



INSPECTION REPORT

Commonwealth of Pennsylvania
Department of Environmental Protection
Air Quality Program

Date(s) of Inspection: 9/18/17	TV <input checked="" type="checkbox"/> SM <input type="checkbox"/> NM <input type="checkbox"/>	PA <input type="checkbox"/> GP <input type="checkbox"/> MEGA <input type="checkbox"/>	Permit #(s): 25-00029	Expiration Date: 28 Feb 2018	Case #: 25-000-00029	PF ID #: 50751
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Company Name: Erie Coke	Municipality: Erie City	County: Erie
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Plant Name: Erie Coke	Physical Location: 92 E Bay Drive	Federal ID - Plant Code #: 25-1547051-7
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Responsible Official: Tony Markout	Mailing Address: PO Box 6180
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Title: Plant Superintendent	Erie PA 16512-6180
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Phone #(s): 814-454-0177

Mark (X) All Inspection Types That Apply To This Inspection:

<input checked="" type="checkbox"/> Full Compliance Evaluation (FCE)	<input type="checkbox"/> Plan Approval Inspection	<input type="checkbox"/> File Review (FR)
<input type="checkbox"/> Operating Permit Inspection (PI)	<input type="checkbox"/> Initial Permit Inspection (IPI)	<input type="checkbox"/> Complaint Inspection (CI)
<input type="checkbox"/> Routine/Partial (RTPT)	<input type="checkbox"/> Follow-Up Inspection (Ref. Date: _____)	<input type="checkbox"/> Sample Collection (SC)
<input type="checkbox"/> Minor Source(s) Inspection (RFD)	<input type="checkbox"/> Stack Test Observation	<input type="checkbox"/> Multi-Media Inspection (MM)
<input type="checkbox"/> Other:	<input type="checkbox"/> Announced	

Annual Compliance Certification Received: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Date Received:
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AIMS Report Received: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	Date Received:
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Mark (X) All Activities That Apply:

<input checked="" type="checkbox"/> File Review	<input checked="" type="checkbox"/> Pre-Inspection Briefing	<input checked="" type="checkbox"/> Exit Interview/Briefing
<input type="checkbox"/> Pre-Inspection Observations	<input checked="" type="checkbox"/> Check For New/Unreported Sources	<input type="checkbox"/> Sample(s) Collected
<input type="checkbox"/> Visible Emissions Observations	<input type="checkbox"/> Verify Operation of CEMS	<input type="checkbox"/> Other

Comments/Recommendations: Enforcement since last FCE Yes No (If yes, attach summary)

I met with Randy Wiler from Erie Coke to complete the file review of their FCE of Erie Coke's Air Quality Permit. Attached is a checklist of their permit conditions to show compliance with the permit. Also attached are examples of their record keeping. I found no violations during this day of my inspection.

Compliance Status: <input checked="" type="checkbox"/> In <input type="checkbox"/> Out <input type="checkbox"/> Pending <input type="checkbox"/> Awaiting Co. Report	Needs a Follow-Up Inspection? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Company Representative: R.G. WILER	Title: ENV. MGR.	Signature: <i>R.G. Wiler</i>	Date: 9/28/17
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DEP Representative: Dan Brody	Title: Air Quality Specialist	Signature: <i>D. Brody</i>	Date/Time: 9/28/17
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This document is official notification that a representative of the Department of Environmental Protection, Air Quality Program, inspected the identified site. The findings of this inspection are shown above and on any attached pages, and may include violations uncovered during the inspection. Violations may also be discovered upon review of sample results or from any additional review of Department records. Notification will be forthcoming, if such violations are noted.

ERIE COKE

PF ID: 50751

Title V Permit: 25-00029

Inspection Date(s) 9/12 9/18

Background: The Erie Coke Corporation plant is situated on approximately 60 acres along the shores of Lake Erie, in Erie, Pennsylvania and produces foundry coke. The facility operates 24 hours per day, 365 days a year.

