# Annual Public TRA Summary Report- Plasti-Fab Kitchener Operational Comparison 2013-2014

# **Basic Facility Information**

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Name & CAS of Substance	VOC(Pentane)	NA-M16							
	Particulate Matter 2.5 (PM2.5)	NA-M10							
Facility Identification and Site Address									
Company Name	Plasti-Fab Ltd								
Facility Name	Kitchener Manufacturing Plant								
	Physical Address	Mailing Address							
Facility Address	1214 Union St. Kitchener, ON	PO Box 1120, Kitchener, ON							
	N2H 6K4	N2G 4G1							
Spatial Coordinates of Facility	Zone 17	UTM NAD83							
	Easting: 541955								
	Northing: 4813389								
Number of Employees	52								
NPRI ID	6891								
Ontario MOE ID number	7282								
	Parent Company (PC) Information								
PC Name & Address	PFB Corporation	Publically traded - TSX							
Primary North American Industria	326140 Polystyrene foam								
(NAICS)	product manufacturing								
Company Contact Information									
Facility Public Contact and	Tim Dillow	Manufacturing Manager							
Highest Ranking Employee	tdillow@plastifab.com	Phone: 519-571-1650 ext 380							
	John Brazzale, Technical Centre	Box 88 802 McCool St.							
Facility Technical Contact	Manager	Crossfield, AB, T0M0S0							
	jbrazzale@plastifab.com	Phone: 403-946-6238							

# STATEMENT OF INTENT

At PFB Corporation (parent company of Plasti-Fab Ltd.), we are concerned with the future of the planet and the effects that modern life styles may be having on climate change. PFB Corporation is committed to conducting our operations responsibly, mindful of the economic, environmental and social impacts of our operations. We have always placed environmental protection at the highest level of importance in our products, our processes and our practices. It is our intent to continue reducing our impacts on the environment that occur as a result of manufacturing energy saving insulation solutions for our customers.

Plasti-Fab Kitchener intends to implement the reduction options identified for VOC (Pentane) to reduce the overall usage, emissions and product content by 2016. The creation of PM2.5 is a result of a specific

operation within the process as well as a product of combustion, at this time there is no intent to reduce this substance due to the lack of technically feasible options.

#### **TOXIC SUBSTANCES**

Two (2) substances were required to be tracked, quantified and reported for under TRA – Phase 2 requirements for the 2012 operational year. These substances are VOC (Pentane) and Particulate Matter 2.5. Reporting completed to the Ministry of Environment under O.Reg. 455/09 through SWIM.

### **VOC Summary**

VOC (Pentane) is contained in the resin material used to produce EPS foam insulation products for residential and commercial construction market and for consumers.

A plan has been developed which would involve purchase of new equipment which would facilitate the transition to alternate raw material (EPS Resin) which contains less VOC (Pentane) and therefore will reduce overall emissions of VOC (Pentane).

The capital investment was planned for 2014 however, due to decreased market demand and decreased sales the capital project was delayed. The project is scheduled to recommence in 2015 and VOC reduction savings should be realized in 2016.

The estimated reduction of VOC (Pentane) from the installation of the new equipment and transition to the lower VOC (Pentane) resin is 9.1% or 11.5 tonnes.

#### Particulate Matter 2.5 Summary

Particulate matter (PM2.5) is created by the combustion of natural gas for process steam production, general heating and during the foam cutting process. A strategy has been developed to improve the quality of emission data for this substance. There is no reduction strategies planned for this substance.

#### TRACKING AND QUANTIFICATIONS

The method used to calculate the TRA quantifications was a mass balance approach based on purchase records and emission estimates were based on published AP-42 emission factors. This is the best available method as there is no equipment specific monitoring data available.

Table 1 is a summary of reported TRA quantities for the 2014 operational year. When compared to the last reported values there is no significant change in the use, creation or contained in product for either substance (VOC (Pentane) or PM2.5). Any change identified is directly related to changes in production levels.

In the 2014 operational year, there were no out of the ordinary incidents or significant process changes at the facility.

Table 1: Comparison of Quantities Reported														
CAS	Substance	Description of Processes that Use or Create Substance	Reporting under NPRI Part	NPRI Threshold (tonnes)	2014 Used (tonnes)	Used 2013 - Last Reported Value	% Change	2014 Created (tonnes)	Created 2013 - Last Reported Value	% Change	2014 Contained In Product (tonnes)	Contained in Product 2013 - Last Reported Value	% Change	Reason for Changes
NA-M16	VOC (Pentane)	Used as a formulation component	Part 1	10 (MPO)	>100 -1000	>100-1000	0%	0.00	0.00	0%	>10-100	>10-100	0%	No significant change
NA-M10	PM2.5 - Particulate Matter	Foam Cutting and Supporting Operations	Part 4	0.3 (Release)	0.00	0.00	0%	>0-10	>0-10	-1%	0.00	0.00	0%	No significant change

### **COMPARISION OF TRACKING AND QUANTIFICATION**

No changes were made in the quantification and tracking methodology from 2013 to 2014.

# **DESCRIPTION OF STEPS TAKEN TO ACHIEVE OBJECTIVE AND ASSESS EFFECTIVNESS**

There was no technologically feasible reduction strategy objectives identified for PM2.5 within the facility and as such there was no economic feasibility study completed for this substance.

The reduction strategy identified for the VOC (Pentane) substance requires an equipment modification that is scheduled for the 2015-2016 operational year.

There are no objectives to track or reduction targets to evaluate for the 2014 operational year.

Table 2 provides a summary of the facility TRA changes and updates which took place in 2014.

Table 2:	Changes in Quantifica	ations, Quantities and F	Plan Updates						
CAS	Substance	Quantification Method(s) Used	Change in Quantification Method Used	Rationale for Using Selected Method(s)	Incidents out of the Ordinary	Significant Process Change	Objectives, Descriptions, Targets	Actions	Amendments
NA-M16	VOC (Pentane)	Mass Balance/Emission Factors	No change	No site specific monitoring data available	No	No	The reduction option identified requires equipment modifications and are scheduled for the 2015-2016 operational year.	None	None
NA-M10	PM2.5 - Particulate Matter	Mass Balance/Emission Factors	No change	No site specific monitoring data available	No	No	No reduction options were identified to be both technically and economically feasible. Therefore, no options were chosen for implementation.	None	None

# CERTIFICATION OF HIGHEST RANKING EMPLOYEE

As of 20 December 2013, I, Michael Sarazin, 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.

> Particulate Matter - PM2.5 NA-M10

Michael Sarazin,

Manufacturing Manager

Plasti-Fab Ltd - Kitchener, ON

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VOC (Pentane)

NA-M16

Michael Sarazin,

Manufacturing Manager

Plasti-Fab Ltd - Kitchener, ON