# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Scheduled Inspection** 

040840919		
FACILITY: EES COKE BATTERY LLC		SRN / ID: P0408
LOCATION: 1400 Zug Island Road, RIVER ROUGE		DISTRICT: Detroit
CITY: RIVER ROUGE		COUNTY: WAYNE
CONTACT: Brenna Harden,		ACTIVITY DATE: 08/01/2017
STAFF: Katherine Koster	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MEGASITE
SUBJECT: Targeted FY2017 ins	pection	
RESOLVED COMPLAINTS:	THE RELEASE AND ADDRESS OF THE PROPERTY OF THE	AND THE PROPERTY OF THE PROPER

**REASON FOR INSPECTION: Targeted Inspection** 

**INSPECTED BY: Katie Koster** 

PERSONNEL PRESENT: Brenna Harden, EES Environmental Engineer; Rob Sanch, DTE Corporate;

Rhiana Dornbos, NTH

FACILITY PHONE NUMBER: 313-297-4183 (phone); 734-320-5255 (cell)

#### **FACILITY BACKGROUND**

EES Coke Battery, LLC was organized and formed by DTE to assume the coke making operations from United States Steel Great Lakes Works (USSGLW) in 2004. Prior to USSGLW ownership, the coke making operations were owned and operated by National Steel Company. The equipment is located on the southern half of Zug Island in the city of River Rouge. The property is owned by USS.

While the No. 5 battery and No. 3 byproducts operations and coal piles are managed by DTE, the coke making operations rely on USSGLW for steam, power, and water. The battery used to receive blast furnace gas from USSGLW for underfire combustion but that practice was halted by EES in July 2012 as DTE claimed that moisture in the gas was degrading the regenerators below the ovens. EES also claimed that preheating the gas to drive off the moisture was not feasible. USSGLW still accepts and purchases excess coke oven gas for use at Boilerhouses1&2 on Zug Island. COG used to also be combusted at the Hot Strip Mill but that was halted by USS in mid 2016.

#### **REGULATORY ANALYSIS**

On June 13, 2014, the facility submitted PTI application, 51-08C, to increase the yearly coal throughput limit, permanently remove the heat input restrictions, modify/remove emission limits, and modify a variety of recordkeeping and reporting conditions. The permit evaluation form states that it is a major modification under PSD for NOx and greenhouse gases. This permit replaced 71-13 and 51-08. The permit was issued in November 2014. 71-13 was a temporary permit to suspend the daily and annual heat input limits on the battery.

The whole coke making facility is incorporated as Section 7 of the United States Steel Great Lakes Works (USSGLW) Renewable Operating Permit (ROP) Number 199600132d. However, USSGLW and EES submitted a request in December 2012 to administratively split the ROP into two documents. This process has started as the USSGLW ROP renewal has gone through public comment and does not contain conditions related to EES. EES was assigned a separate SRN, P0408, and reports annual emissions in MAERS under this SRN.

Facility submitted the attached HAP analysis as part of the ROP renewal. It is attached for informational purposes. For 2015, 25 tons of benzene, 23 tons HCI, and 77 tons aggregate HAPs were emitted. Benzene and HCI emissions are primarily emitted from the underfire stack and the COG flare.

# St of Michigan Consent Orders

Facility is operating under some old Wayne County consent orders including SIP Consent Order No. 27-1993 for fugitive dust. In December 2013, the facility was referred for escalated enforcement action due to issues with the CERMS systems for monitoring NOx, CO, SO2, and flow; including incorrect reporting of downtime and manual revisions of the CERMS data unbeknownst to AQD at the time. The referral also included other recently cited violations related to inadequate maintenance, inspections, and recordkeeping, and failed stack test, and improper calibration gas used for leak checks under Part 61 Subpart L and V. This is consent order AQD CO No. 57-2014.

# Federal Regulations

The No. 5 coke oven battery is subject to MACT Standards promulgated in 40 CFR Part 63, Subpart CCCCC (NESHAP for Coke Ovens: Pushing, Quenching, and Battery Stacks) and Subpart L (National Emission Standards for Coke Oven Batteries). The No. 3 Coke Byproducts plant is subject to NESHAPs promulgated in 40 CFR, Part 61, Subpart FF (NESHAP for Benzene Waste Operations), Subpart L (NESHAP for Benzene Emissions from Coke By-Product Recovery Plants), and Subpart V (NESHAP for Equipment Leaks (Fugitive Emission Sources)).

# PROCESS OVERVIEW

The vast majority of the coal is received by vessel and off loaded on the southern end of the island. Four to six types of coal are used in the coke making process and a mix of low, mid, and hi vol coal is used and properties such as ash and sulfur content and strength are important. Coal is loaded into a truck and driven to the coal hopper. From the hopper, it enters the mixing building. Blended coal is pulverized and conveyed to the coal bunker on top of the battery. Along the way, coal tar sludge is sprayed onto the conveyor for bulk density control. No 2 fuel oil is also used for this purpose.

Coal is stored in a bunker until dispensed into one of two larry cars on the top of the battery. Coal is then charged into an oven with the larry car and leveled with the leveling bar. It is important to create an even headspace so that gas is drawn off evenly across the oven during coking. Each oven has four ports with lids on the top for charging and two sides with removable doors. Approximately 35 tons of wet coal/32 tons dry coal is charged per oven and 23 - 25 tons of coke are produced. The normal coking time is about 17 hours at a temperature of approximately 2200F. If there is reduced demand for coke, then the battery has to shift to an extended coking time; however, at this time, it is on the normal coking cycle.

The staggered oven pushing is to ensure even distribution of the coke oven gas across the collector main. The coking process takes place in the absence of oxygen to drive off residual VOCs and other impurities in the coal and to form a hard mass known as metallurgical coke. This coke can withstand the very high temperatures in iron making blast furnaces. There is a limit to how long coking time can be extended because the process will not generate enough gas to run the battery and the battery will not be able to produce metallurgical coke of the required size. Important factors for coke are stability (strength), size (permeability), sulfur (<0.85%), and ash (<10%), and volatility. Samples are tested daily. Approximately 6% of coke made is breeze and nut coke. 117 ovens per day is maximum that can be pushed. Ovens are 18 inches wide.

