



**Rohm and Haas Canada LP,
a wholly owned subsidiary of
The Dow Chemical Company
Toxics Reduction Act
Public Annual Summary Report
Reporting Year 2019**

Issue Date: 25-June-2020

Purpose

Rohm and Haas Canada LP, a wholly owned subsidiary of The Dow Chemical Company is regulated under the Toxics Reduction Act, 2009 and Ontario Regulation 455/09. The act and regulation require that a summary of data submitted to the Ontario Ministry of the Environment under the Act is made public.

Dow is a Responsible Care® Company

Responsible Care® is a voluntary initiative of the global chemical industry to safely handle our products from inception in the research laboratory, through manufacture and distribution, to ultimate reuse, recycle and disposal, and to involve the public in our decision-making processes. Initiated in Canada in 1984, Responsible Care® has quickly spread to more than 60 countries. In Canada, Dow was instrumental in developing Responsible Care® and continues to be a leader in Responsible Care® efforts. Our membership is maintained through Chemistry Industry Association of Canada (CIAC) for Canadian operations.

In 1988, Responsible Care® began in the U.S. through the ACC. In 2006, Dow signed the Responsible Care® global charter. Today, Responsible Care® Principles apply to Dow globally and are managed through the implementation and compliance with our internal Operating Discipline Management System (ODMS).

Responsible Care® is the chemistry industry's commitment to sustainability – the betterment of society, the environment, and the economy. Through Responsible Care®, CIAC member-companies strive to “do the right thing and be seen to do the right thing.”

Responsible Care® covers all aspects of our company's business, over the entire life cycle of our products. The Responsible Care® ethic is maintained through public annual re-commitments, performance reporting, mutual support and peer accountability at the CEO and technical level, and a robust verification and audit process. Dow Canada's President reviews the Responsible Care® performance of all of Dow Canada's business and manufacturing operations, including that of the West Hill plant, and annually signs Dow's re-commitment to the Ethic and Principles for Sustainability, and the Responsible Care® Codes of Practice.

Dow Canada undergoes a regular third-party verification process that allows independent experts and members of the public to verify that they're living up to the standards set by Responsible Care®. Dow Canada was successfully re-verified in 2016 by outside community and industry verifiers. To view the latest report, visit http://www.canadianchemistry.ca/responsible_care/uploads/2016_Dow.pdf. Dow Canada is currently in its next verification cycle.

A key component of Responsible Care is to innovate for safer products and processes that conserve resources, reduce risk and enhance value. This is accomplished through a regular review of products and processes.

At Dow's West Hill site we address this through the key codes of practice for Responsible Care which include: Operations, Stewardship and Accountability. The West Hill Plant is a modern plant with leading edge technology for processing, safety and environmental protections. The company continues to invest in our site and to add new technology. There are approximately 75 employees at West Hill who all have a strong commitment to the health and safety of our environment and our community.

NPRI Identification Number	2065
MOE O.Reg 127/01 Identification Number	n/a
Legal Name and Facility Address of the Owner and Operator of the facility	Rohm and Haas Canada LP 2 Manse Road Toronto, ON M1E 3T9
Mailing Address	Same as Facility Address
Number of Full-Time Employees	75
North American Industry Classification System (NAICS) 2, 4 and 6 digit code	31-33 - Manufacturing 3255 - Paint, Coating and Adhesive Manufacturing 325510 - Paint and Coating Manufacturing
Public Contact	Jess MacDonald Public Affairs Specialist Phone: +1 7809988426 Email: jmacdonald1@dow.com
UTM Coordinates	Easting: 647152 Northing: 4846708 Zone: 17T
Legal Canadian Parent Company	3229809 Nova Scotia Company 0.001% Ownership Calgary Corporate Head Office, Suite 2400, 215 – 2nd Street S.W., Calgary, Alberta, T2P 1M4
Name of all toxic substances for which plans are required to be prepared	Acrylic Acid (and its salts) Methyl methacrylate Acrylonitrile Methylolacrylamide Acrylamide Octylphenol ethoxylates Ammonia Styrene Butyl acrylate Sulfuric Acid Ethyl acrylate Zinc (and its compounds)

Acrylic Acid

Substance Name	Acrylic Acid (and its salts)
CAS Number	79-10-7

Date of Toxic Reduction Plan

18-December-2013

Reduction Objective and Target

A reduction of the use and creation of Acrylic Acid and its salts as well as a reduction of emissions, transfer and disposal is not targeted at this point.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	100 – 1000	100 – 1000	23.24
Amount of the substance that was created	1-10	1-10	0.98
Amount contained in product	0-1	0-1	7.14
Total Quantity Released (All Media)	0.0035	0.0030	16.67
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	4.231	4.190	0.98
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Acrylonitrile