How many employees? _____ How many days a week/shifts? 7 1 3

Asbestos/demo projects since last FCE inspection dated 2016? Y N

Any change to or unlisted sources? Y N

Plans of change? Y N WEST TAIL Decanter Removal and possible replace of Discussed RFD Process

Sample taken? Y N Sample# _____ Seal # _____ Location: _____ MSDS Acquired

Recent stack test? Y N Date: _____ Method 9 Done? Y N (Attach results)

Enforcement since last inspection? Y N NOU for Method 303 Inspections

Section B. General Site Requirements:

Permit pages 8 - 17

- #002 AQ Operating permit due to expire 28Feb2018; (renewal app. Due 6 -18 mos. prior)
- #006 Inspection and entry; including access to records, ability to sample or monitor
- #016 Emission fees paid for: 2016 n Paid 27 Aug 2017
- #018-020 Reporting; sampling, testing, & monitoring; recordkeeping: reports sent to Regional office w/truth & accuracy certification; records of monitored information and supporting documentation available & kept for 5 yrs.
see attached record keeping for examples

Section C. Site Level Requirements:

Permit pages 18 - 22

- #001, 007, 014 Reasonable actions shall be taken to prevent particulate matter to become airborne from demolition & construction activities, the grading & maintenance of roads, land clearing, stockpiles, etc.
- #002 No fugitives from sources should be visible outside the property.
- #003 No malodors detected outside the property
- #004 No emissions w/opacity equal to or greater than 20% for a period of more than 3 min in one hr or equal to or greater than 60% at any time are not permitted into the outdoor atmosphere. No issues during inspection.
- #008 (a) The permittee shall conduct daily monitoring of the facility property while the facility is operating, to observe for the presence of fugitive emissions and visible emissions, in excess of conditions # 001 and # 002 above, being emitted into the outdoor atmosphere.
(b) All detected fugitive emissions and visible emissions shall be reported to the Supervisor, Manager, or Engineer. see attachment A

#001, water truck on site

**In compliance if condition is checked. Out of compliance if Circled.

Section C. Site Level Requirements (continued)

- #009 (a) The permittee shall maintain a record of the daily monitoring conducted to determine the presence of fugitive emissions and visible emissions *see attachment A*
(b) This recordkeeping shall contain a listing or notation of any and all sources of fugitive emissions or visible emissions; the cause of the fugitive or visible emissions; duration of the emission; and the corrective action taken to abate the deviation and prevent future occurrences.
- #010 Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with §§ 135.3 and 135.21 (relating to reporting; and emission statements).
- #011(c), 012 Annual emission statements and source report (AIMS) are due by March 1 for the preceding calendar year.
- #015 No person may permit air pollution as that term is defined in the APCA.
- #016 No person may permit the open burning of material in an air basin. See permit page 21 #016(c) for exceptions to this condition.
- Compliance Certification:** The permittee shall submit within thirty days of 09/30/2006 a certificate of compliance with all permit terms and conditions set forth in this Title V permit as required under condition #24 of section B of this permit, and annually thereafter.
- Compliance Schedule:** *see attachment B*
#017 The pressure drop range for the Coke Shed baghouse (control device C802A) was established between 1" and 7" w.g.
see attachments

No issues during pre inspection observations

SECTION D: SOURCE LEVEL REQUIREMENTS

- SOURCE 031: Erie City BOILER #1 60.000 mmBTU/Hr Permit page 23
FML 03/05→CU 031→STAC S031
- SOURCE 032: Erie City BOILER #2 77.200 mmBTU/Hr Permit page 25
FML 03/05→CU 032→STAC S032
- SEE SECTION E.:
- GROUP 1 - BOILERS (See below) Permit page 64
- GROUP 10 - H2S TESTING OF COG (See checklist page 8) Permit page 68
- GROUP 2 - NESHAP FOR BOILERS, SUBPART DDDDD (See checklist page 5) Permit page 69

SECTION E. GROUP 1: BOILERS

- #001 Combustion Units: shall not emit particulate matter in excess of 0.4 ppm BTU heat input, when the heat input to the unit in millions of BUTs/Hr is >2.5 but <50 **Use 55,000 lb/hr steam load for the boiler size.** (The Dept. believes the facility is in compliance with this condition because there were no emissions visible)
At maximum heat input of 60 MMBTU/hr., the particulate matter limitation is 0.36 lbs./MMBTU for Source 031, Erie City Boiler #1.
At maximum heat input of 77.2 MMBTU/hr., the particulate matter limitation is 0.32 lbs./MMBTU for Source 032, Erie City Boiler #2.
- #002 shall not emit SO2 in excess of 4 ppm Btu of heat input over a 1-hour period
(The Dept. believes the facility is in compliance with this condition because there were no emissions visible)