Ovens are charged and pushed in a specific sequence whereby odd numbers are pushed and then even or vice versa unless there is extended coking schedule. Ovens are kept under slightly positive pressure while coking and slightly negative pressure while charging. Negative pressure is achieved with the use of an assist oven and jumper pipe. High pressure flushing liquor is in use to aid in off gas collection during charging. The flushing liquor shock cools the raw coke oven gas causes it to contract quickly which pulls a vacuum.

When pressure in the crossover main(s) reaches 0.80 inches w.c., the bleeder stack(s) open. There are two bleeders per crossover. The bleeders are equipped with automatic igniters so that raw COG is combusted when they are opened. The main function of the bleeders is to flare gas until the pressure returns to normal. The company sends reports to AQD on when the bleeders open, length of time of opening, and certification that the emissions were ignited. Overall plant pressure is 37 in. w.c.

Once the coking cycle is complete, the oven doors are removed and coke is pushed from the oven into a receiving car. The car moves along the oven to the quench tower where is it deluged with water. The coke is then poured out onto the coke wharf for further cooling. Emissions from pushing and traveling to the quench tower are captured by a movable hood positioned over the receiving car. The hood ducts emissions to the Pushing Emissions Control System (PECS) baghouse. Baffles in the quench tower must be maintained to suppress the release of particulate emissions. Twelve thousand gallons of water are used per quench. After cooling, coke is conveyed to the screening station and then loaded into rail cars.

Off gas from the ovens (raw coke oven gas or raw "COG"), is collected through the suction main to the four cross over mains and into the collecting main. The collecting main feeds the byproducts recovery

plant. Flushing liquor is sprayed in the collecting main for cooling and tar begins to precipitate out. Tar, light oil, and ammonia are recovered from the coke oven gas through a series of decanters, condensers, heat exchangers, and stills. These products are then sold offsite. The byproducts recovery process is completely enclosed; nitrogen blanketing is in use for emissions suppression. Emissions from this process are only attributable to leaks or storage tank emissions and load out activities. The wash oil has a high boiling point; it absorbs benzene, toluene, and xylene, and is sent through the distillation column. Coal tar is loaded by rail or truck off site.

Excess gas that is not needed in the underfire system by the battery or by US Steel is sent to the main flare. About 40% of the gas generated is used to underfire the battery. Natural gas could be used for a short time period in an emergency situation; however, the flame temperature is too high and it would damage the refractory if used on a long-term basis.

Process water from moisture in the coal is contaminated with ammonia, phenols, heavy metals and mercury. The onsite wastewater treatment plant removes phenols and NH3 biologically.

The battery operates 24 hours a day, 7 days a week. Approximately every 20 minutes there is a reversal whereby the fuel gas combustion is turned off for approximately 2 minutes. The heating flues become exhaust flues and vice versa to even out the heat distribution throughout the battery. The products of combustion of 100% COG are exhausted out of the natural draft stack. There is a CEMS in the combustion stack for measuring NOx, SO2, and CO lb/hr emissions. COG is mainly comprised of hydrogen and CH4 and has an average heating value of 500 BTU/ft3. It also contains H2S, benzene, and PAH's.

A contractor, AKJ, used to oversee the tar sludge handling, storage and loading process. This has been reclaimed by EES to be done in house.

## INSPECTION NARRATIVE

On August 1, 2017, I arrived at Zug Island. I was met by Brenna Harden, EES Environmental Engineer, Rob Sanch, DTE, Mike Krchmar, EES Plant Manager, and Rhianna Dornbos, NTH. We discussed battery operations and recordkeeping.

Currently USS is using coke from its facility in Clairton Works and it is delivered by train which blocks the entrance and exit to the island. Note, the prior inspection report had coal instead of coke in the prior sentence. This was an error. USS is not using any coke that is being produced by EES. The current operation is 118 ovens per day and 13 hours, 7 minutes coking time per oven. Every 11 minutes there is a push.

I did not observe any visible emissions from the underfire combustion stack while on site.

# Notes:

Bleeders – Back up batteries have been installed on all igniters and the batteries are changed annually. Procedures changed from weekly to daily checks that the igniters are functioning; spray for flushing liquor blockages now occurs on a weekly basis; every three years EES's swaps out the igniters (this task is scheduled in MAXIMO), and there is weekly use of an imaging camera on the flushing liquor distribution system.

Chemical dust suppressant – If coke going to ground, no suppressant is in use. If EES is not operating the screening station, there is no dust generated. Recently added a truck loader and NS railcars go to AK Steel.

Byproducts plant – According to the facility, most tanks can be purged and degassed through the nitrogen gas blanketing system; they do not need to be vented to a flare so that is why degassing has not been a permitting issue.

PECS BH – Annual dye inspection from 2016 results in changing bags in 6 cells. The 2017 check indicated that there were no issues.

**BYPRODUCTS PLANT (BPP)** 

We did not complete a walk though of this process during this inspection. This is an enclosed process. It is subject to LDAR monitoring through the various NESHAPs. Reports are submitted on a quarterly and semi annual basis. Siddock performs this monitoring.

# TAR LOADING FACILITY

This emission unit was not included in the existing ROP. It is operating under PTI 124-09. It will be included in the renewal. The TLF is located across the pushing side of the coke battery. The TLF allows EES Coke to ship out the tar produced in the by-product plant (BPP) to their customers by rail or by tank truck. I requested records. See attached #16. Records from January 2016 – June 2017 indicate compliance with benzene, VOC, and tar limits.

# APPLICABLE RULES/PERMIT CONDITIONS EVALUATED

EUCOKE-BATTERY - Conditions are from PTI 51-08C which was issued in November 2014

