

One Longfellow Place, P. O. Box 400, Ludington, Michigan 4943

3/8/14

Mr. Robert Dickman,

DEQ

120 West Chapin Street

Cadillac, MI 49601-2158

MAR 1 3 2014

MACES D MAERS D CC:

Dear Mr. Dickman,

I am in receipt of your Violation Notice letter dated February 24<sup>th</sup>. In this letter it states that we have violated the conditions for our operating permit (PTI 245 -09B), specifically in relation to EU-EXTRUSION 2.

As stated in our telephone call, we have not completed stack tests yet (EU EXTRSION 2 and EU DUST COLLECTOR) on our new line and I confirm that we are operating in excess of 180 days after the initial startup.

I believe there are some strong mitigating circumstances for this but before I explain those circumstances, I would like to apologize for my delays in notifying the DEC about these circumstances.

Please allow me to explain the circumstances.

- 1. We have run the line an average of less than 1 day per month since we first processed material in March of 2013. The company is only making one product on the line at this time. This has not given us the run time to get the experience we need to run the line at the permit conditions claimed. (To date the maximum rate we have run is 1500 lbs/hr. and the permit conditions are 1800 lbs/hr.
- 2. We have not been able to add more than 5% of total blowing agents (percentage of solid feeds) since we started the line. Our emission limit calculations were based on 6%. Because of the lack of run time, it took time to be able to determine the cause of this issue. In January, 2014, the screw from the primary extruder for line 2 was removed, physically measured, and reinstalled and we have continued to make the one product (9 inch rods) and have completed 3 billet trials of 12 hours per trial. The screw design was then analyzed by a recognized industry leader in screw design. It was determined that the screw design was inadequate for our application. Since then a new design has been made. A new screw is on order and is expected to arrive in mid-April. The old screw will be replaced immediately. The goal is to run the line up to the 1800lbs/hr. and increase the blowing agent addition to 6% of solids feed. It is also the goal to

make billets at the permit conditions as this represents the highest emission rates. Once this is accomplished, we will schedule stack tests at these conditions.

A couple of additional comments.

- 1. I will go ahead and engage a stack testing company so that we can get the stack testing protocols determined for your review prior to the equipment installation. This will facilitate stack testing at the earliest opportunity after permit conditions have been established.
- 2. We have documented the blowing agent usage and calculated emissions since we started up the line as detailed in the PTI conditions. In 2013 our total line 2 usage of VOC's was 19,886 lbs and total usage of 152a was 20,319lbs. This means our total blowing agent usage on the line was less than the permitted emission limits of 68.3 tons per year for VOC's and 55.8 tons per year for difluoroethane. It is not possible that we have exceeded the emission limits of the permit for line 2.

FloraCraft Corporation is committed to meeting our environmental obligations in the State of Michigan as stated in our permit to install PTI245-09B.

Again we apologize for our inadequate communications. However, I hope that you find our circumstances for not meeting all the permit requirements reasonable and that our actions, as detailed above, are acceptable to the DEQ.

Sincerely,

Trevor Wardle

Vice President - Foam Division

FloraCraft Corporation,

**Ludington Operations** 

Cc Joseph Sweeney, Corporate Counsel