#003 Byproduct Coke Oven Gas

- (a) no person shall permit the emission of byproduct coke oven gas (COG) unless the gas is first burned.
- (b) shall not permit the flaring or combustion of COG which contains sulfur compounds in concentrations > 50 grains/100dscf. *see attachment C*

#004 (a) when both boilers are operating, the NOx emissions from each boiler shall not exceed;

- (1) 0.39 lbs/mmmbtu
- (2) 11.4 lbs/hr
- (3) 49.82 tons/year

- (b) the NOx emissions shall not exceed 22.8 lbs/hr. when one boiler is operating,
- (c) the quarterly NOx emissions shall not exceed 24.9 tons for both boilers based on a 3-month consecutive period. *Received*

#005 Only Natural gas or COG shall be burned as boiler fuel.

#006

conducting first week Oct 2017

- (a) shall perform an annual stack test for NOx emissions (once per calendar year).
- (b) submit the pretest protocol at least 30 days prior to the stack test.
- (c) notify the Department of the date and time of the stack test at least 2 weeks prior to the test
- (d) also test for CO at the time of the stack tests for NOx

#006(e) if after 3 consecutive annual tests, emission data shows compliance with the NOx limits the testing frequency maybe be altered as determined by the department. This alteration in testing frequency would not be applicable for any calendar year in which Erie Coke operates both boilers simultaneously.

#007 the permittee shall record each annual adjustment or tune-up on the combustion process in a permanently bound log book. This log shall contain, at a minimum, the following:

1. The date of the tuning procedure
2. The name of the service company and technicians
3. The final operating rate or load
4. The final CO and NOx emission rates
5. The final excess oxygen rate

is conducted during the company conducting the stack test. Montrose Air Quality services

#008 maintain on site the total nitrogen oxide (NOx) emissions of each boiler on a monthly basis and the corresponding quarterly (3-month) rolling totals and 12-month rolling totals. *see attachment D*

#009 calculate the SOx emissions whenever the sulfur content of the coke oven gas exceeds 3% by weight to show compliance with Condition #002, above. *see attachment C*

#010

- (a) submit quarterly NOx emission reports to the Department. *- Received*
- (b) The permittee shall submit, within 60 days after completion of the stack test, two copies of the complete test reports, including all operational parameters, to the Department for approval.

#011 compile and submit a semi-annual compliance certification report to the Department within thirty (30) days of the end of each semi-annual period for the coke oven gas testing during the preceding six (6) months.

Received

*Completed
during
see stack
test info*

#012

- (a) perform an annual adjustment or tune-up on the combustion process. This adjustment shall include, at a minimum, the following:
 1. Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
 2. Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x, and to the extent practicable minimize emissions of CO.
 3. Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- (b) the source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

*See attached records for examples
Attachment M for boiler log*

SECTION E: GROUP 2 – NESHAP FOR BOILERS

Permit page 69

**40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart DDDDD
National Emission Standards for ICI Boilers and Process Heaters: Sources are 2 Existing Boilers.
Must be in compliance with this Subpart no later than January 31, 2016.**

Ⓟ #001 For the following pollutants, the emissions must not exceed the following emission limits, except during periods of startup and shutdown And the emissions must not exceed the following output- based limits (lb per MMBtu of steam output) Using the specified sampling volume or test run duration . . .

- (a) Particulate Matter:
Emission Limit of 0.043 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr)
Output-based limit of 0.026 lb per MMBtu of steam output; (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr)
Collect a minimum of 1 dscm per run
- (b) Hydrogen Chloride:
Emission Limit of 0.0017 lb per MMBtu of heat input
Output-based limit of 0.001 lb per MMBtu of steam output
For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run
- (c) Mercury:
Emission Limit of 1.3E-05 lb per MMBtu of heat input
Output-based limit of 7.8E-06 lb per MMBtu of steam output
For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 (Incorporated by reference, see § 63.14.) collect a minimum of 2 dscm
- (d) Carbon Monoxide:
Emission Limit of 9 ppm by volume on a dry basis corrected to 3 percent oxygen
Output-based limit of 0.005 lb per MMBtu of steam output
1 hr minimum sampling time, use a span value of 20 ppmv
- (e) Dioxins/Furans:
Emission Limit of 0.08 ng/dscm (TEQ) corrected to 7 percent oxygen
Output-based limit of 3.9E-11 (TEQ) lb per MMBtu of steam output
Collect a minimum of 4 dscm per run