#### I. EMISSION LIMITS

- 1. IN COMPLIANCE. 437.3 pph CO 8 hr block average from the combustion stack as recorded by the CERMS. No excess emissions have been reported in the quarterly reports.
- 2. IN COMPLIANCE. 1,411 NOx tons per year limit. This is an increase from prior limit of 959.5 tons per year. Based on 12-month time period ending from June 2016 June 2017, highest emissions were 706 tons of NOx from the combustion stack in June 2016 (See attached #1).
- 3. IN COMPLIANCE, 563.5 NOx hourly limit as recorded by the CERMS. No excess emissions have been reported in the quarterly reports.
- 4. IN COMPLIANCE. 0.75 NOx lb/ MMBTU heat input. EES has not reported any exceedances in the quarterly reports. At this time, compliance is based on EES calculation methodology of assuming COG BTU content of 500.
- 5. IN COMPLIANCE. 1.25 NOx Ib/MMBTU heat input 24 hr rolling. EES has not reported any exceedances in the quarterly reports. At this time, compliance is based on EES calculation methodology of assuming COG BTU content of 500.
- 6. IN COMPLIANCE. 2.61 NOx pph from the PECS stack. The most recent test was conducted in September 2016. See TPU memo in the file for a summary of the test report review. The NOx emissions on an hourly basis, based on a three run average, were 2.26 pph. As this process does not run continuously, i.e. pushing only occurs once every 11 minutes, the hourly emissions are calculated based on the actual non-continuous operation.
- 7. IN COMPLIANCE. PM limit of 0.095 lbs/1000 lbs exhaust gas on combustion stack. The most recent test was conducted in September 2015. Results were received on 11/12/2015. Results were 0.078 lb PM/1000 lb gas @50% excess air.
- 8. IN COMPLIANCE. PM limit of 0.012 gr/dscf on the combustion stack (excluding sulfates). The most recent test was conducted in September 2015. Results were received on 11/12/2015. Results were 0.000095 gr/dscf.
- 9. IN COMPLIANCE. PM Limit of 25.7 pph on the combustion stack. The most recent test was conducted in September 2015. Results were received on 11/12/2015. Results were 0.111 pph.
- 10. IN COMPLIANCE. PM limit of 9.7 tons per year from the PECS stack. For the 2016 calendar year, PM emissions from the PECS stack (reported as PM10 filterable) were 0.99 tons. Note, the prior report stated that for calendar year 2015, emissions from the PECS stack were 9.965. This includes fugitive emissions which is not part of the emission limit. The PM emissions from the PECS stack for 2015 were reported as 2.74 tons.
- 11. IN COMPLIANCE. PM limit of 0.02 lb/ton of coke pushed on the PECS stack. The most recent test was conducted in September 2016. See TPU memo in the file for a summary of the test report review Results

were 0.004 lb PM/ton coke pushed.

- 12. IN COMPLIANCE. PM10 limit of 73.3 pph on the combustion stack. This is a new limit. Stack test was performed in September 2015 and results were received on November 12, 2015. Based on reported results, PM10 emissions were 50.8 pph. Note, this report has not undergone TPU review.
- 13. IN COMPLIANCE. PM10 limit of 0.69 pph on the PECS stack. The most recent test was conducted in September 2016. See TPU memo in the file for a summary of the test report review. Results were 0.43 lb PM10/hr.
- 14. IN COMPLIANCE. PM2.5 limit of 73.3 pph on the combustion stack. This is a new limit. Stack test was performed in September 2015. Based on reported results, PM2.5 emissions were 50.5 pph. Note, this report has not undergone TPU review.
- 15. IN COMPLIANCE. PM2.5 limit of 0.69 pph on the PECS stack. The most recent test was conducted in September 2016. See TPU memo in the file for a summary of the test report review. Results were 0.43 lb PM2.5/hr.
- 16. IN COMPLIANCE. SO2 limit of 2,071 tpy based on a 12 month rolling time period. Based on the CERMS and the approved methodology in PTI 51-08C used to estimate emissions during downtime, for the 12-month time period from June 2016 June 2017, highest emissions were 1499 tons of SO2 from the combustion stack in June 2016. Note, some quarter(s) had significant downtime.
- 17. NOT IN COMPLIANCE. SO2 3 hour average of 544.6. Between June 2016 June 2017, one exceedance was reported in the 2<sup>nd</sup> quarter of 2017 and a VN will be issued. In 2016, there were no reported exceedances.
- 18. IN COMPLIANCE. SO2 limit of 0.702 lb/1000 scf of COG on a 1 hr average. For 2016, a VN was issued for exceedances in the 3<sup>rd</sup> quarter. No exceedances have been reported for 2017 so far (through June). As this not an ongoing issue from the 3<sup>rd</sup> quarter, compliance was chosen at this time. Response to the VN indicates that the facility believes exceedances were all caused by the same event which was a plugged filter on the SO2 analyzer providing false positive readings. Filter changes have been increased in frequency from quarterly to monthly.
- 19. IN COMPLIANCE. VOC limit on 43.1 pph for the combustion stack. Testing occurred in October 2013. Results were 7.99 pph VOC. Testing also occurred in September 2015 and results were 19.5 pph.
- 20. IN COMPLIANCE. VOC 0.0956 lb/MMBTU limit. This is a new limit for the combustion stack. Stack test was performed in September 2015. Based on reported results, VOC emissions were .0391 lb/MMBTU heat input. Note, this report has not undergone TPU review.
- 21. IN COMPLIANCE VE limit of 20% 6 minute average on the combustion stack. No visible emissions were observed while on site. For 2016, three COMS exceedances of the 20% 6-minute average have been reported in the quarterly reports. As the COMS operates continuously, facility is substantively in compliance with this condition.
- 22. IN COMPLIANCE. VE limit of 15% on a 6 reading average of the PECS stack. No visible emissions exceedances have been reported in the semi annual Title V deviation reports.
- 23-28. IN COMPLIANCE. These are limits, in terms of % leaking as observed on a daily basis, found in the state Part 3 rules. Facility has not reported an exceedance of these limits. Also, see attached spreadsheet which includes the leak percentages as input from the daily readings.

# II. MATERIAL LIMITS

- 1&2. IN COMPLIANCE. Dry coal charge limited to 1,420,000 tpy on a 12 month rolling time period and 125,000 tons/month. Highest 12 month rolling from June 2016 June 2017 was 1,020,603 tons in June 2016 and 109,831 tons per month in June 2017. (#2 attached)
- 3. IN COMPLIANCE. Heavy tar sludge charged limited to 836,000 gallons per year on a 12 month rolling time period. Highest 12 month rolling from June 2016 June 2017 was 547,013 gallons in June 2016. (#2

## attached)

- 4. IN COMPLIANCE. No. 2 fuel oil charged limited to 1,365,000 gallons per year on a 12 month rolling time period. Highest 12 month rolling from June 2016 June 2017 was 437,609 in June 2016. (#2 attached)
- 5. IN COMPLIANCE. No. 2 fuel oil sulfur content should be no more than 0.5% by weight. Fuel records indicate facility is purchasing ULSD. ULSD is defined as having a maximum sulfur content of 15 ppm. (#5 attached)
- 6. IN COMPLIANCE. TDS of quench water shall not exceed 800 mg/liter. 3 samples minimum collected per week. State rule 336.2033 requires 5 samples be collected. I discussed this with Brenna who stated that the facility was doing that anyway. TDS results have been below the 800. (#6 attached)

