

## Statement of Intent and Objective of the Plan for Toluene Diisocyanate-mixed isomers

Statement of Intent:	Toluene Diisocyanate is currently used by Valle Foam Ltd. in six processes. Valle Foam does not intend to reduce the use of this toxic substance at the facility because it is necessary to use this substance in the creation of polyurethane foam. However, this substance may be reduced due to increasing operational efficiencies. This facility does not create TDI, therefore this plan will not address reducing its creation.
Objective:	Valle Foam prides itself on technological innovation in order to produce quality products in an environmentally responsible manner. Valle Foam will strive to increase operational efficiencies at the facility, which may result in reducing the use of Toluene Diisocyanate at the facility. Further, this plan will determine the technical and economic feasibility of each option to determine which, if any, are viable for implementation at this time.
Target:	Valle Foam intends to reduce the use of toluene diisocyanate by 127.6 tonnes (8.4%) in two to 3 years, by increasing operational efficiencies.

Date of Plan Preparation: December 4, 2013

# 1 Facility Information

## 1.1 Facility Information

Facility Name:	Valle Foam Ltd.
NPRI Identification Number:	4428
Ontario Reg 127/01 Id Number:	6639
Two Digit NAICS Code:	32
Four Digit NAICS Code:	3261
Six Digit NAICS Code:	326150
Number of Full-Time Employees:	125
UTM Spatial Coordinates (NAD83):	17 T 604046 x-easting 4838421 y-northing 43.69152°N -79.70892°E

## 1.2 Owner of the Facility Information

Name:	Steve Knapp
Address:	4 West Drive, Brampton, ON L6T 2H7
Phone Number:	(905)453-8054
Fax Number:	(905)453-6348
E-mail:	<a href="mailto:sknapp@fybon.com">sknapp@fybon.com</a>

## 1.3 Operator of the Facility Information

Same as above.

## 1.4 Parent Company Information

No parent company

## 1.5 Toxic Substances for Which the Facility Must Prepare a Plan

Substance 1 (covered by a different plan)	n-Heptane
CAS Number	142-82-5
Substance 2 (covered by a different plan)	Acetone
CAS Number	67-64-1
Substance 3 (covered by this plan)	Toluene Diisocyanate mixed isomers
CAS Number	26471-62-5

## 1.6 Plan Contacts

### Public Contact

Name: Dale McNeill  
Position: Vice President  
Address: 4 West Drive, Brampton, ON L6T 2H7  
Phone Number: (905)453-8054  
Fax Number: (905)453-6348  
E-mail: [dmcneill@vallefoam.com](mailto:dmcneill@vallefoam.com)

#### 4. Facility Wide accounting Information

Facility level quantification data, determined as a result of the toxics substance accounting performed at Valle Foam for the year 2012 is outlined in the table below

Table Summary – facility level quantification for n-heptane	
Form of involvement	Amount of Substance (tonnes)
Enters the facility (use):	>1,000-10,000 tonnes
Created at the facility:	0 tonnes
Released (air) from the facility:	>0 - 1 tonnes
Released (land) from the facility:	0 tonnes
Released (water) from the facility:	0 tonnes
Disposed of (on-site) by the facility:	0 tonnes
Disposed of (off-site) by the facility:	0 tonnes
Transferred (for recycling) from the facility:	0 tonnes
Contained in product that leaves the facility:	0 tonnes
Destroyed at the facility:	>1,000-10,000 tonnes
Remained in storage at the facility:	>10-100 tonnes

## 6. Implementation of Options for Reduction of the Use of TDI at the Facility

To reduce the use of TDI at the facility, Valle Foam plans to implement Option 4, Option 6, and Option 10. Materials to implement Option 4 have been purchased during 2013 and are awaiting installation. Option 6 has been fully implemented during 2013. The process of scrap reduction, Option 10, is the mandate of Valle Foam and the process to achieving the goals has been started in 2013.

