

CWC TEXTRON 1085 W. Sherman Blvd., Muskegon, MI 49441

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July 10, 2018

Mr. Eric Grinstern
Senior Environmental Quality Analyst
Air Quality Division
Michigan Department of Environmental Quality
State Office Building
350 Ottawa NW – Unit 10
Grand Rapids, MI 49503



Dear Mr. Grinstern:

Regarding: NOV Excess Opacity Letter dated June 21, 2018

CWC Textron located at 1085 West Sherman Blvd, Muskegon, MI 49441 SRN: B1909 is replying to your investigation and letter of violation dated June 21, 2018.

The emission system violation is for our cupola #1 which is listed in the air permit as the west cupola has emissions controlled by two 5 million BTU direct flame afterburners, a water spray wet cap, a high energy Venturi water scrubber and a high velocity water mist eliminator fitted with the highest efficiency rated mesh-type media at 99+% @ 1 µm.

The violation occurred at 10 am Thursday June 14, 2018. The violation continued intermittently throughout the day of June 14 and June 15, 2018.

All emission control units were fully operational and functioning as required at established parameters before June 14 and on June 14. Both afterburners were running at full flame, stack temperatures averaged above 1200 F, the wet cap was visibly checked and had full water flow, and the high velocity mist eliminator was working properly with a pressure of 1.2 psi. The high energy Venturi scrubber unit was showing correct pressure readings between 39 -45 psi (permit limit is 30-50 psi) and a water flow pressure of 62 psi (permit limit is 46-80 psi).

During the night of June 14 and into the early morning of June 15 we tried to improve our stack emission by increasing our average stack temperatures by 183 °F and checked all systems again including fan damper louver operation, stroke of the Venturi cone and the pond water return line. We were unsuccessful in finding any faulty equipment and therefore we were not able to fully eliminate the intermittent excessive opacity on June 15.

On Friday June 15 at our 10 am casting anneal we opened the bolted door on the high pressure Venturi scrubber (which is a sealed steel emission control unit and a confined space) to check on the water spray cone in the Venturi, we could hear the water running but there was no water at the cone. See picture 1. This was the first indication that this could be the failed portion of the emission control system.

On Saturday June 16, at 8 am the cupola had sufficiently cooled down and was free of CO gases that we could safely enter the emission system and it was during this inspection we discovered that the 6-inch water line supplying the Venturi had a 4-inch by 12-inch hole. An immediate patch was welded over the hole and full water flow was restored to the high velocity Venturi scrubber as of 10 am June 16, 2018. Opacity readings immediately improved back to our normal levels below 5%. See attached pictures page 2 of repair and restored water flow to the Venturi.

Further improvement just completed during our 2018 summer shutdown (July 1-8) when we replaced the patched 6-inch water supply pipe with a new section of stainless steel pipe (to prevent future rusting issues and a similar failure) we cleaned all the spray nozzles on every device and had the entire length of 250 feet of the 6-inch water supply pipe to the wet cap power blasted. We also added two new inspection doors in the wet cap.

Enhancements planned for the next 6 months include installing a flow control valve to balance the water flows, adding GPM flow meters on each of the 6-inch water supply lines (1 line goes to the wet cap and 1 line goes to the Venturi), and reviewing the possibility of installing a clear visual observation port on the side of the Venturi.

CWC Textron has and always will strive to be an environmentally responsible company (A Michigan C3 Designated facility) and looks forward to resolving this emissions issue with the MDEQ. Please contact me anytime at 231-739-2794 to discuss this issue or for any clarifications about information contained within this response letter.

Sincerely,



Robert R. Meacham – CSP, CHMM
Manager of EHS

CC. Ms. Jenine Camilleri,
Enforcement Unit Supervisor
Michigan Department of Environmental Quality
Air Quality Division
P.O. Box 30260
Lansing, MI 48909-7760

Attached: Picture pages 1 - 2