

Ontario Toxics Reduction Act Plan Summary

December 2013 Revised May 2014

Facility Details

Trade Name: METAL KOTING

Facility /Legal Name: Continuous Colour Coat Ltd.

1430 Martin Grove Road Rexdale, Ontario, M9W 4Y1

UTM (NAD83) Coordinates: 17T 614122.26 4841383.36

NAICS 2 digit Code: 33 – Manufacturing

NAICS 4 digit Code: 3328 – Coating, Engraving, Heat Treating and Allied Activities

NAICS 6 digit Canada Code: 332810 - Coating, Engraving, Heat Treating and Allied Activities

NPRI (National Pollutant Release Inventory) ID: 0000004527

Full Time Employees: 107

Public Contact	Contact Information
Chris Butt	(416)743-7980 ext 279
Manager, Technical Services	Metal Koting, Continuous Colour Coat Ltd.
	1430 Martin Grove Road,
	Rexdale, ON M9W 4Y1
Person Who Prepared the Report	Contact Information
Person Who Prepared the Report Marika Toyama	Contact Information (416)743-7980 ext 243
Marika Toyama	(416)743-7980 ext 243
Marika Toyama	(416)743-7980 ext 243 Metal Koting, Continuous Colour Coat Ltd.

List of Toxic Substances at the Facility for Which Plans Have Been Prepared

CAS Number	Substance Name – Phase 1 (December 2012)
NA - 19	Hexavalent chromium(and its compounds)
NA - 08	Lead (and its compounds)
7664-93-9	Sulphuric acid
108-88-3	Toluene
1330-20-7	Xylene (all isomers)
NA - 14	Zinc (and its compounds)



CAS Number	Substance Name – Phase 2 (December 2013)
111-76-2	2-butoxyethanol
71-36-3	n-butyl alcohol
100-41-4	Ethylbenzene
78-93-3	Methyl ethyl ketone
108-10-1	Methyl isobutyl ketone
91-20-3	Naphthalene
95-63-6	1,2,4 trimethylbenzene
	PM 10
	PM 2.5



<u>2-butoxyethanol –</u> Ontario Toxics Reduction Act Plan Summary

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to reduce the amount of 2-butoxyethanol used at our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to the environment, Metal Koting will strive for reductions in 2-butoxyethanol usage in our plant as part of this Toxics Reduction plan.

Description of why the toxic substance is used or created

2-butoxyethanol is used as a component of Paints used to paint metal substrate, as well as a component of a solvent blend used for cleaning.

Description of Options to be Implemented

Equipment or Process Modifications

• Improve control of coater head settings

Estimated Reduction:

Use: 0.116 tonnes/year 0.22%

Releases to Air: 0.002 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.011 tonnes/year 0.2 %

Timeline: 2 years

On-site Re-use, Recycling or Recovery

• Re-use paint more efficiently, with improved solvent control

Estimated Reduction:

Use: 0.068 tonnes/year 0.1%

Releases to Air: 0.002 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.07 tonnes/year 0.1 %



Timeline: 2 years

Good Operator Practice or Training

• Improved communication of paint requirements to coater operators

Estimated Reduction:

Use: 0.105 tonnes/year 0.2%

Releases to Air: 0.002 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.01 tonnes/year 0.2 %

Timeline: 1 year

The plan summary for 2-butoxyethanol accurately reflects the Toxics Reduction plan for 2-butoxyethanol.

n-butyl alcohol -

Ontario Toxics Reduction Act Plan Summary

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to reduce the amount of n-butyl alcohol used at our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to the environment, Metal Koting will strive for reductions in n-butyl alcohol usage in our plant as part of this Toxics Reduction plan.

Description of why the toxic substance is used or created

n-butyl alcohol is used as a component of Paints used to paint metal substrate as well as a component of a solvent blend used for cleaning.

Description of Options to be Implemented

Equipment or Process Modifications

• Improve control of coater head settings



Estimated Reduction:

Use: 0.046 tonnes/year 0.22%

Transfers Off Site for Recycling: 0.005 tonnes/year 0.2 %

Timeline: 2 years

On-site Re-use, Recycling or Recovery

• Re-use paint more efficiently, with improved solvent control

Estimated Reduction:

Use: 0.058 tonnes/year 0.3%

Transfers Off Site for Recycling: 0.06 tonnes/year 0.3 %

Timeline: 2 years

Good Operator Practice or Training

• Improved communication of paint requirements to coater operators

Estimated Reduction:

Use: 0.042 tonnes/year 0.2%

Transfers Off Site for Recycling: 0.004 tonnes/year 0.2 %

Timeline: 1 year

The plan summary for n-butyl alcohol accurately reflects the Toxics Reduction plan for 2 n-butyl alcohol.

