Toxics Reduction Act: Annual Report 2016

Patheon – TRO location 2100 Syntex Court, Mississauga, ON

Dec 2017



1. Basic Facility Information

Company Name	Patheon Inc.
Facility Name	Patheon Toronto Region Operations (TRO)
Company Mailing Address	2100 Syntex Court
	Mississauga, ON L5N 7K9, Canada
Business Number	134570811
Number of Full Time Employees	823
NAICS	325410
NPRI ID	11119
Physical Address	2100 Syntex Court, Mississauga, ON L5N 7K9, Canada
	Latitude: 43.60600
	Longitude: -79.75103
	UTM Zone: 17
	UTM Easting: 600789
	UTM Northing: 4828872
Substance name and Chemical Abstracts	Acetonitrile (75-05-8)
Service (CAS) Registry number	Isopropyl Alcohol (67-63-0)
	Methanol (67-56-1)
	Volatile Organic Compounds – VOCs (NA-M16)

2. Report Contacts

Technical Contact	Julie Durias
	Environment Health & Safety Specialist Technical Leader
	2100 Syntex Court, Mississauga, ON L5N 7K9, Canada
Highest Ranked Employee, Public Contact	Nick Postic
	Executive Director & General Manager, TRO

3. Toxic Substance Accounting Results

The information in this section was copied from our 2016 NPRI annual reporting using the Single Window Information Manager (SWIM) program.

• Amounts that were used, created, and contained in product:

TRA Quantifications

CAS RN	Substance Name	Use, Creation, Contained in Product	Quantity	Use ranges for public reporting
75-05-8	Acetonitrile	Use	13.2 tonnes	Yes
75-05-8	Acetonitrile	Creation	0 tonnes	Yes
75-05-8	Acetonitrile	Contained in Product	0 tonnes	Yes
67-63-0	Isopropyl alcohol	Use	18.0 tonnes	Yes
67-63-0	Isopropyl alcohol	Creation	0 tonnes	No
67-63-0	Isopropyl alcohol	Contained in Product	0 tonnes	Yes
67-56-1	Methanol	Use	13.5 tonnes	Yes
67-56-1	Methanol	Creation	0 tonnes	No
67-56-1	Methanol	Contained in Product	0 tonnes	Yes
NA - M16	Volatile Organic Compounds (VOCs)	Use	23.9 tonnes	Yes
NA - M16	Volatile Organic Compounds (VOCs)	Creation	0 tonnes	No
NA - M16	Volatile Organic Compounds (VOCs)	Contained in Product		

TRA Quantifications - VOC Breakdown List

CAS RN	Substance Name	Use, Creation, Contained in Product	Quantity
64-17-5	Ethanol	Use	4.3 tonnes
64-17-5	Ethanol	Creation	0 tonnes
67-63-0	Isopropyl alcohol	Use	7.3 tonnes
67-63-0	Isopropyl alcohol	Creation	0 tonnes
67-56-1	Methanol	Use	5.4 tonnes
67-56-1	Methanol	Creation	0 tonnes

TRA Quantifications - Total Speciated VOCs

Use, Creation, Contained in Product	Quantity
Use	17.0 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
75-05-8	Acetonitrile					No
67-63-0	Isopropyl alcohol					No
67-56-1	Methanol					No
NA - M16	Volatile Organic Compounds (VOCs)					No

Amounts that were released to the air:

On-site Releases - Releases to air

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
67-63-0	Isopropyl alcohol	Storage or Handling Releases	C - Mass Balance		18.0 tonnes
67-56-1	Methanol	Stack or Point Releases	C - Mass Balance		13.5 tonnes
NA - M16	Volatile Organic Compounds (VOCs)	Stack or Point Releases	C - Mass Balance		23.8 tonnes
NA - M16	Volatile Organic Compounds (VOCs)	Other Sources - Speciated VOCs	NA - Not Applicable		23.8 tonnes

On-site Releases - Releases to air - Total

CAS RN	Substance Name	Total - Releases to Air
67-63-0	Isopropyl alcohol	18.0 tonnes
67-56-1	Methanol	13.5 tonnes
NA - M16	Volatile Organic Compounds (VOCs)	23.8 tonnes

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

Category	CAS RN	Substance Name	Quantity
Other Sources - Speciated VOCs	64-17-5	Ethanol	4.3 tonnes
Other Sources - Speciated VOCs	67-63-0	Isopropyl alcohol	7.3 tonnes
Other Sources - Speciated VOCs	67-56-1	Methanol	5.4 tonnes

Offsite Disposals and Transfers:

Disposals - Off-site Transfers (excluding Tailings and Waste Rock) - Total

CAS RN	Substance Name	Total - Treatment Prior to Final Disposal
75-05-8	Acetonitrile	13.2 tonnes
67-63-0	Isopropyl alcohol	7.7 tonnes
67-56-1	Methanol	5.8 tonnes

Disposals - Total Quantity Disposed (All Media)