Substance Name	Acrylonitrile
CAS Number	107-13-1

Date of Toxic Reduction Plan

18-December-2013

Reduction Objective and Target

A reduction of the use of Acrylonitrile, as well as a reduction of emissions, transfer and disposal is not targeted at this point.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	1,000 – 10,000	1,000 – 10,000	1.87
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	0 – 1	0 – 1	100
Total Quantity Released (All Media)	0.927	0.251	269.25
Off-site Transfer for Disposal	0.000	0.000	
Off-site Transfer for Treatment	0.162	0.139	16.87
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Acrylamide

Substance Name	Acrylamide
CAS Number	79-06-1

Date of Toxic Reduction Plan

17-December-2012

Reduction Objective and Target

A further reduction of Acrylamide emissions and disposals at this point is not technically feasible but we remain committed to evaluate new technologies as they become available.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit: [Tonnes]	Unit: [Tonnes]	Unit: [%]
Amount that entered the facility as the substance itself or as a constituent of another substance	10 – 100	10 – 100	-10.09
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	0 – 1	0 – 1	175
Total Quantity Released (All Media)	0.00014	0.00016	-12.5
Off-site Transfer for Disposal	0.10	0.000	
Off-site Transfer for Treatment	0.050	0.041	21.95
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Ammonia

Substance Name	Ammonia (total)
CAS Number	no single CAS RN applies to this substance

Date of Toxic Reduction Plan

18-December-2013

Reduction Objective and Target

A further reduction of Ammonia usage as well as a reduction of emissions and transfers at this point is not technically or economically feasible but we remain committed to evaluate new technologies as they become available.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2018	2019	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	100 – 1000	100 – 1000	4.15
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	100 – 1000	100 – 1000	3.95
Total Quantity Released (All Media)	2.051	1.6401	25.05
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	0.995	1.305	-23.75
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Butyl acrylate

Substance Name	Butyl acrylate
CAS Number	141-32-2

Date of Toxic Reduction Plan

18-December-2013

Reduction Objective and Target

A reduction of the use of Butyl acrylate, as well as a reduction of emissions, transfer and disposal is not targeted at this point.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit: [Tonnes]	Unit: [Tonnes]	Unit: [%]
Amount that entered the facility as the substance itself or as a constituent of another substance	10,000 – 100,000	10,000 – 100,000	6.17
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	1 – 10	1 – 10	-4.28
Total Quantity Released (All Media)	0.285	0.178	60.11
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	0.0142	0.0179	-20.67
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Ethyl acrylate

Substance Name	Ethyl acrylate
CAS Number	140-88-5

Date of Toxic Reduction Plan

18-December-2013

Reduction Objective and Target

A reduction of the use of Ethyl acrylate, as well as a reduction of emissions, transfer and disposal is not targeted at this point.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	1,000 – 10,000	1,000 – 10,000	-10.39
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	0 – 1	0 – 1	-8.57
Total Quantity Released (All Media)	0.053	0.04	32.5
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	0.0048	0.0035	37.14
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Methyl methacrylate

Substance Name	Methyl methacrylate
CAS Number	80-62-6

Date of Toxic Reduction Plan

18-December-2013

Reduction Objective and Target

A reduction of the use of Methyl methacrylate, as well as a reduction of emissions, transfer and disposal is not targeted at this point.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	10,000 – 100,000	10,000 – 100,000	-4.61
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	0 – 1	0 – 1	1.61
Total Quantity Released (All Media)	0.1560	0.0967	61.32
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	0.0096	0.0107	-10.28
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

**Methylol
 acrylamide**

Substance Name	N-Methylolacrylamide
CAS Number	924-42-5

**Date of Toxic
 Reduction Plan**

18-December-2013

**Reduction
 Objective and
 Target**

A reduction of the use of n-Methylolacrylamide, as well as a reduction of emissions, transfer and disposal is not targeted at this point.

