

# EES Coke Battery, LLC

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September 21, 2016

Mr. Thomas Maza  
Air Quality Division, MDEQ  
Cadillac Place  
3058 West Grand Boulevard, Suite 2-300  
Detroit, MI 48202

## Re: Response to September 1, 2016 Violation Notice

Dear Mr. Maza,

EES Coke Battery, L.L.C. (EES Coke) is in receipt of a Violation Notice (VN) issued by the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD). The VN is dated September 1, 2016 and alleges violations of permit requirements to continuously monitor emissions of CO, NO<sub>x</sub> and SO<sub>2</sub> during the second calendar quarter of 2016. The VN identifies EES Coke's reported downtime for the quarter as ten percent. As EES Coke has discussed with MDEQ in the past and due to the unique application of this continuous monitoring technology on coke battery operations, EES disagrees that this level of downtime represents a violation. Notwithstanding the previous sentence, EES Coke understands and is committed to minimizing monitor downtime. With that in mind, EES Coke has taken proactive steps to address the causes of the downtime listed in the VN. As requested, Attachment 1 describes each CEMS downtime event and the actions taken by EES Coke in response to each such event.

In addition, the CEMS annual RATA was performed on September 14, 2016. During the RATA, EES Coke certified the Optical Scintillation Instrument (OSI) flow monitor. Initial results indicate the system passed the RATA. After this apparent successful RATA and in consultation with MDEQ, EES Coke has ceased utilizing the pitot-tube pressure drop stack flow monitor as its compliance instrument and intends to utilize the OSI for such purposes. EES Coke believes the OSI will reduce flow monitor and overall CEMS downtime.

Please contact me at (313) 216-2535 if you have questions regarding this submittal.

Sincerely,

A handwritten signature in black ink that reads "M. Krchmar".

Mike Krchmar  
Plant Manager  
EES Coke Battery, LLC

Enclosures

CC: Brenna Harden – DTEES  
Fadi Mourad – DTE Energy  
Todd Richards – DTEES  
Rob Sanch - DTEES  
Stephen Zervas – DTEES

## ATTACHMENT 1

Start Time	End Time	Duration	Cause	Corrective Actions
0700 April 2	1100 April 4	53 hours	Facility-wide network failure	IT pushed out a network upgrade just before midnight on Saturday of a three-day weekend. The upgrade caused the network to crash. A hotline ticket was submitted on Saturday, but IT did not get to it until Tuesday morning. This situation surfaced a deficiency in IT's service ticket system where electronically submitted tickets are automatically assigned a low priority. Their system requires a phone contact be made for a higher priority to be assigned. In response, EES Coke required IT to commit to no longer pushing network upgrades at EES Coke over the weekend (regardless of holiday or not.)
1500 April 8	2200 April 8	8 hours	Pitot tube plugging	During the second quarter general maintenance on the pitot increased substantially. EES anticipated a need to increase maintenance because it is known that there may be an increase in stack opacity during extended coking. As expected accumulation on the pitot began to occur more frequently. Purge cycles were increased from every 4 hours to every 1 hour. After a period of time, it was determined that purge cycles alone were not fixing the problem and purges were moved back to every 2 hours. Cleaning of the pitot progressively increased from monthly to every other week to every week to 2 times per week. It was determined that this aggressive schedule (unprecedented prior to this quarter) was warranted as plugging was still occurring until we went to the twice per week schedule. With the OSI replacing the pitot tube system, plugging will no longer cause CEMS downtime
1900 April 9	0600 April 10	12 hours		
0800 April 11	0900 April 11	1 hour		
0200 April 27	0900 April 27	8 hours		
1000 April 30	1100 April 30	1 hour	Flow panel routine maintenance	Not applicable
1200 April 30	1500 April 30	4 hours		
0400 May 1	1200 May 1	9 hours	Flow panel routine and preventative maintenance	Recalibration following each maintenance event
0800 May 2	0900 May 2	2 hours		
1000 May 3	1100 May 3	1 hour		
1300 May 3	1400 May 3	2 Hours		
1200 May 4	1300 May 4	1 Hour		
0900 May 5	1000 May 5	1 hour		
0900 May 10	0600 May 13	70 hours	Data logger (PLC) failure	The PLC was obsolete and is no longer manufactured. EES Coke identified this while replacing its parts inventory onsite over the past year. To alleviate this risk a purchase order was established with the part manufacturer for emergency repair, if needed. When the part failed, to minimize CEMS downtime, EES drove the unit to Indianapolis and back – which took less time than shipping via UPS or FedEx. With the OSI replacing the pitot tube system, this PLC is no longer used for compliance purposes.
0500 May 24	1300 May 24	9 hours	Pitot tube plugging	See response for April 8
0800 May 25	0900 May 25	1 hour	Routine maintenance	Recalibrate following maintenance
0900 May 30	1000 May 30	1 hour		
1400 May 31	1500 May 31	2 hours	Quarterly maintenance checks	Not applicable
0900 June 1	1000 June 1	1 hour	Cylinder gas audit	Not applicable
0700 June 5	0900 June 6	27 hours	NOx and CO analyzer failure	Troubleshooting the analyzer to identify cause of failure took much longer than expected as the Instrument Technicians worked through items on the O&M Manual's troubleshooting list. The root cause was finally identified as the failure of the CO analyzer's heat exchanger – which was very far down the troubleshooting list. As a result, EES arranged for its Instrument Technicians to receive training from ThermoScientific in an effort to reduce future troubleshooting times.
0800 June 28	0900 June 28	1 hour		
0700 June 29	1100 June 29	5 hours	Pitot tube plugging	See response for April 8
0700 June 30	0900 June 30	3 hours		