Ⓟ #002 Performance Testing Requirements:
Refer to regulation [76 FR 15664] for Table 5 to 40 CFR Part 63 Subpart DDDDD
For Item 5 of Table 5, refer to regulation [76 FR 15664] for Table 11 to 40 CFR Part 63 Subpart DDDDD -- Toxic Equivalency Factors for Dioxins/Furans

Ⓟ #003 Establishing Operating Limits
Refer to regulation [Federal Register Vol. 76, No. 54, pages 15695 - 15697] for Table 7 to 40 CFR Part 63 Subpart DDDDD

**In compliance if condition is checked. Out of compliance if Circled.

- #004 Demonstrate Initial Compliance: The compliance date for these 2 boilers is specified in §63.7595 to be March 21, 2014. **Initial compliance must be demonstrated no later than September 17, 2014.**
- #005, 006, 007 Performance Tests and Procedures / Fuel Analyses and Frequency
 (a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, except those for dioxin/furan emissions, unless you follow the requirements listed in paragraphs (b) through (e) of this section. Annual performance tests must be completed no more than 13 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (e) of this section. Annual performance testing for dioxin/furan emissions is not required after the initial compliance demonstration.
 See Permit pages 71- 73 for Conditions.
- #009, 010 demonstrate initial and continuous compliance with emission limits and work practice standards; see Permit page 75 – 77 for requirements.
- #011 (a) install, operate, and maintain a continuous oxygen monitor. The oxygen level shall be monitored at the outlet of the boiler or process heater.
 (d) Continuous Emission Monitor:
 CEMS for oxygen (O2CEMS) must be installed, operated, and maintained. See page 78 of the Permit for specific requirements.
- #012 (a) You must monitor and collect data according to this section. (See page 79 of the Permit.)
 (b) You must operate the monitoring system and collect data at all required intervals at all times that the affected source is operating, except for periods of monitoring system malfunctions or out of control periods.
 (c) You must use all the data collected during normal operations in assessing the operation of the control device and associated control system. (No malfunctions, calibration checks, out of control periods.)
 (d) Failure to collect required data during normal operating periods is a **deviation** of the requirements.
- #013 demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 3 to this subpart that applies to you according to the methods specified in Table 8
 (1) Operating limits must be confirmed or reestablished during performance tests.
 (2) Keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of hydrogen chloride and mercury than the applicable emission limit for each pollutant or result in lower fuel input of chlorine and mercury.
- #014 (a) (1) Keep a copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report
 (2) Keep records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations
 (b) (1) Keep records for the CMS including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that apply to you.

- #014 (d) (1) Keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.
(3) Keep records of monthly hours of operation by each boiler or process heater that meets the definition of limited-use boiler or process heater.
(4) Calculate chlorine fuel input, or hydrogen chloride emission rate, for each boiler and process heater.
(5) Keep a copy of all calculations and supporting documentation of maximum mercury fuel input.
(6) If you stack test less frequently than annually, keep annual records that document that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.
(7) Keep records of the occurrence and duration of each malfunction of the boiler or of the associated air pollution control and monitoring equipment.
(8) Keep records of actions taken during periods of malfunction to minimize emissions
(9) Keep records of the total hours per calendar year of either natural gas or COG fuel burned.
- #015 Keep records suitable for review; keep for 5 years; keep records **on site** for at least 2 years.
- #016 Submit a Compliance report semiannually.
(b) If no deviations occurred during the reporting period, a statement of such on the report.
- #017 Performance tests or fuel analyses: (g) Report the results of performance tests and the associated initial fuel analyses within 90 days after the completion of the performance tests.
- #020 Submit the Notification of Compliance Status; including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations
(1) A description of the affected units,
(2) A summary of the results of performance tests and fuel analyses,
(3) A summary of the maximum carbon monoxide emission levels recorded during the performance test,
(4) Plans to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis,
(5) Plans to demonstrate compliance by emissions averaging and demonstrate compliance by using emission credits through energy conservation,
(6) A signed certification that you have met all applicable emission limits and work practice standards.
(7) Description of any deviations, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.
(8) Notification of compliance must include:
"This facility has had an energy assessment performed according to §63.7530(e)."
"No secondary materials that are solid waste were combusted in any affected unit."
- #021 (b) (3) Submit the compliance reports for the semiannual reporting period from January 1 through June 30 or from July 1 through December 31.
(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
- #027 (b) If you have an existing boiler or process heater, you must comply with this subpart no later than 31Jan2016

