

DATE: January 23, 2014

TO: Tania Steele

FROM: Eshetu Beshada, Ph.D., P.Eng.  
Environmental Engineer  
Mines and Wastewater Section  
160 - 123 Main Street  
Winnipeg, Mb R3C 1A5  
Ph: (204) 945-7023

SUBJECT: **Plasti-Fab Ltd. – Plastic Foam Manufacturing – Information for Public Registries**

Tania,

Please find attached the additional Information provided by the proponent and the TAC correspondence related to Plasti-Fab Ltd – foam manufacturing Facility file (5680.00) for distribution to the public registries. The document included is:

- January 23, 2014 memo from Muntaseer Ibn Azkar, 1 page
- January 13, 2014 letter from John Brazzale, 1 page

2 page total

Thank you.

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Eshetu Beshada, Ph.D., P. Eng.

DATE: 23 January 2014

TO: Eshetu Beshada  
Environmental Approvals  
Conservation and Water  
Stewardship  
160-123 Main Street, Winnipeg

FROM: Muntaseer Ibn Azkar  
Air Quality–Environmental Programs  
& Strategies  
Conservation and Water Stewardship  
1007 Century Street, Winnipeg

**SUBJECT: Comment on Plasti-Fab response-Plastic Foam Mfg. Facility (File 5680.00)**

Air Quality Section has the following comments on the response received from Plasti-Fab Ltd.:

- Regarding the measurement of ambient styrene concentration in the plant's surrounding area, they may use what Environment Canada (EC) and the Ontario Ministry of Environment recommend, which is EPA Compendium Method TO-14 or its recent version. Also, Air Quality Section suggests that the proponent should update their indoor air quality tests associated with styrene as this is more than ten years old.
- Considering the costs required to comply with the Canadian Council of Ministers of the Environment's (CCME) 1997 guideline regarding reduction of VOC emissions from the plastics processing industry, Air Quality Section suggests that the proponent submit an emission management plan to comply with the 1997 guideline which may include both short term and long term plans.



Eshetu Beshada  
Environmental Approvals  
Conservation and Water  
Stewardship  
160-123 Main Street, Winnipeg

January 13, 2014

**Re: Plasti-Fab Ltd. - Plastic Foam Mfg. Facility (File 5680.00)**

**Dear Mr. Beshada,**

This letter is in response to two issues raised in the letter dated November 24, 2013 from the Air Quality Section Manitoba Ministry of Conservation and Water Stewardship. To address item #1, Plasti-Fab has retained the services of AMEC Earth and Environmental to prepare a plan to address the question raised regarding 24 hour average standard for styrene in our plant's surrounding area. AMEC representatives may be contacting you to clarify the requirements before preparing their proposal. Plasti-Fab will provide MB Conservation with the plan details and timeline for your review before we proceed.

In regards to CCME 1997 Guideline, Reduction of VOC emissions from the plastics industry (CCME PN 1276, July 1997), Plasti-Fab would require additional time and capital investment in order to comply with the requirement of using only EPS resin with <5.0% VOC content. Expandable polystyrene foam manufacturing process involves an initial expansion step using equipment known as an "expander". The expansion step determines the density of the foam to be produced. Density is the means for differentiating the various product types we manufacture. Plasti-Fab markets products at several densities in the range 9.5 kg/m<sup>3</sup> to 40 kg/m<sup>3</sup>. The Winnipeg facility uses an older type of expander which operates at atmospheric pressure. This particular continuous expander is not capable of achieving density below 20 kg/m<sup>3</sup> unless regular VOC (>6.5%) containing resin is used. Above 20 kg/m<sup>3</sup> Plasti-Fab can utilize the low VOC (<5.0%) resin and this is already done, in fact 40% of the resin consumed in 2013 was low VOC. In order to process all foam product types using low VOC resin the facility would need to purchase and install a pressurized batch expander. The estimated cost of this capital project is in the range of \$550,000 to 750,000 and would take approximately one year to complete. The cost and timeline may be impacted by the engineering review if the required space is not available in the building. Plasti-Fab requests the necessary time to complete the engineering review, purchasing, installation and commissioning process.

From the desk of...

**John Brazzale**  
Technical Centre Manager  
**Plasti-Fab Ltd.**  
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Crossfield, Alberta T0M0S0

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