Air Monitoring Report

Date: February 26, 2019

To: BSEED, MDEQ, EPA

From: Honor Sheard

RE: Start-Up Air Monitoring Report – Final Report

Background

On February 17, 2019 Marathon Petroleum Company LP (MPC) returned the Coker flare to service after it had been out of service for maintenance. The facility is located at 1300 S. Fort Street, Detroit, MI 48217. This document provides details of the air monitoring that occurred in the surrounding downwind community for the 48 hours after the Coker flare was returned to service. Attachment A contains a map of the area with details on where sampling occurred. Attachment **B** is the Air Monitoring Sampling Plan version 2 that was approved on 2/4/19.

Community Ambient Air Sampling

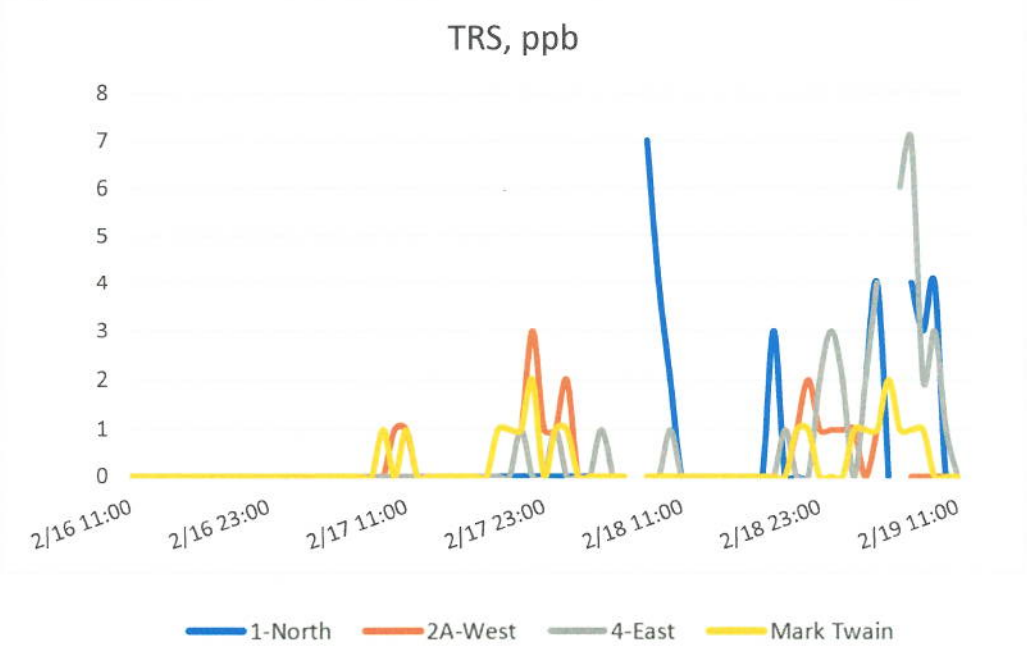
MPC's Air Monitoring Team conducted air monitoring in downwind communities according to Attachment B from February 17, 2019 11:00 am through February 19, 2019 11:00 am. Ambient air readings were conducted with Ultra Raes. Periodic benzene readings were collected with Ultra Rae 3000s. All readings for LEL, VOC, H2S, Benzene were 0.

Air Monitoring Logs can be found in Attachment C. Wind rose information for each day of community ambient air monitoring can be found in Attachment D. The wind rose indicates what direction the wind was coming from. This was developed using the refinery's meteorological station from a Safer System model.

PAMS Data

MPC maintains four perimeter air monitors (PAMS) around the refinery. The PAMS collect data continuously and report hourly averages for particulate matter, Total Reduced Sulfur (TRS), CO and SO2. Graph 1 shows the TRS concentrations from 2/17/19-2/19/19. The TRS analyzer measures hydrogen sulfide, methyl mercaptan, dimethyl sulfide and methyl-disulfide. Data from all four PAMS stations from 2/17/19-2/19/19 are found in Attachment E. *The data contained here are raw data that have not yet undergone QA-Review. The data presented are consequently not yet verified and subject to change.*

Graph 1: PAMS Station TRS Data



OVM Badges

Organic Vapor Monitors (OVM) Badges were placed in six locations throughout the community. Those locations include Ormond & Heidt; Fort & Dearborn; Mellon & Schafer; Pleasant & Lidesdale; Outer Drive and I-75; Annabelle and Schafer. They were analyzed for n-hexane, benzene, toluene, Total Organic Vapors (as n-Hexane) and xylene. All samples were below the lab's detection level. Sample results can be found in Attachment F.

Conclusion

Based on extensive air monitoring results, as provided in this document, MPC concludes that there were no chemicals at harmful levels within the ambient air downwind of our facility from 2/17/19-2/19/19. PAMS data was all within historical values.

Attachment A: Map

Attachment B: Air Monitoring Plan version 2

Attachment C: Air Monitoring Logs

Attachment D: Wind Rose Data

Attachment E: PAMS Data from 2/17/19 through 2/19/19

Attachment F: OVM Badge Summary and Analysis