Report:

AkzoNobel Wood Coatings Ltd.

2014 Toxic Reduction Accounting Report

Date: March 11, 2016

Statement of Intent

AkzoNobel sells liquid coatings to the wood market. The purpose of these coatings is to protect and enhance the wood substrate. Ontario has declared certain solvents that are used in organic coatings as 'toxic' substances. The use of these solvents is dictated by market demands which ultimately determine the usage level. AkzoNobel manufactures a variety of liquid coatings including ultraviolet cured coatings and water borne coatings that minimize the use of solvents altogether. AkzoNobel cannot make unilateral changes to its formulations without the consent of its customer base. As the market adapts towards these non-solvent based coatings or as it trends away from the use of the toxic solvents, AkzoNobel is there to help its customers to make this transition.

In the development of any new coatings, these solvents will be reviewed to ascertain whether their use is justified. Preference will be given to raw materials that do not use the 'toxic' solvents as diluents. If a supplier offers a resin in both toluene and n-butyl acetate, the resin offered in n-butyl acetate will be selected.

AkzoNobel is well aware of its commitments as a steward and takes steps to handle these solvents in a responsible manner. It is in the best interest of AkzoNobel from both a business and environmental perspective to minimize any releases of these solvents.

Objective

AkzoNobel, being a technology leader in wood coatings, takes pride in providing alternatives for its customer base. In the 2012 calendar year, several of its customers have started a transition towards alternative coatings such as water based coatings. AkzoNobel will seek to lower its own demand of these toxics by using alternative blends of resins that contain other solvents, when feasible.

Target

No target reduction amount and timeline can be set as the plan depends on the reaction of the market from both the supply and demand side.

Description of the Toxic Substances Found at AkzoNobel

The following toxic substances require a toxic substance reduction plan based on the criteria set out in the Toxics Reduction Act, 2009 and Ontario Regulation 455/09.

These substances are:

Toluene	108-88-3
Xylene	1330-20-7
Methanol	67-56-1
Ethyl Benzene	100-41-4
1,2,4-trimethyl benzene	95-63-6
Acetone	67-64-1
Iso-butanol	78-83-1
Ethoxy butanol	111 -76-2
N-butanol	71-36-3
Iso-Propanol	67-63-0
Methyl ethyl ketone	78-93-3
Methyl iso-butyl ketone	108-10-1
Ethyl acetate	141-78-6
Ethyl Alcohol	64-17-5

These are organic solvent used as diluents in the manufacture of organic coatings. The site doesn't create or destroy any of these substances. As these compounds are used as formulating components, a single plan will be used to address their reduction.

Basic Facility Information

Company Name:	Akzo Nobel Wood Coatings Ltd.
Site Address:	155 Rose Glen Road North Port Hope, ON, L1A 3V6
Spatial Co-ordinates:	Latitude 43.969593 Longitude -78.284173 Datum WGS84
Number of Full Time Employees:	80
NPRI ID:	5619
O.Reg 127 ID:	6213
Two Digit NAICS Code:	32
Four Digit NAICS Code:	3255
Six Digit NAICS Code:	325510 Paint and Coating Manufacturing
Public Contact:	Frank Jossinet, Site Manager (905)885-6388
Technical Contact:	Frank Jossinet, Site Manager (905)885-6388
Highest Ranking Employee:	Frank Jossinet, Site Manager (905)885-6388
Person who prepared the plan:	Michael Chrisomalis, Product Manager (905)885-6388
Planner responsible for making recommendations:	Scott Manser, Senior Project Manager Ortech Environmental

Options to be Implemented

1) Product Substitution

a. The R&D conducted at the facility will continue to focus on water based and solvent free coatings as well as on transitioning customers that are looking for ways to reduce or eliminate the use of toxic solvents.

b. Preference will be given to selecting raw materials for use that are free of toxics during the development stages.

2) Training or Improved Operating Practices

a. To look for in-house cleaning solutions that are not solvent based. This would look at replacing the use of solvents as the primary cleaning vehicles for surfaces that are open such as floors and walls.

b. To continue engaging employees into developing practices that minimize the occurrence of any unwanted event that could release toxic or other substances.

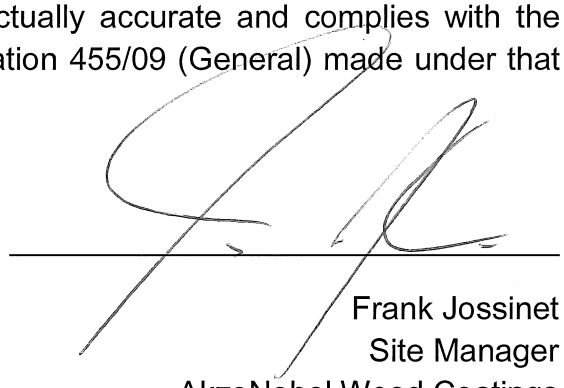
Plan Summary Statement

This plan summary accurately reflects the content of the toxic substance reduction plan for the substances listed below:

