Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Acetaldehyde and CAS # 75-07-0
Substances for which other plans have been prepared	Acetaldehyde, Acetone, Ethylene Glycol, Maleic Anhydride, Methanol, Methyl Methacrylate, Phthalic Anhydride, PM, PM10, PM2.5, Styrene, Xylene
Beneficial Uses at Facility	Component of raw materials
Reasons for Use	Product stability
Reasons for Use – Summary Statement (mandatory)	As a formulation component
Reasons for Creation	This substance is not created at the facility
Reasons for Creation – Summary Statement (mandatory)	N/A

Facility Information

Company Name	AOC Resins and Coatings Co.
Facility Name	Guelph Facility
Facility Physical Address	38 Royal Road, Guelph, ON, N1H 1G3
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	43.54110; -80.29780
Number of Employees	71
NPRI ID	3284
Ontario MOE (R.127) ID Number	5831
2 Digit NAICS Code	32
4 Digit NAICS Code	3252
6 Digit NAICS Code	325210

Parent Company Information

Parent Company Name	AOC LLC
Address	955 Highway 57 East, Collierville, TN, 38017-5205, USA
Percent Ownership (if available)	100%
Business Number (AOC Number)	84202 2873 RC0001

Facility Contact

Public Contact	Helder Botelho
Position	Plant Manager
Address	38 Royal Road, Guelph, ON, N1H 1G3
email	hbotelho@aoc-resins.com
Phone	(519) 823-4310
Fax	(519) 821-0123

Date of Plan: ***December 16, 2013***

Certification By Highest Ranking Employee

As of December 16, 2013, I, Helder Botelho, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Acetaldehyde**

Helder Botelho
Plant Manager
AOC Resins and Coatings Co. - Guelph Facility

Certification By Licensed Planner

As of December 16, 2013, I, Mark Roehler certify that I am familiar with the processes at AOC Resins and Coatings Co. - Guelph Facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Acetaldehyde**

Mark Roehler
Toxic Substance Reduction Planner
License Number: TSRP0128
LEHDER Environmental Services Limited

Statement of Intent

AOC Resins and Coatings Co. - Guelph Facility is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the use of Acetaldehyde in its operations because it is a required component for the facility's final product. Whenever feasible, we will eliminate, or reduce the discharge of Acetaldehyde in full compliance with all Federal and Provincial Regulations.

Plan Objectives

The objective of this plan is to reduce the use of Acetaldehyde by implementing the technically and economically feasible reduction options.

Description of Substance

Acetaldehyde is used as an additive to resins. It is a component of raw materials in the process.

Toxic Substance Reduction Option(s) To Be Implemented

AOC Resins and Coatings Co. will not be implementing any reduction options at this time because no feasible reduction options could be ascertained.

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Acetaldehyde, prepared by AOC Resins and Coatings Co. - Guelph Facility, dated December 16, 2013.

Date of Plan: ***December 16, 2013***

Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Acetone and CAS # 67-64-1
Substances for which other plans have been prepared	Acetaldehyde, Acetone, Ethylene Glycol, Maleic Anhydride, Methanol, Methyl Methacrylate, Phthalic Anhydride, PM, PM10, PM2.5, Styrene, Xylene
Beneficial Uses at Facility	Highly efficient solvent
Reasons for Use	Flushing
Reasons for Use – Summary Statement (mandatory)	Ancillary/other use
Reasons for Creation	This substance is not created at the facility
Reasons for Creation – Summary Statement (mandatory)	N/A

Facility Information

Company Name	AOC Resins and Coatings Co.
Facility Name	Guelph Facility
Facility Physical Address	38 Royal Road, Guelph, ON, N1H 1G3
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	43.54110; -80.29780
Number of Employees	71
NPRI ID	3284
Ontario MOE (R.127) ID Number	5831
2 Digit NAICS Code	32
4 Digit NAICS Code	3252
6 Digit NAICS Code	325210

Parent Company Information

Parent Company Name	AOC LLC
Address	955 Highway 57 East, Collierville, TN, 38017-5205, USA
Percent Ownership (if available)	100%
Business Number (AOC Number)	84202 2873 RC0001

Facility Contact

Public Contact	Helder Botelho
Position	Plant Manager
Address	38 Royal Road, Guelph, ON, N1H 1G3
email	hbotelho@aoc-resins.com
Phone	(519) 823-4310
Fax	(519) 821-0123

Date of Plan: ***December 16, 2013***

Statement of Intent

AOC Resins and Coatings Co. - Guelph Facility is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the use of Acetone in its operations because it is a highly efficient solvent used within the current manufacturing processes at the site. Whenever feasible, we will eliminate, or reduce the discharge of Acetone in full compliance with all Federal and Provincial Regulations.