#### III. PROCESS/OPERATIONAL

- 1. IN COMPLIANCE. An updated MAP was submitted on January 22, 2015 and approved by AQD.
- 2. IN COMPLIANCE. Volatile matter in coke shall not exceed 0.94% by weight based on a 12-month rolling average. Based on the attached records, the 12-month rolling volatility is below this level. Facility tests for volatility for quality purposes as well. (#3 attached)
- 3. IN COMPLIANCE. Shall not cause a standpipe lid to be open on an oven which is more than 3 ovens ahead of the one being pushed. Facility is demonstrating compliance through training of the operators. At this time, I do not have information that indicates this is not sufficient. Based on visible observations during prior inspections, I did not notice any open standpipe lids on in service ovens that did not meet this condition.
- 4. IN COMPLIANCE. Excess COG shall be sent off site when dry coal charged exceeds 1.3MM tons per 12 month rolling time period (based on equation in the permit). Dry coal charged has not exceeded 1.3MM for the 12-month rolling time period June 2016- June 2017. (#2 and #4 attached)

# IV. DESIGN/EQUIPMENT

1-4. IN COMPLIANCE. Facility was cited with a VN in October 2015 due to ongoing issues with the bleeder/bypass flare system not igniting. Facility responded with detailed corrective actions and upgraded maintenance procedures that were put in place or going to be put in place. See facility manila file for letters. Since January 2016, there have only been 3 incidents of bypass flare not working resulting in less than 2 minutes of raw coke oven gas being released. One example is that the inspection frequency to ensure ignitors are working has been changed from weekly to daily. See attached records from June 2016 – June 2017(#11). Also, the flare batteries are changed annually through a work order (#13 attached).

The PECS baghouse. including the capture system, and quench tower appear to be maintained properly based on records provided from June 2016 – June 2017 that I reviewed on site. It appears that more timely work orders related to leaks in the capture system or other issues with the BH have been implemented so that issues do not appear to be ongoing from one month to the next. The quench tower does not appear to have ongoing issues that would affect its performance.

- 5. IN COMPLIANCE. Permittee shall only use acceptable make up water. Make up water is mill water. I believe it meets that definition in terms of "water from any of these sources (i.e. river), that has been used only for non-contact cooling or in water seals".
- 6. IN COMPLIANCE. Pressure drop monitoring occurs on a continuous basis via a pressure drop gauge and is electronically recorded.

# V. TESTING

- 1. IN COMPLIANCE. Permittee shall test combustion stack every two years. Prior test was conducted in 2013 and 2015. Next test is due in 2017.
- 2. IN COMPLIANCE. Permittee shall test PECS stack every two years. Prior tests were conducted in September 2016, December 2014 and June 2012. Next test is due in 2018.

- 3. IN COMPLIANCE. Permittee shall sample TDS on a weekly basis with a minimum of three samples collected per week. Records were presented. Five samples are being collected per week.
- 4. IN COMPLIANCE Volatility records are attached. (#3 attached)

#### VI.MONITORING/RECORDKEEPING

- 2. IN COMPLIANCE. COMS shall be installed and maintained. COMS is installed; annual audit is performed and provided to AQD. Also, quarterly excess emission reports are required and have been submitted by EES in a timely manner.
- 3. NOT IN COMPLIANCE. CERMS shall be maintained and operated in a satisfactory manner. This system was the subject of a recent enforcement action which resulted in Consent Order AQD No 57-2014. Through this order, various improvements were made to the CERMS. However, downtime continues to be an issue; mostly related to issues with the flow monitor. A violation notice was issued by TPU staff for the 2016 2<sup>nd</sup> quarter excess emissions report. As such, the flow monitor was replaced with a different type of monitor. It was a pitot based monitor that was prone to plugging, and is now an OSI (optical scintillation monitor). It was installed in the 3<sup>rd</sup> quarter of 2016 and passed a RATA on October 21, 2016. The 4th quarter 2016 and 1<sup>st</sup> quarter 2017 had minimal downtime. However, the 2<sup>nd</sup> quarter 2017 EER had 12.6% downtime for all pollutants. A VN will be issued.
- 4. NOT IN COMPLIANCE. Flow monitoring system shall be maintained and operating in a satisfactory manner. This system was the subject of a recent enforcement action which resulted in Consent Order AQD No. 57-2014. Through this order, various improvements were made to the CERMS. However, downtime continues to be an issue; mostly related to issues with the flow monitor. A violation notice was issued by TPU staff for the 2016 2<sup>nd</sup> quarter excess emissions report. As such, the flow monitor was replaced with a different type of monitor. It was a pitot based monitor that was prone to plugging, and is now an OSI (optical scintillation monitor). It was installed in the 3<sup>rd</sup> quarter of 2016 and passed a RATA on October 21, 2016. The 4th quarter 2016 and 1<sup>st</sup> quarter 2017 had minimal downtime. However, the 2<sup>nd</sup> quarter 2017 EER had 12.6% downtime for all pollutants. A VN will be issued.
- 5. IN COMPLIANCE. Permittee shall keep continuous opacity monitor records. Records are available.
- 6. IN COMPLIANCE. Hourly and 8-hour averages of CO are being maintained in a satisfactory manner through the CERMS system.
- 7. IN COMPLI ANCE. Required NOx emission records are being maintained. However, AQD and EES are still working to agree on the calculation methodology. AQD needs further justification for why 500 BTU/cf should be the standard value applied at all times for the COG.
- 8. IN COMPLIANCE. Required SO2 emission records are being maintained. However, AQD and EES are still working to agree on the calculation methodology.
- 9. IN COMPLIANCE. Required SO2 emission records are being maintained. However, AQD and EES are still working to agree on the calculation methodology.
- 10. IN COMPLIANCE. Non-certified VE's of the PECS baghouse. Records were presented during the inspection. See attached examples. (#8 attached)
- 11. IN COMPLIANCE. Certified VE's of the PECS baghouse. Records were presented during the inspection. See attached examples. (#8 attached)
- 12. IN COMPLIANCE. Daily Method 9B observations shall be conducted. It appears that sufficient information to determine compliance with Method 9B is being recorded.
- 13. IN COMPLIANCE. Pressure drop is continuously recorded. No pressure readings outside of the normal range during processing have been observed. The normal range is 0.3 7 in. w.c. according to the July 1, 2015 O&M plan.
- 14. IN COMPLIANCE. Inspection of the PECS baghouse is required once per month. From June 2016 June 2017, inspections were performed on time.