Option 1, 5, and 8 will not be implemented. The reduction in TDI used, consumed, and released to air is minimal as compared to Option 10.

### 6.1 Implementation Time Tables

Step	Description	Estimated Timelines
1	Purchase mechanicals	July 2013
2	Install mechanicals	January 2014
3	Test mechanicals	January 2014
4	Full implementation	February 2014

Type	Estimated Reductions in tonnes (per cent)	Anticipated Date(s) for Achieving Reductions
Use	0.97 (0.064%)	February 2014
Creation	0 (0%)	n/a
Consume	0.97 (0.064%)	February 2014
Release to Air	0 (0%)	n/a
Release to Water	0 (0%)	n/a
Release to Land	0 (0%)	n/a
Disposal Off-site	0 (0%)	n/a
Disposal on-site	0 (0%)	n/a
Transfer off-site for recycling	0 (0%)	n/a
Contained in Product	0 (0%)	n/a

Table xx Description and Timetable for Implementation of Steps for Option 6		
Step	Description	Estimated Timelines
1	Write/Modify work instructions	2013
2	Implement	2013

Table. Estimate of Reductions of TDI from the Implementation of Option 6		
Type	Estimated Reductions in tonnes (per cent)	Anticipated Date(s) for Achieving Reductions
Use	0.02 (0%)	2013
Creation	0 (0%)	n/a
Release to Air	0 (0%)	n/a
Release to Water	0 (0%)	n/a
Release to Land	0 (0%)	n/a
Disposal Off-site	0 (0%)	n/a
Disposal on-site	0 (0%)	n/a
Transfer off-site for recycling	0 (0%)	n/a
Contained in Product	0 (0%)	n/a

Step	Description	Estimated Timelines
1	Inform employees of project	1 <sup>st</sup> half 2013
2	Hire I/T, I/S manager	3 <sup>rd</sup> quarter 2013
3	Write custom coding	3 <sup>rd</sup> quarter 2013-4 <sup>th</sup> quarter 2014
4	Purchase ERP upgrades	3 <sup>rd</sup> quarter 2014
5	Implement shop floor data collection	3 <sup>rd</sup> quarter 2013 – 4 <sup>th</sup> quarter 2014
6	Train employees on data collection	3 <sup>rd</sup> quarter 2013-4 <sup>th</sup> quarter 2014
7	Utilize shop floor data to determine scrap rates	3 <sup>rd</sup> quarter 2014 – 2 <sup>nd</sup> quarter 2015
8	Change operations to reduce scrap rate	3 <sup>rd</sup> quarter 2014-4 <sup>th</sup> quarter 2015

Type	Estimated Reductions in tonnes (per cent)	Anticipated Date(s) for Achieving Reductions
Use	127.6 (8.4%)	4 <sup>th</sup> quarter 2015
Creation	0 (0%)	n/a
Consumed	127.6 (8.4%)	4 <sup>th</sup> quarter 2015
Release to Air	0.004 (7%)	4 <sup>th</sup> quarter 2015
Release to Water	0 (0%)	n/a
Release to Land	0 (0%)	n/a
Disposal Off-site	0 (0%)	n/a
Disposal on-site	0 (0%)	n/a
Transfer off-site for recycling	0 (0%)	n/a
Contained in Product	0 (0%)	n/a

## 8. Plan Certification for TDI (toluene diisocyanate mixed isomers)

As of December 31, 2013, I, Steve Knapp, certify that I have read the toxic substance reduction plan for the toxic substance 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.

[TDI]


  
\_\_\_\_\_  
Steve Knapp  
President, Valle Foam Ltd. (Highest Ranking  
Employee)

  
\_\_\_\_\_  
Date

As of December 31, 2013, I, Dave Hounsome certify that I am familiar with the processes at Valle Foam Ltd 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 31, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under the Act.

[TDI]

  
\_\_\_\_\_  
Dave Hounsome  
Toxic Substance Reduction Planner

  
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Date