Plan Objectives

The objective of this plan is to reduce the use of Acetone by implementing the technically and economically feasible reduction options.

Description of Substance

Acetone is used as an additive to resins. It is a component of raw materials in the process.

Toxic Substance Reduction Option(s) To Be Implemented

AOC Resins and Coatings Co. will not be implementing any reduction options at this time because no feasible reduction options could be ascertained.

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Acetone, prepared by AOC Resins and Coatings Co. - Guelph Facility, dated December 16, 2013.

Date of Plan: ***December 16, 2013***

Certification By Highest Ranking Employee

As of December 16, 2013, I, Helder Botelho, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Acetone**

Helder Botelho
Plant Manager
AOC Resins and Coatings Co. - Guelph Facility

Certification By Licensed Planner

As of December 16, 2013, I, Mark Roehler certify that I am familiar with the processes at AOC Resins and Coatings Co. - Guelph Facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Acetone**

Mark Roehler
Toxic Substance Reduction Planner
License Number: TSRP0128
LEHDER Environmental Services Limited

Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Ethylene Glycol and CAS # 107-21-1
Substances for which other plans have been prepared	Acetaldehyde, Acetone, Ethylene Glycol, Maleic Anhydride, Methanol, Methyl Methacrylate, Phthalic Anhydride, PM, PM10, PM2.5, Styrene, Xylenes
Beneficial Uses at Facility	Monomer in polyester backbone; makes the product work
Reasons for Use	Product stability
Reasons for Use – Summary Statement (mandatory)	As a formulation component
Reasons for Creation	This substance is not created at the facility
Reasons for Creation – Summary Statement (mandatory)	N/A

Facility Information

Company Name	AOC Resins and Coatings Co.
Facility Name	Guelph Facility
Facility Physical Address	38 Royal Road, Guelph, ON, N1H 1G3
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	43.54110; -80.29780
Number of Employees	71
NPRI ID	3284
Ontario MOE (R.127) ID Number	5831
2 Digit NAICS Code	32
4 Digit NAICS Code	3252
6 Digit NAICS Code	325210

Parent Company Information

Parent Company Name	AOC LLC
Address	955 Highway 57 East, Collierville, TN, 38017-5205, USA
Percent Ownership (if available)	100%
Business Number (AOC Number)	84202 2873 RC0001

Facility Contact

Public Contact	Helder Botelho
Position	Plant Manager
Address	38 Royal Road, Guelph, ON, N1H 1G3
email	hbotelho@aoc-resins.com
Phone	(519) 823-4310
Fax	(519) 821-0123

Date of Plan: ***December 16, 2013***

Statement of Intent

AOC Resins and Coatings Co. - Guelph Facility is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the use of Ethylene Glycol in its operations because it is a required component for the facility's final product. Whenever feasible, we will eliminate, or reduce the discharge of Ethylene Glycol in full compliance with all Federal and Provincial Regulations.

Plan Objectives

The objective of this plan is to reduce the use of Ethylene Glycol by implementing the technically and economically feasible reduction options.

Description of Substance

Ethylene Glycol is used as an additive to resins. It is a monomer in the polyester backbone which makes the product work.

Toxic Substance Reduction Option(s) To Be Implemented

AOC Resins and Coatings Co. will not be implementing any reduction options at this time.

Description of Previously Implemented Reduction Opportunities:

- Replaced Ethylene Glycol with PG in the antifreeze system
- Reduced from inhibitor solutions
- Improved overhead control, minimizing waste and emissions
- Replaced fibreglass tanks with stainless steel tanks which reduced potential for spills
- Implemented recycling of line drainings

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Ethylene Glycol, prepared by AOC Resins and Coatings Co. - Guelph Facility, dated December 16, 2013.

