



Innovating for
patient affordability

TOXIC REDUCTION ACT ANNUAL REPORT – 2019

150 SIGNET DRIVE

JULY 2020

BACKGROUND:

Every year, Apotex Inc. must submit an annual summary report under the Ontario Toxic's Reduction Act (TRA) for the 150 Signet facility.

- This report compares the planned activities previously identified in the Toxics Reduction Plan with the actual activities undertaken over the past year. Apotex remains on target to achieve our 2019 activities.

1. GENERAL INFORMATION

Name and contact information for the owner and the operator of the Facility	Gordon Fahner SVP, Global Finance, & GIS 150 Signet Drive 416-749-9300
Public Contact	Jordan Berman VP, Global Corporate Affairs, Transformation & Strategy 4100 Weston Road 416-749-9300
NPRI ID#	111
MOE Regulation 127/01 ID#	6535
Legal/Trade Names of the owner and the operator of the facility, the street/ mailing address of the facility	Apotex Inc. 150 Signet Drive Toronto, ON M9L 1T9
# of Full Time Employees	1,440
NAICS Code	325410
Spatial Coordinates expressed in UTM	UTM Zone: 17 UTM Easting: 617453.5560685011 UTM Northing: 4846684.912193055 Latitude: 43.76390 Longitude: -79.54080
Canadian Parent Company of the Facility	Apotex Inc. 150 Signet Drive Toronto, ON M9L 1T9 100% owned
Substance Name and Chemical Abstracts Service (CAS) Registry Number	Methanol (CAS Number 67-56-1) Acetonitrile (CAS Number 75-05-8) Ethanol (CAS Number 64-17-5)

2. TOXIC SUBSTANCE ACCOUNTING

Substances Used, Created and Contained

CAS RN	Substance Name	Use, Creation, Contained	Quantity (tonnes)
75-05-8	Acetonitrile	Use	16.2403
75-05-8	Acetonitrile	Creation	0
75-05-8	Acetonitrile	Contained	0
67-56-1	Methanol	Use	52.0956
67-56-1	Methanol	Creation	0.038
67-56-1	Methanol	Contained	0
NA-M16	Volatle Organic Compounds	Use	100.43
NA-M16	Volatle Organic Compounds	Creation	0.493
NA-M16	Volatle Organic Compounds	Contained	0

Substance Released, Disposed and Transferred

CAS RN	Substance Name	Category	Quantity (tonnes)
75-05-8	Acetonitrile	Total Releases to Air	0.0812
75-05-8	Acetonitrile	Total Off-site transfer for treatment prior to final disposal	16.1591
64-17-5	Ethanol	Total Releases to Air	20.6426
67-56-1	Methanol	Total Releases to Air	3.470
67-56-1	Methanol	Total Off-site transfer for treatment prior to final disposal	48.6253

3. OBJECTIVES/TARGETS

Our goal is to identify, investigate, and if possible, implement practical solutions that will increase efficiencies associated with the use of acetonitrile, methanol and ethanol.

4. FACILITY PROGRESS IN REDUCING TOXIC SUBSTANCE

Substance Use, Created and Contained Comparison

CAS RN	Substance	Category	2019 Data Year	2018 Data Year	Change	% Change	Reason for Change
75-08-8	Acetonitrile	Use	16.2403	20.371	-4.13	-20.28%	Decrease in lab use
75-08-8	Acetonitrile	Creation	0	0	0	0	
75-08-8	Acetonitrile	Contained	0	0	0	0	
64-17-5	Ethanol (Breakdown)	Use	21.7264	27.552	-5.83	-21.14%	Decrease in production
67-56-1	Methanol	Use	52.0956	19.616	32.4796	165.58%	There has been a change in the way methanol purchases in the labs have been accounted for. This could have resulted in the large increase in usage.
67-56-1	Methanol	Creation	0.038	0.037	0.001	2.70%	No reason—quantities approximately the same
67-56-1	Methanol	Contained	0	0	0	0	
67-56-1	Methanol (Breakdown)	Use	52.0956	19.616	32.4796	165.58%	There has been a change in the way methanol purchases in the labs have been accounted for. This could have resulted in the large increase in usage.
67-56-1	Methanol (Breakdown)	Creation	0.038	0.037	0.001	2.70%	No reason—quantities approximately the same

Substance Disposal Off-Site Comparison

CAS RN	Substance	Category	2019 Data Year	2018 Data Year	Change	% Change	Reason for Change
75-05-8	Acetonitrile	Total Releases to Air	0.0812	0.102	-0.02	-20.39%	Decrease in lab use
75-05-8	Acetonitrile	Total Off-site transfer for treatment prior to final disposal	16.1591	20.269	-4.11	-20.28%	Decrease in lab use
64-17-5	Ethanol	Total Releases to Air	20.6426	25.908	-5.27	-20.32%	Decrease in production
67-56-1	Methanol	Total Releases to Air	3.470	2.591	0.8790	33.93%	No reason—quantities

67-56-1	Methanol	Total Off-site transfer for treatment prior to final disposal	48.6253	17.062	31.5633	184.99%	approximately the same There has been a change in the way methanol purchases in the labs have been accounted for. This could have resulted in the large increase in usage and resulting disposal.
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5. PROGRESS YOUR FACILITY HAS MADE TO IMPLEMENT A PLAN

Include estimates of reductions achieved, difference between steps taken and those set out in the plan, amendments to the plan.

Targets for TR4 Plan

Substance	Quantity	Years
Acetonitrile	No quantity target	No timeline target
Ethanol	No quantity target	No timeline target
Methanol	No quantity target	No timeline target

Description and Comparison of Steps in TR4 Plan

CAS RN	Substance Name	Activity	Description/Comparison of Steps
75-05-8	Acetonitrile	Other	The issue was investigated and completed in 2015, there were no additional steps taken in the past year.
75-05-8	Acetonitrile	Training related to toxic substance reduction	This presentation was delivered to chemists in 2014/2015 and added to new chemist training material. This reduction option is complete and there were no additional steps taken in the past year.
67-56-1	Methanol	Substituted Materials	Further investigation of these options determined these were not viable and no additional steps were taken in the past year.

67-56-1	Methanol	Other	Batch sizes have changed since this reduction option was identified. Further investigation is required to determine whether the new batch size can be optimized and what the impacts will be.
67-56-1	Methanol	Modified Design or Composition	During the investigation of this reduction option, additional processes were identified that could impact the economic feasibility. This reduction option was determined to no longer be viable and no additional steps were taken in the past year.
67-45-1	Methanol	Changed Product Specifications	This presentation was delivered to chemists in 2014/2015 and added to new chemist training material. This reduction option is complete and there were no additional steps taken in the past year.
67-56-1	Methanol	Other	This option was completed in 2015, thus no additional steps were taken in the past year.

6. CERTIFICATION

As of July 30th, 2020, I, Tom Mitten, certify that I have read the report on the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the information contained in the report is factually accurate and the report complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Tom Mitten
VP, Product Supply - Signet

7-30-20

Date