

APOTEX

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patient affordability

TOXIC REDUCTION ACT ANNUAL REPORT – 2017

50 STEINWAY BLVD

JUNE 2018

BACKGROUND:

Every June, Apotex Inc. must submit an annual summary report under the Ontario Toxic's Reduction Act (TRA) for the 50 Steinway 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 2017 activities.

1. GENERAL INFORMATION

Name and contact information for the owner and the operator of the Facility	Jack Kay Chief Executive Officer 150 Signet Drive 416-749-9300
Public Contact	Jordan Berman Global Director, Corporate Communications 4100 Weston Road 416-749-9300
NPRI ID#	10731
MOE Regulation 127/01 ID#	10775
Legal/Trade Names of the owner and the operator of the facility, the street/ mailing address of the facility	Apotex Inc. Etobicoke Site 50 Steinway Blvd. Etobicoke, ON M9W 6Y3
# of Full Time Employees	1,359
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) PM10 (Per O.Reg. 455/09; "no single CAS numbers apply to these substances") PM2.5 (Per O.Reg. 455/09; "no single CAS numbers apply to these substances")

2. TOXIC SUBSTANCE ACCOUNTING

Substances Used, Created and Contained

CAS RN	Substance Name	Use, Creation, Contained	Quantity (tonnes)
75-05-8	Acetonitrile	Use	18.429
75-05-8	Acetonitrile	Creation	0
75-05-8	Acetonitrile	Contained	0
67-56-1	Methanol	Use	60.140
67-56-1	Methanol	Creation	0.047
67-56-1	Methanol	Contained	0
NA - M09	PM10- Particulate Matter <= 10 Microns	Use	0.846
NA - M09	PM10- Particulate Matter <= 10 Microns	Creation	0.078
NA - M09	PM10- Particulate Matter <= 10 Microns	Contained	0
NA - M10	PM2.5- Particulate Matter <= 2.5 Microns	Use	0.846
NA - M10	PM2.5- Particulate Matter <= 2.5 Microns	Creation	0.078
NA - M10	PM2.5- Particulate Matter <= 2.5 Microns	Contained	0
NA-M16	Volatile Organic Compounds	Use	114.370
NA-M16	Volatile Organic Compounds	Creation	0.607
NA-M16	Volatile Organic Compounds	Contained	0

Substance Released, Disposed and Transferred

CAS RN	Substance Name	Category	Quantity (tonnes)
75-05-8	Acetonitrile	Total Releases to All Media	0.092
75-05-8	Acetonitrile	Total Off-site transfer for treatment prior to final disposal	18.337
64-17-5	Ethanol	Total Releases to Air	29.403
67-56-1	Methanol	Total Releases to Air	44.508
67-56-1	Methanol	Total Off-site transfer for treatment prior to final disposal	15.678
NA-M09	PM10- Particulate Matter <= 10 Microns	Total Released to Air	0.924
NA-M10	PM2.5- Particulate Matter <= 2.5 Microns	Total Released to Air	0.924

3. OBJECTIVES AND TARGETS

Our goal is to identify, investigate, and where possible implement practical solutions that will increase efficiencies associated with the release of Acetonitrile, ethanol, methanol, PM2.5 and PM10 particulate matter.

4. FACILITY PROGRESS IN REDUCING TOXIC SUBSTANCES

Substance Use, Created and Contained Comparison

CAS RN	Substance	Category	2017 Data Year	2016 Data Year	Change	% Change	Reason for Change
75-08-8	Acetonitrile	Use	18.429	16.412	2.017	12.29	Increase in production levels
75-08-8	Acetonitrile	Creation	0	0			
75-08-8	Acetonitrile	Contained	0	0			
64-17-5	Ethanol (Breakdown)	Use	29.667	18.435	11.232	60.93	Increase in production levels
67-56-1	Methanol	Use	60.140	77.073	-16.933	-21.97	Decrease in usage of methanol, not necessarily production levels
67-56-1	Methanol	Creation	0.047	0.046	0.001	2.17	No reason—quantities approximately the same
67-56-1	Methanol	Contained	0	0			
67-56-1	Methanol (Breakdown)	Use	60.140	77.073	-16.933	-21.97	Decrease in usage of methanol due, not necessarily production levels
67-56-1	Methanol (Breakdown)	Creation	0.047	0.046	0.001	2.17	No reason—quantities approximately the same
NA-M09	PM10- Particulate Matter <= 10 Microns	Use	0.846	0.844	0.002	0.24	No reason—quantities approximately the same
NA-M09	PM10- Particulate Matter <= 10 Microns	Creation	0.078	0.073	0.005	6.85	No reason—quantities approximately the same
NA-M10	PM2.5- Particulate Matter <= 2.5 Microns	Use	0.846	0.844	0.002	0.24	No reason—quantities approximately the same
NA-M10	PM2.5- Particulate	Creation	0.078	0.073	0.005	6.85	No reason—quantities approximately the same

Matter <= 2.5 Microns							
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Substance Release, Disposal and Transfer Comparison

CAS RN	Substance	Category	2017 Data Year	2016 Data Year	Change	% Change	Reason for Change
75-05-8	Acetonitrile	Total Releases to Air	0.092	0.082	0.01	12.20	No reasons – quantities approximately the same
75-05-8	Acetonitrile	Total Off-site transfer for treatment prior to final disposal	18.337	16.330	2.007	12.29	No reasons – quantities approximately the same
64-17-5	Ethanol	Total Releases to Air	29.403	18.355	11.048	60.19	Increase in production levels
67-56-1	Methanol	Total Releases to Air	44.508	61.642	-17.134	-27.80	Decrease in use of methanol, not necessarily a decrease in production levels
67-56-1	Methanol	Total Off-site transfer for treatment prior to final disposal	15.678	15.477	0.210	1.30	No reason – quantities approximately the same
NA-M09	PM10- Particulate Matter <= 10 Microns	Total Releases to Air	0.924	0.917	0.007	0.76	No reason—quantities approximately the same
NA-M10	PM2.5- Particulate Matter <= 2.5 Microns	Total Releases to Air	0.924	0.917	0.007	0.76	No reason—quantities approximately the same

5. PROGRESS YOUR FACILITY HAS MADE TO IMPLEMENT A PLAN

Targets for TRA Plan

Substance	Quantity	Years
Acetonitrile	No quantity target	No timeline target

Ethanol	No reduction options	No reduction options
Methanol	No quantity target	No timeline target
PM2.5	No reduction options	No reduction options
PM10	No reduction options	No reduction options

Description and Comparison of Steps in TRA Plan

CAS RN	Substance Name	Activity	Description/Comparison of Steps
75-05-8	Acetonitrile	Other	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.
75-05-8	Acetonitrile	Modified equipment, layout or piping	During the investigation of this option, additional processes were identified that could impact the economic feasibility. No additional steps were completed this 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	Modified Design or Composition	During the investigation of this option, additional processes were identified that could impact the economic feasibility of implementation. No additional steps were completed 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.

6. CERTIFICATION

As of May 29th, 2018, 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-Etobicoke

5-29-18

Date