CAS RN	Substance Name	Total Quantity Disposed (All Media)
75-05-8	Acetonitrile	13.2 tonnes
67-63-0	Isopropyl alcohol	7.7 tonnes
67-56-1	Methanol	5.8 tonnes

Disposals - Reasons and Comments

CAS RN	Substance Name	Reasons Why Substance Was Disposed	Reasons for Changes in Quantities from Previous Year	Comments
67-56-1	Methanol	Production residues Expiration date passed	Changes in production levels	
67-63-0	Isopropyl alcohol	Production residues Expiration date passed	Changes in production levels	
75-05-8	Acetonitrile	Production residues Expiration date passed	Changes in production levels	

4. Facilities objectives and targets

Progress on TRA Plan - Objectives

CAS RN	Substance Name	Objectives
75-05-8	Acetonitrile	At this time, there are no technical or economical feasible options that were identified for reduction of acetonitrile.
64-17-5	Ethanol	To comply with the regulation, and to review the reduction strategies to see if they apply to our facility.
67-63-0	Isopropyl alcohol	TO comply with the regulation, and to review reduction strategies to see if they apply to our facility.
67-56-1	Methanol	To comply with the regulation, and to review reduction strategies to see if they apply to our facility.

Progress on TRA Plan - Creation Targets

CAS RN	Substance Name	Quantity	Years	Description of Target
75-05-8	Acetonitrile	No quantity target	No timeline target	
64-17-5	Ethanol	No quantity target	No timeline target	
67-63-0	Isopropyl alcohol	No quantity target	No timeline target	
67-56-1	Methanol	No quantity target	No timeline target	

5. Facilities progress in reducing toxic substances

Progress on TRA Plan - Creation Targets

CAS RN	Substance Name	Quantity	Years	Description of Target
75-05-8	Acetonitrile	No quantity target	No timeline target	
64-17-5	Ethanol	No quantity target	No timeline target	
67-63-0	Isopropyl alcohol	No quantity target	No timeline target	
67-56-1	Methanol	No quantity target	No timeline target	

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	description of the additional action taken
75-05-8	Acetonitrile	No		
64-17-5	Ethanol	No		
67-63-0	Isopropyl alcohol	No		
67-56-1	Methanol	No		

Progress on TRA Plan - Reductions due to additional actions taken

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
75-05-8	Acetonitrile	The amount of reduction in use of the substance at the facility during the reporting period that resulted due to the additional actions.	
75-05-8	Acetonitrile	The amount of reduction in creation of the substance at the facility during the reporting period that resulted due to the additional actions.	
75-05-8	Acetonitrile	The amount of reduction in the substance contained in product at the facility during the reporting period that resulted due to the additional actions.	
75-05-8	Acetonitrile	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.	
75-05-8	Acetonitrile	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.	
75-05-8	Acetonitrile	The amount of reduction in release to land of the substance at the facility during the reporting period that resulted due to additional actions.	
75-05-8	Acetonitrile	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.	
75-05-8	Acetonitrile	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.	
75-05-8	Acetonitrile	The amount of reduction in the substance recycled off-site at the facility during the reporting period that resulted due to the additional actions.	
4-17-5	Ethanol	The amount of reduction in use of the substance at the facility during the reporting period that resulted due to the additional actions.	
54-17-5	Ethanol	The amount of reduction in creation of the substance at the facility during the reporting period that resulted due to the additional actions.	
54-17-5	Ethanol	The amount of reduction in the substance contained in product at the facility during the reporting period that resulted due to the additional actions.	
54-17-5	Ethanol	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.	
54-17-5	Ethanol	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.	
54-17-5	Ethanol	The amount of reduction in release to land of the substance at the facility during the reporting period that resulted due to additional actions.	
54-17-5	Ethanol	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.	
54-17-5	Ethanol	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.	
4-17-5	Ethanol	The amount of reduction in the substance recycled off-site at the facility during the reporting period that resulted due to the additional actions.	
57-63-0	Isopropyl alcohol	The amount of reduction in use of the substance at the facility during the reporting period that resulted due to the additional actions.	
57-63-0	Isopropyl alcohol	The amount of reduction in creation of the substance at the facility during the reporting period that resulted due to the additional actions.	

67-63-0	Isopropyl alcohol	The amount of reduction in the substance contained in product at the facility during the reporting period that resulted due to the additional actions.	
67-63-0	Isopropyl alcohol	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.	
67-63-0	Isopropyl alcohol	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.	
67-63-0	Isopropyl alcohol	The amount of reduction in release to land of the substance at the facility during the reporting period that resulted due to additional actions.	
67-63-0	Isopropyl alcohol	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.	
67-63-0	Isopropyl alcohol	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.	
67-63-0	Isopropyl alcohol	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.	