Date of Plan: ***December 16, 2013***

Certification By Highest Ranking Employee

As of December 16, 2013, I, Helder Botelho, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Ethylene Glycol**

Helder Botelho
Plant Manager
AOC Resins and Coatings Co. - Guelph Facility

Certification By Licensed Planner

As of December 16, 2013, I, Mark Roehler certify that I am familiar with the processes at AOC Resins and Coatings Co. - Guelph Facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Ethylene Glycol**

Mark Roehler
Toxic Substance Reduction Planner
License Number: TSRP0128
LEHDER Environmental Services Limited

Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Maleic Anhydride and CAS # 108-31-6
Substances for which other plans have been prepared	Acetaldehyde, Acetone, Ethylene Glycol, Maleic Anhydride, Methanol, Methyl Methacrylate, Phthalic Anhydride, PM, PM10, PM2.5, Styrene, Xylenes
Beneficial Uses at Facility	Component of polyester backbone; makes the product work
Reasons for Use	Product stability
Reasons for Use – Summary Statement (mandatory)	As a formulation component
Reasons for Creation	This substance is not created at the facility
Reasons for Creation – Summary Statement (mandatory)	N/A

Facility Information

Company Name	AOC Resins and Coatings Co.
Facility Name	Guelph Facility
Facility Physical Address	38 Royal Road, Guelph, ON, N1H 1G3
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	43.54110; -80.29780
Number of Employees	71
NPRI ID	3284
Ontario MOE (R.127) ID Number	5831
2 Digit NAICS Code	32
4 Digit NAICS Code	3252
6 Digit NAICS Code	325210

Parent Company Information

Parent Company Name	AOC LLC
Address	955 Highway 57 East, Collierville, TN, 38017-5205, USA
Percent Ownership (if available)	100%
Business Number (AOC Number)	84202 2873 RC0001

Facility Contact

Public Contact	Helder Botelho
Position	Plant Manager
Address	38 Royal Road, Guelph, ON, N1H 1G3
email	hbotelho@aoc-resins.com
Phone	(519) 823-4310
Fax	(519) 821-0123

Date of Plan: ***December 16, 2013***

Statement of Intent

AOC Resins and Coatings Co. - Guelph Facility is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the use of Maleic Anhydride in its operations because it is a required component for the facility's final product. Whenever feasible, we will eliminate, or reduce the discharge of Maleic Anhydride in full compliance with all Federal and Provincial Regulations.

Plan Objectives

The objective of this plan is to reduce the use of Maleic Anhydride by implementing the technically and economically feasible reduction options.

Description of Substance

Maleic Anhydride is used as an additive to resins. It is a monomer in the polyester backbone which makes the product work.

Toxic Substance Reduction Option(s) To Be Implemented

AOC Resins and Coatings Co. will not be implementing any reduction options at this time.

Description of Previously Implemented Reduction Opportunities:

- Improved overhead control, minimizing waste and emissions
- Reduced vapours by switching from rail car to road tanker offloading
- Replaces old pump with seal less pump

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Maleic Anhydride, prepared by AOC Resins and Coatings Co. - Guelph Facility, dated December 16, 2013.

Date of Plan: ***December 16, 2013***

Certification By Highest Ranking Employee

As of December 16, 2013, I, Helder Botelho, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Maleic Anhydride**

Helder Botelho
Plant Manager
AOC Resins and Coatings Co. - Guelph Facility

Certification By Licensed Planner

As of December 16, 2013, I, Mark Roehler certify that I am familiar with the processes at AOC Resins and Coatings Co. - Guelph Facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Maleic Anhydride**

Mark Roehler
Toxic Substance Reduction Planner
License Number: TSRP0128
LEHDER Environmental Services Limited

Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Methyl Methacrylate and CAS # 80-62-6
Substances for which other plans have been prepared	Acetaldehyde, Acetone, Ethylene Glycol, Maleic Anhydride, Methanol, Methyl Methacrylate, Phthalic Anhydride, PM, PM10, PM2.5, Styrene, Xylenes
Beneficial Uses at Facility	Monomer critical for UV stability
Reasons for Use	Product stability
Reasons for Use – Summary Statement (mandatory)	As a formulation component
Reasons for Creation	This substance is not created at the facility
Reasons for Creation – Summary Statement (mandatory)	N/A