- 15. IN COMPLIANCE. Inspection of the baffles is required once per month. From June 2016 June 2017, inspections were performed on time based on the records reviewed on site.
- 16. IN COMPLIANCE. Records of monthly and 12 month rolling dry coal, heavy tar sludge, and No.2 fuel oil charged to the battery for the time period requested (June 2016 June 2017) were provided. (#2 attached)
- 17. IN COMPLIANCE. Records of monthly, twelve month rolling, heat input, fuel gas usage, BTU content of fuel gas, volatile matter of coke produced, and coke production rate as attached. BTU content is an assumed constant of 500 BTU/scf. (#2,3,4, and 7 attached)
- 18. IN COMPLIANCE. Records of monthly and twelve month rolling of the amount of COG generated per ton of dry coal and amount sent to a separate stationary source and COG generated per ton of dry coal are attached. (#4 attached)
- 19. IN COMPLIANCE. Permittee shall monitor and record the amount of coke oven gas vented to the flare on a daily basis. This information is tracked and maintained by DTE.
- 20. IN COMPLIANCE. Condition requires regular inspections of the flare and automatic ignition system. According to facility, no formal inspections are necessary because it is obvious whether the flare is working. No issues with the ignition system at the flare have been experienced. At this time, this appears to be sufficient.
- 21. IN COMPLIANCE. Daily records of overpressure of the bleeder flare system. Records are maintained and a log of opening is submitted to AQD semi annually as part of the ROP deviation report. Records contain time, duration, and reason for opening. See semiannual ROP deviation reports.
- 22. IN COMPLIANCE. Shall maintain record of the analysis of each shipment of No 2 fuel oil. Purchase records with notations that the material is ultra low sulfur diesel (ULSD) from vendor, Spencer Oil, are maintained and were presented during the inspection. (#5 attached)

# VII. REPORTING

- 1. IN COMPLIANCE. Reports of bleeder openings have been received in a timely manner.
- 2. IN COMPLIANCE. 1 hr SO2 emissions quarterly reports are being received in a timely manner.

## VIII. STACK HEIGHTS/RESTRICTIONS

1,2&3. IN COMPLIANCE. Stack dimensions were reviewed during the recent PTI review and should be correct. Error in height from 51-08 was corrected.

IX. OTHER. NESHAP L and 5C are contained in later sections of the PTI.

#### **EUMATERIALS**

I.1&2 IN COMPLIANCE. Visible emissions limit of 10% opacity on a 6-minute average for the coal bin vents and the mixing building baghouse. No exceedances have been observed by the certified reader.

III.1 IN COMPLIANCE. Under PTI 51-08C, a revised plan to include EUMATERIALS was required within 180 days of permit issuance. The permit was issued November 21, 2014. An updated fugitive dust control plan was received on 5/26/15. Portions of the plan related to EUMATERIALS were approved by default after 90 days as the condition states. However, the facility also made changes to part of the fugitive dust plan that are from SIP CO No 27-1993 and related to equipment that is not part of EUMATERIALS. AQD has informed EES that changes require SIP approval from EPA and a demonstration needs to be made that the request change is at least equivalent to the level of control that is currently being met. The May 26, 2015 document does not contain this level of detail. At this time, the proposed changes have not been accepted by AQD and AQD is awaiting further information from the facility. This conversation occurred with Brenna Harden while on site for an inspection on June 3, 2015. Kerry Kelly of AQD was also present.

III.2 IN COMPLIANCE. An updated MAP was submitted on January 22,2015 for the mixing building baghouse and was approved. See facility file.

IV. IN COMPLIANCE. A pressure drop gauge is installed at the mixing building baghouse

VI.2 and 3 IN COMPLIANCE. Monitor and record the amount of chemical dust suppressant used in coal crushing and screening and coke screening buildings on a monthly basis. Maintain monthly records of the time and duration of chemical dust suppressant system malfunction. Amount of suppressant used is being recorded. Example is attached (#14). At this time, the required information appears to be tracked although the format is cumbersome. According to Ms. Harden, facility is looking for ways to streamline this recordkeeping. Looks like chemical feed pump was replaced in October 2016. System is not in use if coke is not being screened in which case it is "going to ground." It appears that there are issues from January – May 2017 with the pump and chemical feed system. Awaiting further explanation from the facility. (attached #14)

VI.4. IN COMPLIANCE. Daily non certified VE's on the mixing building baghouse and coal bin vents. If VE's are observed, a certified reading shall be performed. No VE's have been observed.

VI.5 IN COMPLIANCE. Daily pressure drop records are maintained. Examples are attached. (#10 attached).

IX.1 IN COMPLIANCE. Shall comply with fugitive dust plan in SIP CO 27-1993. Facility has certified compliance with dust plan quarterly. Quarterly reports are submitted which detail the fugitive dust activities that have been performed.

#### FGMACT L

I.1 IN COMPLIANCE. Percentage of leaks allowed at certain points on the battery. Based on daily Method 303 readings and the tabulated 30-day averages and log averages as allowed by the MACT, the battery is in compliance with these conditions. (#9 attached)

I.2 IN COMPLIANCE. No visible emissions from each flare except for periods not to exceed 5 minutes in 2 hours. Facility has started reporting all individual bleeder openings (regardless of whether the gas was ignited) that last more than 5 minutes as deviations. AQD agrees with this approach. However, as there are 8 bleeders, usually a single bleeder is not open for more than 5 minutes. Based on information provided by the facility (in the file), much work has been done to minimize the duration of scheduled maintenance which causes most of the flaring events. As such, instances of flares open more than 5 minutes in two hours have been reduced. At this time, compliance is chosen.

Of note, AQD has requested how the company is determining compliance with Rule 336.1301 during these flaring events and whether the deviation reports reflect this analysis. Facility thinks that Rule 301 is not applicable because the NESHAP limit is more restrictive. AQD explained that both limits are applicable to the flares in a meeting on February 13, 2017. The two limits cannot be compared because one is quantitative and the other is qualitative. AQD also suggested that if a VE reading was not able to be performed, then a prudent approach would be to assume 100% opacity once the flare is engaged and anything open for more than 90 seconds in a 6 minute period should be reported as a potential deviation of Rule 301. Facility objected to the approach and claims this is a "new" requirement from AQD and a change in existing interpretation. This is not true. This is the first time having the conversation with the facility as AQD thought this analysis was being performed. AQD never told EES Coke/DTE that Rule 301 did not apply to the flares nor did DTE ever approach AQD to make this determination.