Ethylbenzene –

Ontario Toxics Reduction Act Plan Summary

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to reduce the amount of Ethylbenzene used at our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to



the environment, Metal Koting will strive for reductions in Ethylbenzene usage in our plant as part of this Toxics Reduction plan.

Description of why the toxic substance is used or created

Ethylbenzene is used as a component of Paints used to paint metal substrate.

Description of Options to be Implemented

Equipment or Process Modifications

• Improve control of coater head settings

Estimated Reduction:

Use: 0.032 tonnes/year 0.22%

Transfers Off Site for Recycling: 0.003 tonnes/year 0.2 %

Timeline: 2 years

On-site Re-use, Recycling or Recovery

• Re-use paint more efficiently, with improved solvent control

Estimated Reduction:

Use: 0.024 tonnes/year 0.2%

Transfers Off Site for Recycling: 0.002 tonnes/year 0.2 %

Timeline: 2 years

Good Operator Practice or Training

• Improved communication of paint requirements to coater operators

Estimated Reduction:

Use: 0.030 tonnes/year 0.2%

Transfers Off Site for Recycling: 0.003 tonnes/year 0.2 %

Timeline: 1 year

The plan summary for Ethylbenzene accurately reflects the Toxics Reduction plan for Ethylbenzene.



<u>Methyl Ethyl Ketone –</u> <u>Ontario Toxics Reduction Act Plan Summary</u>

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to reduce the amount of Methyl Ethyl Ketone (MEK) used in our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to the environment, Metal Koting will strive to reduce the MEK usage in our plant as part of this Toxics Reduction plan.

Description of why the toxic substance is used or created

MEK is used as a component of Wash Up Solvent, which is used to clean Equipment and floors after and between painting set-ups. MEK is used as a viscosity adjuster, additive to paints on the Paint Line. MEK is also used as a component of Paints and Inks which are used to paint a metal substrate on the Paint line.

Description of Options to be Implemented

Material or Feedstock Substitution

• Replace MEK in ink solvent with alternative solvent

Estimated Reduction:

Use: 3.78 tonnes/year 7.3%

Releases to Air: 0.054 tonnes/year 9.4 %

Transfers Off Site for Recycling: 0.805 tonnes/year 7.3 %

Timeline: 5 years

Material or Feedstock Substitution

• Switch to a recycled cleaning solvent with lower % MEK

Estimated Reduction:

Use: 0.311 tonnes/year 0.6%

Releases to Air: 0.005 tonnes/year 0.9 %

Transfers Off Site for Recycling: 0.066 tonnes/year 0.6 %



Timeline: 1 year

Equipment or Process Modifications

• Improve control of coater head settings

Estimated Reduction:

Use: 0.114 tonnes/year 0.22%

Releases to Air: 0.002 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.024 tonnes/year 0.2 %

Timeline: 2 years

Good Operator Practice or Training

• Optimize use of wand for cleaning process

Estimated Reduction:

Use: 0.719 tonnes/year 1.4%

Releases to Air: 0.01 tonnes/year 1.7 %

Transfers Off Site for Recycling: 0.153 tonnes/year 1.4 %

Timeline: 2 years

The plan summary for MEK accurately reflects the Toxics Reduction plan for MEK.

<u>Methyl Isobutyl Ketone –</u> Ontario Toxics Reduction Act Plan Summary

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to reduce the amount of Methyl Isobutyl Ketone (MIBK) used in our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to the environment, Metal Koting will strive to reduce the MIBK usage in our plant as part of this Toxics Reduction plan.



Description of why the toxic substance is used or created

MIBK is used as a component of Paints which used to paint a metal substrate on the Paint line. MIBK is used as a viscosity adjuster, additive to inks on the Paint Line. MIBK is also used as a component of Wash Up Solvent, which is used to clean Equipment and floors after and between painting set-ups.

Description of Options to be Implemented

Material or Feedstock Substitution

• Replace MIBK in ink solvent with alternative solvent

Estimated Reduction:

Use: 3.78 tonnes/year 16%

Releases to Air: 0.054 tonnes/year 17.6 %

Transfers Off Site for Recycling: 0.327 tonnes/year 16 %

Timeline: 5 years

Equipment or Process Modifications

• Improve control of coater head settings

Estimated Reduction:

Use: 0.052 tonnes/year 0.22%

Releases to Air: 0.001 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.005 tonnes/year 0.2 %

Timeline: 2 years

On-site Re-use, Recycling or Recovery

• Re-use paint more efficiently, with improved solvent control

Estimated Reduction:

Use: 0.022 tonnes/year 0.1%

Releases to Air: 0.001 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.002 tonnes/year 0.1 %

Timeline: 2 years

Good Operator Practice or Training



• Improved communication of paint requirements to coater operators

Estimated Reduction:

Use: 0.047 tonnes/year 0.2%

Releases to Air: 0.001 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.004 tonnes/year 0.2 %

Timeline: 1 year

The plan summary for MIBK accurately reflects the Toxics Reduction plan for MIBK.