Facility Information

Company Name	AOC Resins and Coatings Co.
Facility Name	Guelph Facility
Facility Physical Address	38 Royal Road, Guelph, ON, N1H 1G3
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	43.54110; -80.29780
Number of Employees	71
NPRI ID	3284
Ontario MOE (R.127) ID Number	5831
2 Digit NAICS Code	32
4 Digit NAICS Code	3252
6 Digit NAICS Code	325210

Parent Company Information

Parent Company Name	AOC LLC
Address	955 Highway 57 East, Collierville, TN, 38017-5205, USA
Percent Ownership (if available)	100%
Business Number (AOC Number)	84202 2873 RC0001

Facility Contact

Public Contact	Helder Botelho
Position	Plant Manager
Address	38 Royal Road, Guelph, ON, N1H 1G3
email	hbotelho@aoc-resins.com
Phone	(519) 823-4310
Fax	(519) 821-0123

Date of Plan: ***December 16, 2013***

Statement of Intent

AOC Resins and Coatings Co. - Guelph Facility is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the use of Methyl Methacrylate in its operations because it is a required component for the facility's final product. Whenever feasible, we will eliminate, or reduce the discharge of Methyl Methacrylate in full compliance with all Federal and Provincial Regulations.

Plan Objectives

The objective of this plan is to reduce the use of Methyl Methacrylate by implementing the technically and economically feasible reduction options.

Description of Substance

Methyl Methacrylate is used as an additive to resins. It is a monomer in the polyester backbone which makes the product work.

Toxic Substance Reduction Option(s) To Be Implemented

AOC Resins and Coatings Co. will not be implementing any reduction options at this time.

Description of Previously Implemented Reduction Opportunities:

- Alternative product testing completed – other compounds found to be less effective and more costly and therefore not implemented at the facility

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Methyl Methacrylate, prepared by AOC Resins and Coatings Co. - Guelph Facility, dated December 16, 2013.

Date of Plan: ***December 16, 2013***

Certification By Highest Ranking Employee

As of December 16, 2013, I, Helder Botelho, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Methyl Methacrylate**

Helder Botelho
Plant Manager
AOC Resins and Coatings Co. - Guelph Facility

Certification By Licensed Planner

As of December 16, 2013, I, Mark Roehler certify that I am familiar with the processes at AOC Resins and Coatings Co. - Guelph Facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Methyl Methacrylate**

Mark Roehler
Toxic Substance Reduction Planner
License Number: TSRP0128
LEHDER Environmental Services Limited

Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Phthalic Anhydride and CAS # 85-44-9
Substances for which other plans have been prepared	Acetaldehyde, Acetone, Ethylene Glycol, Maleic Anhydride, Methanol, Methyl Methacrylate, Phthalic Anhydride, PM, PM10, PM2.5, Styrene, Xylenes
Beneficial Uses at Facility	Component of polyester backbone; makes the product work
Reasons for Use	Product stability
Reasons for Use – Summary Statement (mandatory)	As a formulation component
Reasons for Creation	This substance is not created at the facility
Reasons for Creation – Summary Statement (mandatory)	N/A

Facility Information

Company Name	AOC Resins and Coatings Co.
Facility Name	Guelph Facility
Facility Physical Address	38 Royal Road, Guelph, ON, N1H 1G3
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	43.54110; -80.29780
Number of Employees	71
NPRI ID	3284
Ontario MOE (R.127) ID Number	5831
2 Digit NAICS Code	32
4 Digit NAICS Code	3252
6 Digit NAICS Code	325210

Parent Company Information

Parent Company Name	AOC LLC
Address	955 Highway 57 East, Collierville, TN, 38017-5205, USA
Percent Ownership (if available)	100%
Business Number (AOC Number)	84202 2873 RC0001

Facility Contact

Public Contact	Helder Botelho
Position	Plant Manager
Address	38 Royal Road, Guelph, ON, N1H 1G3
email	hbotelho@aoc-resins.com
Phone	(519) 823-4310
Fax	(519) 821-0123

Date of Plan: ***December 16, 2013***

Statement of Intent

AOC Resins and Coatings Co. - Guelph Facility is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the use of Phthalic Anhydride in its operations because it is a required component for the facility's final product. Whenever feasible, we will eliminate, or reduce the discharge of Phthalic Anhydride in full compliance with all Federal and Provincial Regulations.

