

## **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

## REGION 6 1201 ELM STREET, SUITE 500 DALLAS, TEXAS 75270

September 7, 2022

Ms. Kelly Hedges Environmental Supervisor Marathon Petroleum Company LP P. O. Box AC Garyville, LA 70051

Sent via email: kmhedges@marathonpetroleum.com

Re: Revised Alternative Monitoring Plan (AMP) – New Source Performance Standards (NSPS) Subpart Ja – Span Gas Concentration and High Range Validation Standards for Hydrogen Sulfide (H<sub>2</sub>S) Continuous Emission Monitoring System (CEMS) at Marathon Petroleum Company LP (MPC) – Garyville Refinery, Garyville, Louisiana.

Dear Ms. Hedges:

This letter is in response to your Alternative Monitoring Plan (AMP) request dated February 18, 2022, regarding the concentration of span gas used to check daily calibration drift, and validation standards used during continuous emission monitoring system (CEMS) audits under NSPS Subpart Ja. Based upon the information provided, the United States Environmental Protection Agency (EPA) conditionally approves your request, as explained below.

Under NSPS Subpart Ja, the CEMS for South Flare Stack 59-1401 (EQT 0160), North Flare Stack 59-1451 (EQT 0162), North Ground Flare 259-1401 (EQT 0282) and South Ground Flare 259-1402 (EQT 0284) at Garyville Refinery are subject to the compliance requirements of 40 C.F.R. § 60.107a(e), sulfur monitoring for assessing root cause analysis thresholds for affected flares. According to 40 C.F.R. § 60.13(d)(1), CEMS calibration drift checks must be conducted daily for the zero level (or a low value of 0-20 percent [%] of span value) and span range (50-100 % of span value). Additionally, quarterly CEMS cylinder gas audits (CGA) and relative accuracy test audits (RATA) must be conducted which require the analyzer to be challenged at low (20-30% of span value) and high (50-60% of span value) level concentrations.

MPC has installed ThermoFisher Scientific SOLA iQ sulfur analyzers on each of the four flares to continuously analyze and record hydrogen sulfide (H2S) concentration. ThermoFisher Scientific has certified the linearity of the SOLA iQ analyzer over the range of sulfur concentrations of 0-60%. Therefore, to eliminate significant safety concerns associated with the handling, transportation, and storage of materials containing extremely high concentrations of H<sub>2</sub>S, MPC proposes using reduced calibration gas concentrations for the daily span check and the validation standard for CGAs and RATAs, while following all other monitoring requirements.

Based on the process and analyzer information submitted, EPA conditionally approves your request to revise the concentrations of the calibration gas and validation standards on the CEMS for the four flares,

Marathon Petroleum Company LP Garyville Refinery – NSPS Ja Flare CEMS validation

provided that all other requirements of the monitoring procedures of NSPS Subpart Ja for H<sub>2</sub>S and total reduced sulfur (TRS) are followed.

The revised reduced H<sub>2</sub>S calibration gas concentrations are approved as follows:

Daily Calibration	Zero Check: 0 - 1400 ppmv Span: 3500 - 4900 ppmv
Quarterly CGAs and RATA	Zero Check: 0 Low Span: 1400 - 2100 ppmv High Span: 3500 - 4200 ppmv

Additionally, MPC shall conduct linearity analysis on the ThermoFisher Scientific SOLA iQ analyzers once every three years to demonstrate the detectors' linearity across the entire range of expected sulfur concentrations. The analysis must include four test gases in the following nominal ranges: zero, 5-20%, 40-60%, and 80-100% of maximum anticipated sulfur concentration. Target acceptance criteria would be results within 5% of span that is based on maximum anticipated sulfur concentration. A report of the linearity analysis shall be submitted to EPA Region 6 and the Louisiana Department of Environmental Quality (LDEQ).

This conditional approval is site specific for the South Flare Stack 59-1401 (EQT 0160), North Flare Stack 59-1451 (EQT 0162), North Ground Flare 259-1401 (EQT 0282) and South Ground Flare 259-1402 (EQT 0284) at Garyville Refinery. If refinery operations change such that the sulfur content or H<sub>2</sub>S concentration range of the fuel gas vent stream to the four flares change from representations made in your request, then MPC must document the change(s) and submit a new AMP request. This approval should also be incorporated into the facility's New Source Review (NSR) and Title V permits for federal enforceability. If you have any questions or concerns about this conditional approval, please contact Prince Nfodzo of my staff at (214) 665-7491 or Nfodzo.prince@epa.gov.

Sincerely,

STEVEN THOMPSON Digitally signed by STEVEN THOMPSON
Date: 2022.09.07 14:48:33

Steve Thompson Chief, Air Enforcement Branch

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