



Ford Motor Company

Ford Flat Rock Assembly Plant  
One International Drive  
Flat Rock, MI 48134

July 9, 2014

Mr. Jonathan Lamb  
Senior Environmental Quality Analyst, Air Quality Division  
Michigan Department of Environmental Quality (MDEQ)  
3058 West Grand Boulevard Suite 2-300  
Detroit, Michigan 48202

Subject: Flat Rock Assembly Plant (SRN N0929)  
Renewable Operating Permit - MI-ROP-N0929-2011  
Notice of Violation – June 19, 2014

This letter is in response to the Notice of Violation dated June 19, 2014 for failure to meet the required minimum VOC destruction efficiency of 95% and/or maximum VOC outlet concentration of 5 ppm requirements, as allowed per Renewable Operating Permit (ROP), MI-ROP-N0929-2011a.

As you are aware, Flat Rock Assembly has been working cooperatively with the Air Quality Division District Office to implement numerous items to improve the performance the VOC abatement equipment. These actions include:

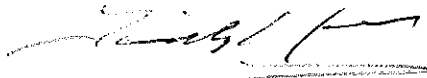
- Several RCO valve inspections and adjustments during 2011 and 2012.
- Replacement of all RCO valves in August 2013.
- A review to confirm the recently replaced RCO valves were correctly installed and operating as designed was performed in November 2013.
- A temperature survey of RCO C was conducted in January 2014. The survey was used to:
  - confirm minimum required catalyst bed temperatures were being maintained
  - a temperature gradient from West to East in catalyst beds was confirmed as suspected.
  - The abatement equipment outlet concentration was tested while increasing the RCO operating temperatures
- In March/ April 2014 the RCO burner firing controls were adjusted to produce more uniform heat input.
- A mild acid catalyst wash was completed in April 2014 to remove contaminants and restore catalyst activity.

These actions have successfully improved the performance of the VOC abatement equipment from an outlet concentration of 9 ppm in October 2013 to 7 ppm in May 2014.

During the latest round of testing a significant amount of methane (~45 – 55 ppmv CH<sub>4</sub>) was observed in the abatement equipment exhaust. Although methane is removed as part of the test method, it indicates inefficiencies in the abatement equipment and may contribute to analytical variability. Tuning of the RCO burners will be completed to improve the burner efficiency prior to conducting additional outlet concentration testing with elevated RCO combustion chamber temperatures. The testing will be used to determine if elevated RCO temperatures will improve the destruction efficiency and return the plant to compliance. This work is expected to be completed in August 2014. Notifications will be made to the District office when plans are finalized to allow the District to witness any testing which is conducted.

Please contact Danielle Fenbert of the Environmental Quality Office at (313) 337-8411 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Timothy Young', with a horizontal line drawn underneath it.

Timothy Young  
Plant Manager

cc: Dave Drinan, Ford Environmental Quality Office  
Terence Filipiak, Ford Flat Rock Assembly Plant  
Lynn Fiedler, Michigan Department of Environmental Quality  
Thomas Hess, Michigan Department of Environmental Quality  
Wilhemina McLemore, Michigan Department of Environmental Quality  
Teresa Seidel, Michigan Department of Environmental Quality