DTE VANTAGE

December 3, 2024

Katie Koster Air Quality Division, EGLE Cadillac Place 3058 West Grand Boulevard Detroit, MI 48202

Re: Response to November 12, 2024 Violation Notice EES Coke Battery, L.L.C., River Rouge, Michigan Renewable Operating Permit No. 199600132 (SRN: P0408)

Dear Ms. Koster:

EES Coke Battery, L.L.C. (EES Coke) is in receipt of a Violation Notice (VN) issued by the Michigan Department of Environment, Great Lakes and Energy (EGLE), Air Quality Division (AQD). The VN, dated November 12, 2024, cites EES Coke for exceeding visible emissions from each of the bleeder flares over five minutes during any two consecutive hours and exceeding 20% opacity from each of the bleeder flares per 6-minute average except for one 6-minute average per hour of not more than 27%.

The bleeder flares only operate as an emergency measure when there is a potential for a dangerous build-up of gas and pressure at the coke battery. These events are not routine and are needed to protect workers, neighbors, and the environment. EES Coke has taken measures to reduce the frequency and duration of bleeder events through system improvements and increased maintenance, but bleeding over pressurized gas will always be a crucial and necessary step to the safe operation of the facility.

Below in Table 1 the cited violations are summarized. None of these violations are ongoing.

Date of Violation	Duration of Violation*	Cause and Corrective Actions
February 3, 2023	9 minutes, 42 seconds	Boilers 2-1 and 2-3 tripped due to air pressure loss. The air line failed on the compressor that serves instrument controls in Boiler House #2 (BH2). Typically plant air is available as a backup but was unavailable on this day due to maintenance activities being performed on the plant air system. Nitrogen was available by manual control to get the boilers back in service. During this time of troubleshooting, steam was not being generated by the boilers. The exhauster in the By-Products Plant was not able to operate and the gas pressure in EES Coke's collector main increased and caused the pressure relief valves to vent the built-up coke oven gas to the emergency bleeders. All bleeds were ignited. Communication about critical maintenance activities has been improved. The BH2 air line hose was repaired 2/3/2023.
March 21, 2023	16 minutes, 15 seconds	The West Exhauster tripped in the By-Products plant due to a low oil pressure alarm. While trying to switch to the East Exhauster to maintain suction, the bolt

		that connects the limit torque shaft to the outlet valve for the West Exhauster snapped and the valve could not close. The West Exhauster was run locally to override the alarm until maintenance replaced the bolt. During the time of the attempted exhauster switch-over, there was a momentary loss of suction which caused pressure in the collector main to increase. The built-up coke oven gas vented to the emergency bleeders. All bleeds were ignited. The electrical oil pump was repaired 3/22/2023.
March 28, 2023	10 minutes, 53 seconds	The Exhauster drains were clogged with tar and liquor causing a loss of suction. This caused pressure in the collector main to increase and the built up coke oven gas was vented to the emergency bleeders. All bleeds ignited. The drains for the exhauster were steamed out and a more frequent drain inspection schedule was implemented.
June 27, 2023	6 minutes, 7 seconds	The West Exhauster tripped due to a high vibration alarm. This caused pressure in the collector main to increase and the built up coke oven gas was vented to the emergency bleeders. All bleeds ignited. The machine was washed out with liquor to remove any residue that could be contributing to the imbalance. The vibration action levels were retrained to ensure operators were correcting issues before a trip occurs.
April 29, 2024	8 minutes, 31 seconds	Boilers 2-3 and 2-4 coincidentally tripped due to two separate issues. Boiler 2-3 trip was caused by an instrumentation failure related to the coke oven gas transmitter. Boiler 2-4 tripped due to a fan fault. Without the steam generated by the boilers, the exhauster in the By-Products Plant was not able to operate and the gas pressure in the collector main increased and caused the pressure relief valves to vent the built-up coke oven gas to the emergency bleeders. All bleeds were ignited. More frequent Preventative Maintenance reviews have been created for BH#2 and an alarm was added to the DCS for fan faults.
June 11, 2024	8 minutes, 16 seconds	Maintenance activities on the #2 crossover askania caused the valve to close. The four crossover valves that service the battery are essential to maintaining a correct balance of pressure on the coke oven gas collector main. When one of these valves closes unexpectedly, gas is released through the corresponding overpressure bleeder flare. Alternatives to the askania system are currently being explored. Newer actuator technologies are available which are more reliable and lower maintenance.
June 18, 2024	3 hours, 41 minutes, 14 seconds	The air compressor that serves instrument controls at BH2 failed causing the safety interlocks to fail close and shut down all running boilers before a switch to the backup system could be made. Without the steam generated by the boilers, the exhauster in the By-Products Plant was not able to operate causing the pressure relief valves to vent the built-up coke oven gas to the emergency bleeders. All bleeds were ignited. Air Technologies came onsite the same day to service the air compressor and BH2 was able to regain steam. EES Coke has since installed a beacon light, voice and DCS alarms for the air compressor which will notify the operators of any issues. EES Coke has also obtained a backup air compressor.

^{*}The longest single bleeder during the event listed as duration.

Please contact me at 313.216.2548 should you have any further questions.

Sincerely,

Laura Harris, P.E.

Envrionmental Engineer

EES Coke Battery, L.L.C.

Jam Danis

Cc: J. Camilleri, EGLE

R. Sanch, DTE Vantage

M. Krchmar, EEC Coke

K. Janis, EES Coke