



HESS Department



**Marathon Petroleum Company LP**

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**VIA FEDERAL EXPRESS**

March 26, 2019

Mr. Jorge Acevedo  
Michigan Department of Environmental Quality  
Air Quality Division  
3058 W. Grand Boulevard  
Suite 2300  
Detroit, MI 48202

**RE: Follow up Response to 12/20/2018 Violation Notice Regarding Excess Opacity from the FCCU;  
Marathon Petroleum Company LP, Michigan Refining Division – SRN A9831**

Dear Mr. Acevedo:

This letter is intended to supplement Marathon Petroleum Company LP, Michigan Refining Division's (MPC) response to the Violation Notice (VN) issued by the Michigan Department of Environmental Quality to MPC on December 20, 2018. MPC's initial written response was submitted on January 18, 2019; however, subsequent conversations with Jorge Acevedo indicated MDEQ would like to be informed of options MPC has identified to minimize opacity from the refinery's Fluid Catalytic Cracking Unit (FCCU) during periods of startup, shutdown, and malfunction.

The opacity exceedances alleged in the VN were primarily related to issues with the Gas Oil Hydrotreating unit (GOHT) during the startup that followed the refinery-wide maintenance outage in late 2018. Delays in starting up the GOHT delayed production of feed for the FCCU. The GOHT removes sulfur from the gas oil processed in the FCCU. The delay in generating feed for the FCCU resulted in the FCCU being put in internal circulation for an extended period. When both the GOHT and FCCU have been shut down, it is typical to stagger startup of these units to allow the GOHT to generate feed for the FCCU. However, the required maintenance on the FCCU reactor during the 2018 outage led the refinery to initiate an early startup of the FCCU to ensure proper catalyst circulation could be achieved before introducing feed into the unit.

The unexpected delay in the startup of the GOHT resulted in a lack of available feed for the FCCU and required the FCCU to remain on internal circulation much longer than expected. For safety reasons, the FCCU regenerator electrostatic precipitators (ESPs) cannot be operated unless the unit is fully operational. Because the ESPs were not operating, the ESPs were not able to capture catalyst fines from the FCCU regenerator overhead. While during this period the FCCU was operated in accordance with alternative work practices in 40 CFR Part 63, Subpart UUU intended to minimize particulate matter emissions during periods of startup, shutdown, or hot standby, the inability to operate the ESPs ultimately led to the periods of excess opacity alleged in the VN.

In reviewing opportunities to minimize opacity, MPC has identified the following measures that may be implemented either independently or in combination:

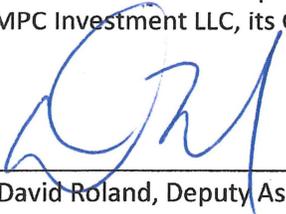
1. Establish a minimum inventory of sweet gas oil to be available prior to the FCCU startup. This will be done on a case-by-case basis, rather than setting a firm minimum volume, as each unit shutdown has the potential for creating unique circumstances. Having this minimum inventory would create a buffer to allow the FCCU and the ESPs to startup, even if there are unforeseen delays with the GOHT.
2. Delay FCCU startup until GOHT is processing sour gas oil and sending sweet gas oil to storage. Like the first, this measure would ensure that the FCCU and ESPs would be able to operate normally upon startup by ensuring available feed for the FCCU.
3. If neither measure set forth above is feasible based upon the circumstances of any startup, shutdown, or malfunction scenario, MPC will attempt to minimize the duration the FCCU would be allowed to run on internal circulation if sufficient feed is not available.

MPC's intent is to prevent excess emissions of opacity to the extent possible while operating the FCCU and ESPs in a safe manner and maintaining flexibility necessary to react to unique circumstances presented by startup, shutdown, and malfunction scenarios. The measures identified above will help minimize the potential for and duration of opacity events under circumstances similar to those identified in the VN and MPC's response.

MPC appreciates this opportunity to supplement our response to the VN. If you would like further information, please do not hesitate to contact Honor Sheard at 313-297-6248.

Sincerely,

Marathon Petroleum Company LP  
By: MPC Investment LLC, its General Partner



Mr. David Roland, Deputy Assistant Secretary

cc: Mr. Paul Max, City of Detroit, BSEED  
Ms. Mary Ann Dolehanty, DEQ  
Dr. Eduardo Olaguer, DEQ  
Mr. Christopher Ethridge, DEQ  
Ms. Jenine Camilleri, DEQ  
Ms. Wilhemina McLemore, DEQ  
Mr. Jeff Korniski, DEQ  
Mr. Jorge Acevedo, DEQ