July 1, 2016

FedEx: 8065 1238 8953

GM

Ms. Joyce Zhu Michigan Department of Environmental Quality Air Quality Division 27700 Donald Court Warren, Michigan 48092-2793

**RE:** Response to DEQ Violation Notice

Pontiac North Campus/Permit Number MI-ROP-B4032-2014b

Dear Ms. Zhu:

In response to the Violation Notice dated June 15, 2016 regarding low RTO temperatures, General Motors LLC North Campus, located in the City of Pontiac, submits this summary of the actions taken to correct the violation and steps taken to prevent a reoccurrence.

## **DEQ Rule/Permit Condition Violated**

Per the Michigan Department of Environmental Quality (DEQ) Violation Notice, the DEQ observed the following as a rule/permit condition violated:

Process Description		Rule/Permit Condition Violated	Comments
91 engine test cells from which	1.	ROP No. MI-ROP-B4032-	During December 1 through
the emissions are controlled by		2014b, Table FG-	December 9, the thermal
4 RTOs		TESTCELLS, Condition IV	oxidizer temperatures of RTO
	2.	ROP No. MI-ROP-B4032-	#4 were kept below the newly
		2014b, Table FG-	set-point levels established
		TESTCELLMACT,	during the destruction efficiency
	]	Condition III.1	(DE) test of October 2015.

## **Reason for Deviation and Corrective Actions**

The facility conducted DE testing on October 13-14, 2015, resulting in new temperature set point levels. After the DE testing was completed, the facility did not increase the minimum set point immediately as previously reviewed and discussed. Corrective action included email communications and a formal meeting with the maintenance team. In addition, temperature set-point levels were adjusted for the RTOs on December 3, 2015. However, on December 7, 2015 it was discovered that the changes did not save to the RTO programming. The facility performed troubleshooting on the system and corrected the problem on December 10, 2015. To ensure programming changes are saved properly, the facility developed a task instruction sheet detailing all steps needed to ensure that RTO temperature programming changes are saved.

To prevent a reoccurrence of operation below temperature set-point levels, the site implemented a response plan to address low temperature fault alarms. Continuous manual monitoring was initially instituted to monitor RTO temperatures, followed by automated engineering controls. If the RTO temperatures should begin to fall below the required set-point levels established, the affected RTO is placed in standby mode. The response plan is then executed to troubleshoot any problems and prevent a reoccurrence of low 3-hour RTO temperatures.





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If you have any question, please contact either Lauren Smith at 248.836.8298 or Lisa Parks at 248.410.2591.

Sincerely,

Dave Mooty

Senior Manager, Engineering Propulsion Systems

CC: Rodney Black, GM Dave Mooty, GM Lauren Smith, GM Lisa Parks, GM Stacey Helton, GM