#### III. PROCESS/OPERATIONAL RESTRICTIONS

2. IN COMPLIANCE. Shall seal leaks in the collecting main within 4 hours. No leaks have been detected in the collecting main.

DID NOT EVALUATE III.1,3 and 4.

# IV. DESIGN/EQUIPMENT PARAMETERS

IN COMPLIANCE. Electronic igniters are in place. Did not request full design specifications at this
time. The permittee shall operate and maintain a bypass/bleeder stack flare system complete with
electronic igniters installed in accordance with the design requirements as specified in § 63.307(a)
(1) and (b).

#### V. TESTING/SAMPLING

1. IN COMPLIANCE. A daily performance test shall be conducted each day, 7 days per week by certified Method 303 observer to determine compliance with each applicable visible emission limitation for coke oven doors, topside port lids, offtake systems, bypass/bleeder flares, and charging operations in this permit. Each performance test shall be conducted according to the procedures and requirements of reference Method 303 or 303A or Methods 9 and 22 where applicable. Each performance test is to be conducted by a certified observer. The certified observer shall conduct each performance test according to the requirements of 40 CFR 63, Subpart L. The procedures in § 63.309(d) shall be used to determine compliance with each applicable visible emission limitation for coke oven doors, topside port lids, offtake systems, bypass/bleeder flares, and charging operations in this permit.

Daily readings described in this condition are conducted and recorded. Records are maintained by the facility and have been presented during past inspections.

# VI. MONITORING/RECORDKEEPING

- 1. IN COMPLIANCE. The permittee shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303 as specified in § 63.308(a). The permittee shall record the time and date a leak is first observed, the time and date the leak is temporarily sealed, and the time and date of repair. Collecting main is inspected daily. No leaks have been observed
- 2. DID NOT EVALUATE. The permittee shall maintain a record of internal reports which form the basis of every malfunction notification under § 63.310(f).
- 3. IN COMPLIANCE. The permittee shall maintain files on-site at all time of all required information in a permanent form suitable for inspection at an on-site location for at least 1 year, and thereafter will maintain such files for 5 years from the date of creation at a location so that the files are accessible within 3 working days. Such records include a copy of the work practice plan, records related to the implementation of the work practice plan, design drawings and engineering specifications for the bypass/bleeder stack flare system, and records regarding the basis of each malfunction notification. Facility appears to have the required records for the past year on site. I did not evaluate the remainder of the condition.
- 4. DID NOT EVALUATE. The permittee shall maintain records required to be maintained and reports required to be filed under 40 CFR 63, Subpart L be made available to the authorized collective bargaining representative of the employees at the coke battery for inspection and copying in accordance with the provisions of § 63.311(g). Did not evaluate whether this information was provided to the employees.

# VII. REPORTING

- IN COMPLIANCE. Within 14 days of the notification made under § 63.310(d), or after a startup, shutdown, or malfunction, the permittee shall submit a written report to the AQD District Supervisor that:
  - a. Describes the time and circumstances of the startup, shutdown, or malfunction; and
  - b. Describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.

From June 2016 - June 2017, no SSM notifications have been received.

- 2. IN COMPLIANCE. The permittee shall submit semi-annual compliance certifications in accordance with § 63.311(d). Certifications are submitted semiannually.
- 3. IN COMPLIANCE. The permittee shall report any venting of coke oven gas through a bypass/bleeder stack that was not vented through the bypass/bleeder stack flare system to the USEPA as soon as practicable but no later than 24 hours of the event. The permittee shall submit a follow-up written report within 30 days. From time period of June 2016 June 2017, initial and follow up reports have been received in a timely manner.

# VIII. STACK/VENT RESTRICTIONS NA

# IX. OTHER REQUIREMENTS

1. DID NOT EVALUATE. The permittee shall make available to the surrounding communities the results

of any risk assessment performed by the USEPA to determine the appropriate level of any emission standards under section 112(f) of the CAA, within reasonable time after any such risk assessment is published by the USEPA.

## FGMACTCCCCC/MACT 5C

I.1 IN COMPLIANCE. PM limit of .02 lb/ton of coke pushed. December 2014 test results were 0.006 and April 2015 were 0.003. The most recent test was conducted in September 2016. See TPU memo in the file for a summary of the test report review Results were 0.004 lb PM/ton coke pushed.

I.2 IN COMPLIANCE. Based on the COMS data, and as reported quarterly in the Excess Emissions Reports (EER), no exceedances of the daily average 15% opacity for a battery on normal coking have been reported or 20% on extended coking.

#### II. MATERIAL LIMITS

1 IN COMPLIANCE. TDS testing results for the quench water are all below 1,100 mg/liter. This is based on a composite sample of 5 daily samples. Records to indicate daily samples are being taken were presented. (#6 attached).

# III PROCESS/OPERATIONAL

1& 2. IN COMPLIANCE. Permittee shall comply with work practice standards for fugitive pushing emissions and soaking. Compliance is demonstrated through training. Training materials and attendance logs were provided during the prior inspection and this training is still in place. At this time, c, d and e of this condition were not evaluated as I am unsure how compliance should be demonstrated.

- 3. Shall comply with the following for quench towers:
- a.IN COMPLIANCE. Demonstration provided in the prior inspection showing uncovered cross-sectional area less than 5% and the design has not changed.
- b.IN COMLPLIANCE. Baffles washed every 6<sup>th</sup> quench cycle and are washed every day regardless of temperature. The PLC activates the washing.
- c.IN COMPLIANCE. Baffles inspected monthly and monthly checks for blockage are performed as well. While some issues are indicated on the monthly inspection forms, none of them were reportedly causing an issue with the efficiency of the spray tower (i.e. small leaks in nozzles, some buildup but none blocking sprays, etc.). According to Ms. Harden, video and photos were taken inside the quench tower of the sprays while operating and shown to the plant manager for review to demonstrate that the tower is in a good state of repair. The plant manager reviewed the information and agreed that no further action was necessary at this time.
- d.IN COMPLIANCE. No baffles needing repair were identified in the inspection records.
- 4. IN COMPLIANCE. Permittee shall comply with the general O&M requirements for the battery. Must prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of new or existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed in paragraphs (b)(1) through (6) of this section. (1) Frequency and method of recording underfiring gas parameters. (2) Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures. (3) Procedures to prevent pushing an oven before it is fully coked. (4) Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged. (5) Frequency and procedures for inspecting flues, burners, and nozzles. (6) Schedule and procedures for the daily washing of baffles. Procedures exist. Parameters that are tracked and recorded to indicate compliance with this condition were provided during the prior inspection and are still being monitored.
- 5. IN COMPLIANCE. Permittee shall maintain and operate at all times according to the O&M plan for the capture system and control device. Part of the O&M plan is to inspect the capture system monthly and repair defects within 30 days. Based on the records provided for June 2016 June 2017 and reviewed on site, repairs appear to complete within 30 days and records include references to follow up work orders. Facility has implemented a system for temporarily patching holes until an outage can be taken. As such, records do not indicate as many leaks as the prior review. No issues with the ductwork were noted in 2016. In 2017, some holes were observed in January and March and there are follow up work order numbers and same issue does not appear to exist in the next month inspection. No issues with the compressed air system were noted.