Plan Objectives

The objective of this plan is to reduce the use of Phthalic Anhydride by implementing the technically and economically feasible reduction options.

Description of Substance

Phthalic Anhydride is used as an additive to resins. It is a monomer in the polyester backbone which makes the product work.

Toxic Substance Reduction Option(s) To Be Implemented

AOC Resins and Coatings Co. will not be implementing any reduction options at this time.

Description of Previously Implemented Reduction Opportunities:

- Improved overhead control which minimizes waste and emissions
- Implemented seal less pumps, eliminating leaks
- Revised pump procedures and modified piping for offloading
- Investigated offloading controls but determined that they would not change the quantities of phthalic anhydride used due to the current sealed offloading process

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Phthalic Anhydride, prepared by AOC Resins and Coatings Co. - Guelph Facility, dated December 16, 2013.

Date of Plan: ***December 16, 2013***

Certification By Highest Ranking Employee

As of December 16, 2013, I, Helder Botelho, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Phthalic Anhydride**

Helder Botelho
Plant Manager
AOC Resins and Coatings Co. - Guelph Facility

Certification By Licensed Planner

As of December 16, 2013, I, Mark Roehler certify that I am familiar with the processes at AOC Resins and Coatings Co. - Guelph Facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Phthalic Anhydride**

Mark Roehler
Toxic Substance Reduction Planner
License Number: TSRP0128
LEHDER Environmental Services Limited

Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Particulate Matter (PM10 & PM2.5) and CAS # NA
Substances for which other plans have been prepared	Acetaldehyde, Acetone, Ethylene Glycol, Maleic Anhydride, Methanol, Methyl Methacrylate, Phthalic Anhydride, PM, PM10, PM2.5, Styrene, Xylenes
Beneficial Uses at Facility	None
Reasons for Use	This substance is not used at the facility
Reasons for Use – Summary Statement (mandatory)	N/A
Reasons for Creation	As a by-product
Reasons for Creation – Summary Statement (mandatory)	The substance is a by-product of key reactions within the manufacturing processes at the site

Facility Information

Company Name	AOC Resins and Coatings Co.
Facility Name	Guelph Facility
Facility Physical Address	38 Royal Road, Guelph, ON, N1H 1G3
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	43.54110; -80.29780
Number of Employees	71
NPRI ID	3284
Ontario MOE (R.127) ID Number	5831
2 Digit NAICS Code	32
4 Digit NAICS Code	3252
6 Digit NAICS Code	325210

Parent Company Information

Parent Company Name	AOC LLC
Address	955 Highway 57 East, Collierville, TN, 38017-5205, USA
Percent Ownership (if available)	100%
Business Number (AOC Number)	84202 2873 RC0001

Facility Contact

Public Contact	Helder Botelho
Position	Plant Manager
Address	38 Royal Road, Guelph, ON, N1H 1G3
email	hbotelho@aoc-resins.com
Phone	(519) 823-4310
Fax	(519) 821-0123

Date of Plan: ***December 16, 2013***

Statement of Intent

AOC Resins and Coatings Co. - Guelph Facility is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the creation of Particulate Matter (PM10 & PM2.5) in its operations because it is a by-product of key reactions within the current manufacturing processes at the site. Whenever feasible, we will eliminate, or reduce the discharge of Particulate Matter (PM10 & PM2.5) in full compliance with all Federal and Provincial Regulations.

Plan Objectives

Our goal is to reduce Particulate Matter (PM10 & PM2.5) used at our facility and to further minimize the potential for losses through continuous improvements and our commitment to best management practices.

Description of Substance

Particulate Matter (PM10 & PM2.5) is created as a by-product in the processes associated with the manufacture of resin products.

Toxic Substance Reduction Option(s) To Be Implemented

For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the creation of Particulate Matter (PM10 & PM2.5) in its operations because it is a by-product of key reactions within the current manufacturing processes at the site. In the past, the facility has implemented multiple programs to prevent and limit discharges. There were no further feasible (technical and economic) reduction options identified.

Description of Previously Implemented Reduction Opportunities:

- Currently using industry standard technology, procedures and practices to prevent losses
- Combustion control system in place to minimize/optimize natural gas usage
- Control equipment currently in place to prevent/limit PM emissions

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Particulate Matter (PM10 & PM2.5), prepared by AOC Resins and Coatings Co. - Guelph Facility, dated December 16, 2013.