Naphthalene -

Ontario Toxics Reduction Act Plan Summary

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to reduce the amount of Naphthalene used at our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to the environment, Metal Koting will strive for reductions in Naphthalene usage in our plant as part of this Toxics Reduction plan.

Description of why the toxic substance is used or created

Naphthalene is used as a component of Paints used to paint metal substrate.

Description of Options to be Implemented

Equipment or Process Modifications

• Improve control of coater head settings

Estimated Reduction:

Use: 0.026 tonnes/year 0.22%

Transfers Off Site for Recycling: 0.002 tonnes/year 0.2 %



Timeline: 2 years

On-site Re-use, Recycling or Recovery

• Re-use paint more efficiently, with improved solvent control

Estimated Reduction:

Use: 0.016 tonnes/year 0.1%

Transfers Off Site for Recycling: 0.001 tonnes/year 0.1 %

Timeline: 2 years

Good Operator Practice or Training

• Improved communication of paint requirements to coater operators

Estimated Reduction:

Use: 0.024 tonnes/year 0.2%

Transfers Off Site for Recycling: 0.002 tonnes/year 0.2 %

Timeline: 1 year

The plan summary for naphthalene accurately reflects the Toxics Reduction plan for naphthalene.

1,2,4-trimethylbenzene –

Ontario Toxics Reduction Act Plan Summary

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to reduce the amount of 1,2,4-trimethylbenzene used at our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to the environment, Metal Koting will strive for reductions in 1,2,4-trimethylbenzene usage in our plant as part of this Toxics Reduction plan.



Description of why the toxic substance is used or created

1,2,4-trimethylbenzene is used as a component of Paints used to paint metal substrate.

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Description of Options to be Implemented

Equipment or Process Modifications

Improve control of coater head settings

Estimated Reduction:

Use: 0.055 tonnes/year 0.22%

Releases to Air: 0.001 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.005 tonnes/year 0.2 %

Timeline: 2 years

On-site Re-use, Recycling or Recovery

• Re-use paint more efficiently, with improved solvent control

Estimated Reduction:

Use: 0.078 tonnes/year 0.3%

Releases to Air: 0.001 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.007 tonnes/year 0.3 %

Timeline: 2 years

Good Operator Practice or Training

• Improved communication of paint requirements to coater operators

Estimated Reduction:

Use: 0.050 tonnes/year 0.2%

Releases to Air: 0.001 tonnes/year 0.3 %

Transfers Off Site for Recycling: 0.004 tonnes/year 0.2 %

Timeline: 1 year

The plan summary for 1,2,4-trimethylbenzene accurately reflects the Toxics Reduction plan for 1,2,4-trimethylbenzene.



<u>PM 10 –</u> Ontario Toxics Reduction Act Plan Summary

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to look for ways to reduce the amount of PM 10 created at our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to the environment, Metal Koting will strive to use our resources more efficiently to reduce PM 10 creation in our plant as part of this Toxics Reduction plan.

Description of why the toxic substance is used or created

PM 10 is created through burning natural gas which powers our plant heating, boiler, incinerators and ovens. VOCs from paint applied to our metal strip are also burned up in our incinerators creating PM 10. In addition PM 10 emissions occur from our cooling towers, located on both our Paint and Electrogalvanizing lines. Trucks make deliveries as well was pick ups and this vehicle traffic creates PM 10. In addition fugitive emissions are created through the use of Zinc processing used within the plant in our Electrogalvanizing and Waste Treatment processes.

Description of Options to be Implemented

Spill and Leak Prevention

• Preventative maintenance on dampers

Estimated Reduction:

Creation: 0.006 tonnes/year 0.4% Releases to Air: 0.006 tonnes/year 0.4 %

Timeline: 2 years

Good Operator Practice or Training

• Train operators to close outside doors more often



Estimated Reduction:

Use: 0.002 tonnes/year 0.1%

Transfers Off Site for Recycling: 0.002 tonnes/year 0.1 %

Timeline: 2 years

The plan summary for PM 10 accurately reflects the Toxics Reduction plan for PM10.

PM 2.5 –

Ontario Toxics Reduction Act Plan Summary

Statement of Intent To Reduce

At Metal Koting, Continuous Colour Coat Ltd, the preservation and protection of our natural environment is a primary consideration in our decision making. We will strive to look for ways to reduce the amount of PM 2.5 created at our plant where feasible with consideration to reducing our environmental impact.