Toluene	108-88-3
Xylene	1330-20-7
Methanol	67-56-1
Ethyl Benzene	100-41-4
1,2,4-trimethyl benzene	95-63-6
Acetone	67-64-1
Iso-butanol	78-83-1
Ethoxy butanol	111 -76-2
N-butanol	71-36-3
Iso-Propanol	67-63-0
Methyl ethyl ketone	78-93-3
Methyl iso-butyl ketone	108-10-1
Ethyl acetate	141-78-6
Ethyl Alcohol	64-17-5

Certification by Highest Ranking Employee

As of March 11, 2016 I, Frank Jossinet, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and I 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.



Frank Jossinet
Site Manager
AkzoNobel Wood Coatings

Comparison of Toxic Substance Accounting for 2014

CAS	Substance Name	Amount of Substance Used(MT)				Released to Air (MT)				Offsite Transfers (MT) Recycling				Contained in Product (MT)			
		2013	2014	Reduction	%	2013	2014	Reduction	%	2013	2014	Reduction	%	2013	2014	Reduction	%
95636	1,2,4-TRIMETHYLBENZENE	15.1	11.0	4.1	26.9	0.23	0.17	0.06	26.9	0.0	0.0	0.0	0.0	14.8	10.8	4.0	26.9
108101	METHYL ISOBUTYL KETONE	42.1	41.4	0.7	1.6	0.63	0.62	0.01	1.6	1.0	1.0	0.1	5.7	40.5	39.8	0.6	1.5
78933	METHYL ETHYL KETONE	45.6	54.9	-9.3	-20.4	0.68	0.82	-0.14	-20.4	2.2	2.1	0.1	5.7	42.7	52.0	-9.3	-21.8
100414	ETHYL BENZENE	46.8	48.8	-1.9	-4.1	0.70	0.73	-0.03	-4.1	0.7	0.7	0.0	5.7	45.4	47.3	-1.9	-4.3
78831	ISOBUTYL ALCOHOL	68.8	70.0	-1.3	-1.8	1.03	1.05	-0.02	-1.8	2.4	2.2	0.1	5.7	65.4	66.7	-1.4	-2.1
71363	N-BUTANOL	81.4	79.2	2.2	2.7	1.22	1.19	0.03	2.7	1.3	1.2	0.1	5.7	79.0	76.9	2.1	2.7
67630	PROPAN-2-OL	111.7	96.5	15.2	13.6	1.68	1.45	0.23	13.6	0.0	0.0	0.0	0.0	110.0	95.1	15.0	13.6
141786	ETHYL ACETATE	152.6	173.7	-21.2	-13.9	2.29	2.61	-0.32	-13.9	2.5	2.4	0.1	5.7	147.8	168.8	-21.0	-14.2
67561	METHANOL	131.9	131.2	0.7	0.5	1.98	1.97	0.01	0.5	3.3	3.1	0.2	5.7	126.6	126.1	0.5	0.4
64175	ETHANOL	169.8	183.2	-13.3	-7.8	2.55	2.75	-0.20	-7.8	0.0	0.0	0.0	0.0	167.3	180.4	-13.1	-7.8
1330207	XYLENE	201.4	209.3	-7.9	-3.9	3.02	3.14	-0.12	-3.9	2.9	2.7	0.2	5.7	195.5	203.5	-8.0	-4.1
108883	TOLUENE	319.8	301.6	18.2	5.7	4.80	4.52	0.27	5.7	21.9	20.7	1.2	5.7	293.1	276.4	16.7	5.7
67641	ACETONE	555.9	565.4	-9.5	-1.7	8.34	8.48	-0.14	-1.7	24.5	23.1	1.4	5.7	523.0	533.8	-10.8	-2.1

CAS	Substance Name	Created (MT)				Destroyed (MT)				Released to Water (municipal) (MT)				Off-Site Transfers (Incineration)			
		2013	2014	Reduction	%	2013	2014	Reduction	%	2013	2014	Reduction	%	2013	2014	Reduction	%
95636	1,2,4-TRIMETHYLBENZENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108101	METHYL ISOBUTYL KETONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78933	METHYL ETHYL KETONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100414	ETHYL BENZENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78831	ISOBUTYL ALCOHOL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71363	N-BUTANOL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67630	PROPAN-2-OL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
141786	ETHYL ACETATE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67561	METHANOL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64175	ETHANOL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1330207	XYLENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108883	TOLUENE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67641	ACETONE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments/Reasons for Change:
There are many solvents that saw an increase in usage from 2013 to 2014, this is due to business growth and the beginning influx of business from a plant closure elsewhere in Canada.
Reductions seen in 1.2.4 trimethylbenze are due to resin consolidation and raw material selection from the RD&I team, part of AkzoNobel's Toxics reduction plan.