6. DID NOT EVALUATE. Permittee shall implement and maintain an SSM plan. Did not evaluate this plan.

# IV DESIGN/EQUIPMENT

1. IN COMPLIANCE. Documentation has been previously provided to demonstrate that the bag leak detector meets the requirements in the MACT and the sensitivity and range have not been adjusted since the initial establishment. According to Ms. Harden, an alarm is generated from an instantaneous reading above the set point.

#### V. TESTING

- 1. IN COMPLIANCE. PECS baghouse stack shall be tested twice every 5 years. Testing was conducted in 2012 and 2014 and 2016. Sampling was only conducted during pushing.
- 2. IN COMPLIANCE. Permittee uses a COMS to determine compliance with opacity limits.
- 3. DID NOT EVALUATE. Sampling of TDS of the quench water based on methods for coke oven quench towers in 63.7325. Did not evaluate at this time whether all parts of the methodology are being followed.

#### VI. MONITORING/RECORDKEEPING

- 1a. IN COMPLIANCE. Documentation was previously provided to demonstrate that the bag leak detector meets the requirements in the MACT and the sensitivity and range have not been adjusted since the initial establishment.
- 1b. IN COMPLIANCE. The required PECS baghouse monitoring pressure drop, dust removal, compressed air supply, bag cleaning mechanism, quarterly visual inspection of interior, quarterly fan inspections is being conducted as documented in the inspection records reviewed on site.
- 2. IN COMPLIANCE. Permittee shall monitor and collect data for combustion stack opacity, PECS stack bag leak detection readings, and PECS baghouse fan amps to demonstrate continuous compliance. All parameters listed are continuously monitored and recorded.
- 3. IN COMPLIANCE. Daily average opacity has not exceeded 15% as determined by the COMS. This is reported quarterly in the EER.
- 4. IN COMPLIANCE. TDS content is below 1100 mg/l as determined by the sampling results provided. Also, the TDS content is determined weekly per the records.
- 5. a.1 IN COMPLIANCE. 4 pushes a day are being read and every oven has been read once every 90 days.
- b. Records of work practice standards for soaking. IN COMPLIANCE related to training of workers and procedures for dampering off ovens. Did not evaluate whether facility has documentation related to soaking emissions events.
- c. IN COMPLIANCE. See other identical condition regarding the quench tower.
- 6. IN COMPLIANCE. For 6.a and b.ii, part of the O&M plan is to inspect the capture system monthly and repair defects within 30 days. Based on the records provided, repairs appear to be completed within 30 days if there is a potential to affect the capture and/or control. For the remainder of this condition, records of corrective actions for a BLD alarm were provided and appear sufficient (see attached), baghouse conditions related to 63.7331(a)(1) -(8) were provided during the inspection. Current O&M plans are maintained and available per condition d. I did not request copies of prior plans at this time. For the BLD alarms from June 2016 June 2017, all but two of the incidents appears to have been corrected within 24 hours. The regulation requires that corrective action be initiated within 24 hours and completed as soon as practicable. For the two incidents, the 6/20/16 alarm was resolved on 6/22 and the 9/29/16 alarm was resolved on 10/13. This timeframe appears reasonable. I will inform facility that recordkeeping needs to be enhanced to demonstrate that corrective action was started within 24 hours. (attached #11)
- 7. IN COMPLIANCE. Based on a spot check of records during the inspection, it appears that the permittee is maintaining the required records. Permittee must maintain compliance records.

# VII.REPORTING

- 1. IN COMPLIANCE. From the time period of June 2016-June 2017, 5C reports appear to contain the required information.
- 2. DID NOT EVALAUTE. Did not review all notifications that have been submitted for MACT 5C at this time.

#### **EUCOKE-BYPRODUCT**

DESCRIPTION: The by-products plant includes the exhausters that draw the gases off the No. 5 coke oven battery and all the process vessels required to separate the phenols, tars, light oils, and ammonia from the coke oven gas. This occurs by passing the gas and fluids through a series of process decanters, condensers, heat exchangers, and stills. The by-products plant also includes storage tanks, and light oil loading operations.

Flexible Group ID: FGNESHAPL, V,&FF

POLLUTION CONTROL EQUIPMENT: Nitrogen gas blanketing system

- I. EMISSION LIMITS NA
- II. MATERIAL LIMITS NA
- III. PROCESS/OPERATIONAL RESTRICTIONS
- 1. IN COMPLIANCE. The permittee shall not vent raw coke oven gas that has not been processed in EUCOKE-BYPRODUCT to the COG flare. At this time, AQD is not aware of any situation where raw COG could go the flare without passing through the byproducts plant. This situation has not been reported either.
- IV. DESIGN/EQUIPMENT PARAMETERS NA
- V. TESTING/SAMPLING
- 1. IN COMPLIANCE.

The permittee shall monitor for benzene leaks from the by-products plant equipment using Method 21 or other methods as approved by the AQD District Supervisor. The frequency of leak testing is as follows:

- a. Monthly for pump seals
- b. Quarterly for flanges, valves and exhausters
- c. Semi-annually for blanketing systems
- d. Annually for difficult to monitor equipment
- e. The frequency of leak tests as required by 40 CFR 61, Subpart V shall prevail over the above indicated frequency if lesser.

The permittee must submit any request for a change in the sampling frequency and methods to the AQD District Supervisor for review and approval.