Objectives

Metal Koting - Continuous Colour Coat Limited is committed to maintaining a leadership role as a manufacturer of specialty coated metal for customers in a range of industries. In our commitment to the environment, Metal Koting will strive to use our resources more efficiently to reduce PM 2.5 creation in our plant as part of this Toxics Reduction plan.

Description of why the toxic substance is used or created

PM 2.5 is created through burning natural gas which powers our plant heating, boiler, incinerators and ovens. VOCs from paint applied to our metal strip are also burned up in our incinerators creating PM 2.5. In addition PM 2.5 emissions occur from our cooling towers, located on both our Paint and Electrogalvanizing lines. Trucks make deliveries as well was pick ups and this vehicle traffic creates PM 2.5. In addition fugitive emissions are created through the use of Zinc processing used within the plant in our Electrogalvanizing and Waste Treatment processes.

Description of Options to be Implemented

Spill and Leak Prevention

• Preventative maintenance on dampers



Estimated Reduction:

Creation: 0.006 tonnes/year 0.4%

Releases to Air: 0.006 tonnes/year 0.4 %

Timeline: 2 years

Good Operator Practice or Training

• Train operators to close outside doors more often

Estimated Reduction:

Use: 0.002 tonnes/year 0.2%

Transfers Off Site for Recycling: 0.002 tonnes/year 0.2 %

Timeline: 2 years

The plan summary for PM 2.5 accurately reflects the Toxics Reduction plan for PM 2.5.



Toxics Reduction Plan: Plan Re-Submitted After	December 31, 2013
Highest Ranking Employee:	
Rationale: Upon examination of the spreadsheet used to calcu 20th, 2013 edition of the Toxics Reduction Plan, at been corrected and the plan updated accordingly.	
I have read the plan, am familiar with its contents factually accurate and, with exception of the certif deadline, the Plan meets all other requirements of	ication falling after the regulatory
D OSA	
De Wall	May 30, 2014
Keyin McCallum President and CEO	Date
Metal Koting – Continuous Colour Coat Ltd.	
Toxic Substance Reduction Planner: I am familiar with the processes at Metal Koting, with the estimates of reduction for those options the exception of the certification of the plan falling after	at will be implemented and, with the er the regulatory deadline, the Plan
Toxic Substance Reduction Planner: I am familiar with the processes at Metal Koting, with the estimates of reduction for those options the exception of the certification of the plan falling after	at will be implemented and, with the er the regulatory deadline, the Plan
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Toxic Substance Reduction Planner: I am familiar with the processes at Metal Koting, with the estimates of reduction for those options the exception of the certification of the plan falling after meets all other requirements of the act and regular Marika Toyama Project Engineer Metal Koting – Continuous Color Coat Ltd.	at will be implemented and, with the er the regulatory deadline, the Plan ion.
Toxic Substance Reduction Planner: I am familiar with the processes at Metal Koting, with the estimates of reduction for those options the exception of the certification of the plan falling after meets all other requirements of the act and regular Marika Toyama Project Engineer Metal Koting – Continuous Color Coat Ltd.	at will be implemented and, with the er the regulatory deadline, the Plan ion. May 30, 2014
Toxic Substance Reduction Planner: I am familiar with the processes at Metal Koting, with the estimates of reduction for those options the exception of the certification of the plan falling after meets all other requirements of the act and regular Marika Toyama	at will be implemented and, with the er the regulatory deadline, the Plan ion. May 30, 2014



Re: Toxics Reduction Plan Update May 30, 2014, to previous version December 20, 2013 CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of May 30, 2014 I, Kevin McCallum, certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

2-butoxyethanol naphthalene n-butyl alcohol 1,2,4 trimethylbenzene ethylbenzene PM 10 PM 2.5 MEK

Kevin McCallum President and CEO

MIBK

Metal Koting - Continuous Colour Coat Ltd.

May 30, 2014

Date

CERTIFICATION BY LICENSED PLANNER

As of May 30, 2014, I, Marika Toyama certify that I am familiar with the processes at Metal Koting - Continuous Colour Coat Ltd. that use or create the toxic substances 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 plans dated May 30, 2014 and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

2-butoxyethanol (May 30, 2014) n-butyl alcohol (May 30, 2014) ethylbenzene (May 30, 2014) MEK (May 30, 2014) MIBK (May 30, 2014) naphthalene (May 30, 2014) 1,2,4 trimethylbenzene (May 30, 2014) PM 10 (May 30, 2014) PM 2.5 (May 30, 2014)

May 30, 2014

Date

Marka Tayana Marika Toyama

Project Engineer

Metal Koting - Continuous Color Coat Ltd.

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