Name

Toyota Boshoku Canada Inc.

Certifying Official (or authorized delegate)

Jason Dittburner

Report Submitted by

Jason Dittburner

I, the Certifying Official or authorized delegate, agree with the statements above and acknowledge that by pressing the "Submit Report(s)" button, I am electronically certifying and submitting the facility report(s) for the identified company to its affiliated programs.

ON MOE TRA - Electronic Certification Statement

Annual Report Certification Statement

As of 01/06/2018, I, Norimichi Adachi, certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the information contained in the reports is factually accurate and the reports comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

TRA Substance List

CAS RN	Substance Name
110-82-7	Cyclohexane
141-78-6	Ethyl acetate
NA - 31	Heptane (all isomers)
67-56-1	Methanol
NA - M09	PM10 - Particulate Matter <= 10 Microns
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns
108-88-3	Toluene
1330-20-7	Xylene (all isomers)

Company Name

Toyota Boshoku Canada Inc.

Highest Ranking Employee

Norimichi Adachi

Report Submitted by

Jason Dittburner

Website address

I, the highest ranking employee, agree with the certification statement(s) above and acknowledge that by checking the box I am electronically signing the statement(s). I also acknowledge that by pressing the 'Submit Report(s)' button I am submitting the facility record(s)/report(s) for the identified facility to the Director under the Toxics Reduction Act, 2009. I also acknowledge that the Toxics Reduction Act, 2009 and Ontario Regulation

455/09 provide the authority to the Director under the Act to make certain information as specified in subsection 27(5) of Ontario Regulation 455/09 available to the public.

Submitted Report

Period	Submission Date	Facility Name	Province	City	Programs
2017	01/06/2018	Toyota Boshoku Canada	Ontario	Woodstock	NPRI,ON MOE TRA

Note: If there is a change in the contact information for the facility, a change in the owner or operator of the facility, if operations at the facility are terminated, or if information submitted for any previous year was mistaken or inaccurate, please update this information through SWIM or by contacting the National Pollutant Release Inventory directly.

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