Date of Plan: ***December 16, 2013***

Certification By Highest Ranking Employee

As of December 16, 2013, I, Helder Botelho, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Particulate Matter (PM10 & PM2.5)**

Helder Botelho
Plant Manager
AOC Resins and Coatings Co. - Guelph Facility

Certification By Licensed Planner

As of December 16, 2013, I, Mark Roehler certify that I am familiar with the processes at AOC Resins and Coatings Co. - Guelph Facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Particulate Matter (PM10 & PM2.5)**

Mark Roehler
Toxic Substance Reduction Planner
License Number: TSRP0128
LEHDER Environmental Services Limited

Toxic Reduction Plan Summary

Substance

Substance Name and CAS #	Styrene and CAS # 100-42-5
Substances for which other plans have been prepared	Acetaldehyde, Acetone, Ethylene Glycol, Maleic Anhydride, Methanol, Methyl Methacrylate, Phthalic Anhydride, PM, PM10, PM2.5, Styrene, Xylenes
Beneficial Uses at Facility	Integral component of polyester resin; required for product's physical properties
Reasons for Use	Product Stability
Reasons for Use – Summary Statement (mandatory)	As a formulation component
Reasons for Creation	This substance is not created at the facility
Reasons for Creation – Summary Statement (mandatory)	N/A

Facility Information

Company Name	AOC Resins and Coatings Co.
Facility Name	Guelph Facility
Facility Physical Address	38 Royal Road, Guelph, ON, N1H 1G3
Facility Mailing Address	Same as physical address
Spatial Coordinates of Facility	43.54110; -80.29780
Number of Employees	71
NPRI ID	3284
Ontario MOE (R.127) ID Number	5831
2 Digit NAICS Code	32
4 Digit NAICS Code	3252
6 Digit NAICS Code	325210

Parent Company Information

Parent Company Name	AOC LLC
Address	955 Highway 57 East, Collierville, TN, 38017-5205, USA
Percent Ownership (if available)	100%
Business Number (AOC Number)	84202 2873 RC0001

Facility Contact

Public Contact	Helder Botelho
Position	Plant Manager
Address	38 Royal Road, Guelph, ON, N1H 1G3
email	hbotelho@aoc-resins.com
Phone	(519) 823-4310
Fax	(519) 821-0123

Date of Plan: ***December 16, 2013***

Statement of Intent

AOC Resins and Coatings Co. - Guelph Facility is committed to playing a leadership role in protecting the environment. For the purposes of the Toxics Reduction Act, the facility will not be implementing any options to reduce the use of Styrene in its operations because it is a required component for the facility's final product. Whenever feasible, we will eliminate, or reduce the discharge of Styrene in full compliance with all Federal and Provincial Regulations.

Plan Objectives

The objective of this plan is to reduce the use of Styrene by implementing the technically and economically feasible reduction options.

Description of Substance

Styrene is used as an additive to resins. It is a component of raw materials in the process.

Toxic Substance Reduction Option(s) To Be Implemented

AOC Resins and Coatings Co. will not be implementing any reduction options at this time because no feasible reduction options could be ascertained.

Description of Previously Implemented Reduction Opportunities:

- Most products/resins are currently low styrene
- Tested several re-formulations and alternate products but they are not feasible options
- Tried styrene suppressants but no possible improvements due to technical reasons and costs
- Installed back venting/vapour balancing systems on loading processes
- Reduction of recirculation pump from styrene tank potentially reduces spills, leaks and emissions
- Reduced supply pressure in production areas
- Decreased flush volume by training operators

Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for Styrene, prepared by AOC Resins and Coatings Co. - Guelph Facility, dated December 16, 2013.

Date of Plan: ***December 16, 2013***

Certification By Highest Ranking Employee

As of December 16, 2013, I, Helder Botelho, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Styrene**

Helder Botelho
Plant Manager
AOC Resins and Coatings Co. - Guelph Facility

Certification By Licensed Planner

As of December 16, 2013, I, Mark Roehler certify that I am familiar with the processes at AOC Resins and Coatings Co. - Guelph Facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the *Toxics Reduction Act, 2009* that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: **Styrene**

Mark Roehler
Toxic Substance Reduction Planner
License Number: TSRP0128
LEHDER Environmental Services Limited