6. Changes in tracking and quantification methodsComparison 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
75-05-8	Acetonitrile	No	Enters the facility (Use)	13.2 tonnes	15.47 tonnes	2015	-2.27	-14.67
75-05-8	Acetonitrile	No	Creation	0 tonnes	0 tonnes	2015	0	
75-05-8	Acetonitrile	No	Contained in Product	0 tonnes	0 tonnes	2015	0	
67-63-0	Isopropyl alcohol	No	Enters the facility (Use)	18.0 tonnes	11.23 tonnes	2015	6.77	60.28
67-63-0	Isopropyl alcohol	No	Creation	0 tonnes	0 tonnes	2015	0	
67-63-0	Isopropyl alcohol	No	Contained in Product	0 tonnes	0 tonnes	2015	0	
67-56-1	Methanol	No	Enters the facility (Use)	13.5 tonnes	11.03 tonnes	2015	2.47	22.39
67-56-1	Methanol	No	Creation	0 tonnes	0 tonnes	2015	0	
67-56-1	Methanol	No	Contained in Product	0 tonnes	0 tonnes	2015	0	

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

CAS RN	Substance Name	Reason(s) for Change	Other Reason
75-05-8	Acetonitrile	Abnormal incident occurred at facility in the previous year	
67-63-0	Isopropyl alcohol	Increase in production levels	
67-56-1	Methanol	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
67-63-0	Isopropyl alcohol	No	Total Releases to Air	18.0 tonnes	11.23 tonnes	2015	6.77	60.28
67-63-0	Isopropyl alcohol	No	Total Releases to Water	0 tonnes	0 tonnes	2015	0	
67-63-0	Isopropyl alcohol	No	Total Releases to Land	0 tonnes	0 tonnes	2015	0	
67-63-0	Isopropyl alcohol	No	Total Releases to All Media	0 tonnes	0 tonnes	2015	0	
67-56-1	Methanol	No	Total Releases to Air	13.5 tonnes	11.03 tonnes	2015	2.47	22.39
67-56-1	Methanol	No	Total Releases to Water	0 tonnes	0 tonnes	2015	0	
67-56-1	Methanol	No	Total Releases to Land	0 tonnes	0 tonnes	2015	0	
67-56-1	Methanol	No	Total Releases to All Media	0 tonnes	0 tonnes	2015	0	

Comparison Report - Disposals On-site, Off-site and Tailings and Waste Rock

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
75-05-8	Acetonitrile	No	Total On-site Disposals	0 tonnes	0 tonnes	2015	0	
75-05-8	Acetonitrile	No	Total Off-site Disposals	0 tonnes	15.47 tonnes	2015	-15.47	-100
75-05-8	Acetonitrile	No	Total Off-site transfer for treatment Prior to Final Disposal	13.2 tonnes	0 tonnes	2015	13.2	100
75-05-8	Acetonitrile	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2015	0	
75-05-8	Acetonitrile	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2015	0	
67-63-0	Isopropyl alcohol	No	Total On-site Disposals	0 tonnes	0 tonnes	2015	0	
67-63-0	Isopropyl alcohol	No	Total Off-site Disposals	0 tonnes	4.66 tonnes	2015	-4.66	-100
67-63-0	Isopropyl alcohol	No	Total Off-site transfer for treatment Prior to Final Disposal	7.7 tonnes	0 tonnes	2015	7.7	100
67-63-0	Isopropyl alcohol	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2015	0	
67-63-0	Isopropyl alcohol	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2015	0	
67-56-1	Methanol	No	Total On-site Disposals	0 tonnes	0 tonnes	2015	0	
67-56-1	Methanol	No	Total Off-site Disposals	0 tonnes	4.60 tonnes	2015	-4.60	-100
67-56-1	Methanol	No	Total Off-site transfer for treatment Prior to Final Disposal	5.8 tonnes	0 tonnes	2015	5.8	100
67-56-1	Methanol	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2015	0	
67-56-1	Methanol	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2015	0	

Comparison Report - Disposals On-site, Off-site and Tailings and Waste Rock - Reason(s) for Change

CAS RN	Substance Name	Reason(s) for Change	Other Reason
75-05-8	Acetonitrile	Abnormal incident occurred at facility in the previous year	
67-63-0	Isopropyl alcohol	Increase in production levels	
67-56-1	Methanol	Increase in production levels	

7. Significant process changes

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
75-05-8	Acetonitrile	No		
64-17-5	Ethanol	No		
67-63-0	Isopropyl alcohol	No		
67-56-1	Methanol	No		

8. Progress your facility has made to implement its plan (if applicable)

For the purposes of the Toxics Reduction Act, Patheon Inc, will not be implementing any options to reduce the use of ethanol, isopropyl alcohol, methanol or acetonitrile in our operations and labs, as they are required in the manufacturing processes and analytical testing.

9. Certification

I also acknowledge that the data will be made public.

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.

Note: Only the person	identified as the	Certifying Of	fficial or the a	uthorized	delegate sho	ould submit the	report(s)	identified below.
, ,		, -			-			

Company Name	
Patheon Inc	
Certifying Official (or authorized delegate)	
Postic Nick	
Report Submitted by	
Postic Nick	

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.