Reports are submitted semiannually and activities appear to meet the required monitoring frequency from the time period of June 2016 - June 2017.

- VI. MONITORING/RECORDKEEPING NA
- VII. REPORTING NA
- VIII. STACK/VENT RESTRICTIONS NA

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IX. OTHER REQUIREMENTS - Evaluated below in FGNESHAP L, V, and FF

FGNESHAPL, V. &FF

DESCRIPTION: The provisions of Subpart L apply to coke by-product recovery plants: tar decanters, tar storage tanks, tar-intercepting sumps, flushing-liquor circulation tanks, light-oil sumps, light-oil condensers, light-oil decanters, wash-oil decanters, wash-oil circulation tanks, final coolers, final-cooler cooling towers, and the following equipment that are intended to operate in benzene service: pumps, valves, exhausters, pressure relief devices, sampling connection systems, open-ended valves or lines, flanges or other connectors, and control devices or systems. The provisions of Subpart V apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service:

pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices. The provisions of Subpart FF apply to coke by-product recovery plants because the waste stream is benzene-containing.

**Emission Units: EUCOKE-BYPRODUCT** 

POLLUTION CONTROL EQUIPMENT: Nitrogen gas blanketing system

- I. EMISSION LIMITS NA
- II. MATERIAL LIMITS NA
- III. PROCESS/OPERATIONAL RESTRICTIONS
- IN COMPLIANCE. Company submits quarterly and semi-annual reports indicating compliance with the conditions in this section. Some shortcomings of the LDAR program, such as some missed weekly visual inspections of the pumps and incorrect calibration gas and concentration of the gas were the subject of an EPA CD. Note, AQD also cited the facility for some of these issues in 2013.
- IV. DESIGN/EQUIPMENT PARAMETERS DID NOT EVAULATE at this time.
- V. TESTING/SAMPLING IN COMPLIANCE.
- The permittee shall comply with the test methods and procedures requirements set forth in §
  61.245. Monitoring shall comply with Method 21 utilizing calibrated instrumentation, and employing
  the techniques described in § 61.245(b) and (c).

Method 21 was the subject of a recent CD between EES and EPA due to some shortcomings of the LDAR program, such as some missed weekly visual inspections of the pumps and incorrect calibration gas and concentration of the gas specified in Method 21 were the subject of an EPA CD. Note, AQD also cited the facility for some of these issues in 2013. At this time, facility is adhering to the methodology.

- VI. <u>MONITORING/RECORDKEEPING</u> Records outlined in Conditions 1-4 are maintained and provided semi annually. See attached records for information regarding Condition 2. For Conditions 5, 6, and 7, an updated TAB was submitted to AQD last year and is in the facility file. Calculation of the TAB was part of a recent CD with EPA.
- 1. The permittee shall monitor each exhauster quarterly to detect leaks by Method 21.
- 2. The permittee shall record and keep in a readily accessible location information pertaining to the design of the control equipment (including schematics, design specifications, and information regarding changes in the design specifications) installed to comply with § 61.132 through § 61.134.
- 3. The permittee shall record and maintain the following information regarding the semi-annual monitoring of the gas blanketing system:
  - a. The date of the inspection and the name of the inspector.
  - b. A brief description of each visible defect.
  - c. The presence of any leaks including the date of attempted and actual repair and method of repair of the leak.
  - d. Brief description of system abnormalities found.
- 4. The permittee shall maintain records including information regarding equipment leaks, equipment identification numbers for all equipment in benzene service, a list of difficult to monitor valves, and information regarding any exemptions. Such records shall be maintained in a readily accessible location and be readily available to AQD upon request.
- 5. The permittee shall determine the Total Annual Benzene (TAB) quantity in accordance with 40 CFR 61, Subpart FF, § 61.355(a)(1), (a)(2), (a)(6), (b), and (c).
- 6. The permittee shall comply with the recordkeeping requirements of § 61.356 and reporting requirements of § 61.357. The permittee shall repeat the determination of TAB quantity whenever there is a change in the process generating the waste that could cause the TAB to increase to 1 Mg/yr or more.
- 7. The permittee shall maintain in a readily available location for a period not less than 2 years, records regarding benzene waste streams subject to Subpart FF that include the information required by § 61.356(b).

VII. REPORTING - Required reports in Conditions 1-3 have been maintained and provided to AQD. Condition 4 is not applicable because the facility has not requested alternate monitoring. Regarding condition 5, an updated TAB was provided to AQD last year. See facility file.

# VIII. STACK/VENT RESTRICTIONS NA

IX. OTHER REQUIREMENTS - DID NOT EVAULATE AT THIS TIME.

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APPENDIX B - Continuous Opacity Monitoring System (COMS) Requirements

IN COMPLIANCE. Annual audits of the COMS have been completed in a timely manner and reports have been submitted for review. Quarterly EER's are being submitted with the required information and on time. Monitoring plan was submitted to TPU for review.

APPENDIX C - NO<sub>x</sub>, SO<sub>2</sub>, CO, CO<sub>2</sub>/O<sub>2</sub> - Continuous Emission Monitoring System and Continuous Emission Rate Monitoring System (CEMS/CERMS) Requirements

IN COMPLIANCE with Conditions 2-7. The CERMS monitoring plans have been submitted and reviewed by TPU. The initial plan was submitted on July 27, 2009. An updated plan was submitted on April 13, 2015 as required by the Consent Order 57-2014. Quarterly reports have been submitted and contain the required information. TPU staff has determine the CERMS to be compliant with the required performance specifications. However, there is still an outstanding issue related to the fuel flow monitoring plan (Condition #1 below). It has not been approved. Awaiting further justification from EES on why the COG BTU value should be fixed at 500 BTU/scf.

# PENDING for Condition 1.

1. Within 30 calendar days after permit issuance, the permittee shall submit two copies of a Fuel Flow Monitoring Plan to the AQD for review and approval. The Fuel Flow Monitoring Plan shall include fuel flow metering methodology and data to support a default COG heating value (Btu/scf). NOTE: While plan was submitted, it is not yet approved. AQD is awaiting additional justification to

support the COG default value.

#### COMPLIANCE DETERMINATION

At this time of the inspection, EES Coke is not in compliance with all of the conditions evaluated above as there are ongoing issues with CERMS downtime and one exceedance of the SO2 3-hour average limit in the 2<sup>nd</sup> guarter of 2017. A violation notice will be issued.

DATE 9/17 SUPERVISOR\_