**Description of
 Steps and
 Effectiveness**

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

**Substance
 Accounting**

	2019	2018	Year over Year change
On a facility basis:	Unit: [Tonnes]	Unit: [Tonnes]	Unit: [%]
Amount that entered the facility as the substance itself or as a constituent of another substance	10 – 100	10 – 100	44.96
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	0 – 1	0 – 1	26.66
Total Quantity Released (All Media)	0.000	0.000	0
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	0.000	0.000	0
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Octylphenol and its ethoxylates

Substance Name	Octylphenol and its ethoxylates
CAS Number	no single CAS RN applies to this substance

Date of Toxic Reduction Plan

18-December-2013

Reduction Objective and Target

A reduction of the use of Octylphenol and its ethoxylates, as well as a reduction of emissions, transfer and disposal is not targeted at this point.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	100 – 1,000	100 – 1,000	-36.85
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	100 – 1,000	100 – 1,000	-36.03
Total Quantity Released (All Media)	0.000	0.000	0
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	0.0021	0.0073	-70
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Styrene

Substance Name	Styrene
CAS Number	100-42-5

Date of Toxic Reduction Plan

18-December-2013

Reduction Objective and Target

A reduction of the use of Styrene, as well as a reduction of emissions, transfer and disposal is not targeted at this point.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	1,000 – 10,000	1,000 – 10,000	13.14
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	0 – 1	0 – 1	-28.69
Total Quantity Released (All Media)	1.932	1.645	17.44
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	0.050	0.043	2.7
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Sulfuric acid

Substance Name	Sulfuric acid
CAS Number	7664-93-9

Date of Toxic Reduction Plan

18-December-2012

Reduction Objective and Target

Through our commitment to Responsible Care®, Rohm and Haas Canada LP is committed to continuously improve our operations. We intent to reduce Sulfuric Acid usage by improving utility usage of our process.

We are targeting a reduction of 1,800 kg of Sulfuric Acid by reducing the amount of deionized water used in the manufacturing process

Description of Steps and Effectiveness

Activity: Reduce deionized water usage.

New backflow prevention requirements, mandating additional protection layers to maximize drinking water protection forced the proposed modification to be re-evaluated.

Amendments

The project was re-evaluated considering the increased protection layers required to meet the company back-flow prevention standard to maximize drinking water protection. The project is no longer economically feasible.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	10 – 100	10 – 100	7.32
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	0 – 1	0 – 1	0
Total Quantity Released (All Media)	0.0004	0.0004	0
Off-site Transfer for Disposal	0.000	0.000	0
Off-site Transfer for Treatment	0.000	0.000	0
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

The plan targeted the engineering changes to be implemented in 2014. A re-evaluation in 2017, after new backflow prevention requirements to maximize drinking water protection were mandated in 2016, determined that this project is no longer economically feasible. This has no impact on the quantity of emissions of Sulfuric acid from the site. This has no impact on the quantity of emissions of Sulfuric acid from the site.

Zinc (and its compounds)

Substance Name	Zinc (and its compounds)
CAS Number	no single CAS RN applies to this substance

Date of Toxic Reduction Plan

17-December-2012

Reduction Objective and Target

A further reduction of Zinc emissions and disposals at this point is not feasible but we remain committed to evaluate new technologies as they become available.

Description of Steps and Effectiveness

Not applicable.

Amendments

There have been no amendments to the plan in the reporting period.

Substance Accounting

	2019	2018	Year over Year change
On a facility basis:	Unit:	Unit:	Unit:
	[Tonnes]	[Tonnes]	[%]
Amount that entered the facility as the substance itself or as a constituent of another substance	100 – 1000	100 – 1000	3.21
Amount of the substance that was created	0 – 1	0 – 1	0
Amount contained in product	100 – 1000	100 – 1000	2.92
Total Quantity Released (All Media)	0.000	0.000	0
Off-site Transfer for Disposal	0.013	0.013	0
Off-site Transfer for Treatment	0.147	0.2922	-49.69
Off-site Transfer for Recycling	0.000	0.000	0

Progress Review

Not applicable.

Annual Report Certification Statement

As of June 25, 2020, I certify that I have read the report on the toxic substance reduction plan for Acrylic Acid (and its salts); Acrylonitrile; Acrylamide; Ammonia (total); Butyl acrylate; Ethyl acrylate; Methyl methacrylate; Methylol acrylamide; Octylphenol ethoxylates; Styrene; Sulfuric Acid and Zinc (and its compounds) and am familiar with their contents and to my knowledge the information contained in the report is factually accurate and the report complies with the Toxic Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under the Act.

Janet Melnyk (original signature on file)
 Melnyk, Janet Site Leader, Rohm and Haas Canada LP

25th-June-2020
 Date