SECTION E: GROUP 2 - NESHAP FOR BOILERS Subpart DDDDD (continued)

Permit page 89

#028 (3) At all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

see attachment D and steady test results
Attachment M for Boiler House maintenance

SECTION E: GROUP 10 - H2S TESTING OF COG
(Hydrogen Sulfide testing of Coke Oven Gas)

Permit page 68

#001 Perform monthly tests of the COG for H2S content and maintain records of the testing

see attachment C

SOURCE 101 PARTS CLEANER

PROC 101 -> STAC Z101

Permit page 27

#001 shall not use any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or combination of these halogenated HAPS solvents, in a total concentration greater than 5% by weight, as a cleaning and/or drying agent.

- #002 applies to cold cleaning machines that use 2 gallons or more containing > 5% VOC by weight
 - (a) (2) (i) shall have a label summarizing: (1) cleaned parts should drain for at least 15 sec or until dripping ceases. Parts shall be tipped and rotated. During draining parts shall be located over the cold cleaning machine. (2) with a pump-agitated bath, the agitator shall produce a rolling motion of solvent with no splashing of solvent against walls or parts. (3) fans shall not blow across openings of the degreaser unit
 - (a) (2) (ii) shall be equipped with a cover that is closed at all times degreaser is not in use. Degreasers with a remote reservoir shall be equipped with a perforated drain no larger than 6" in diameter
 - (3) (i) waste solvent shall be stored in closed containers with pressure reliefs
 - (iii) absorbent materials may not be cleaned in degreaser
 - (5) Seller must provide to buyer the name of solvent supplier, type of solvent, vapor pressure of solvent measured in mmHg at 20C
 - (6) Maintain records of MSDS, bill of sale, invoice to comply with this section for at least 5 years

Safety Kleen services as needed
only 1 parts cleaner that uses solvent

SOURCE 801: COKE OVEN BATTERY CHARGING OPERATIONS

Permit page 30

PROC 801 -> STAC Z801

- SEE SECTION E. GROUP 10 - H2S TESTING OF COG (See checklist page 8) Permit page 68
- SEE SECTION E. GROUP 3 - NESHAP FOR COKE OVEN BATTERIES (See below) Permit page 95
- SEE SECTION E. GROUP 4 - NESHAP VE WORK PLAN (See checklist page 10) Permit page 101
- SEE SECTION E. GROUP 5 - METHOD 303 TESTING (See checklist page 10) Permit page 106

- #001 Coke Oven Gas (COG)
 - (a) no person shall permit the emission of byproduct coke oven gas unless the gas is first burned.
 - (b) shall not permit the flaring or combustion of COG which contains sulfur compounds in concentrations > 50 grains/100dscf.
 - (a) & (b) do not apply to COG from (1) dampened oven, prior and during pushing, because of some malfunction of the oven, (2) unavoidable oven leakage during the coking cycle.

** In compliance if condition is checked. Out of compliance if Circled.

- #002 open charging emissions of 4 consecutive charges shall be ≤ 75 seconds
- #003 shall not emit coke oven emissions that exceed the emission limitation of 12 seconds of visible emissions per charge for the 30 day logarithmic rolling avg.
- #004 refers to observations of open and closed charging emissions from the topside of the battery
see daily 303 reports and attachment E for charges daily total

SECTION E. GROUP 3 - NESHAP FOR COKE OVEN BATTERIES
NESHAP for Coke Oven Batteries, 40 CFR Part 63 Subpart L

Permit page 95

- #001 Emission limitations as stated in Sources 801, 806, and 807.
- #002 (f) Recordkeeping – Maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year.
- #004 (d) Semi-annual compliance certification
- #007 (a) Inspect the collecting main for leaks at least once daily.
 (b) 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.
 (c) Temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of the leak.
 (d) The owner or operator shall initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection.
Done during 303 inspection
see daily 303 inspection reports

- #011 Requirements for Startups, Shutdowns, and Malfunctions (SSM):
 If there is a malfunction, the company must:
 - (c) Malfunctions shall be corrected as soon as practicable after their occurrence.
 - (d) In order for the provisions of paragraph (i) of this section to apply with respect to the observation (or set of observations) for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator:
 - (1) If practicable, to the certified observer if the observer is at the facility during the occurrence;
 - (2) Or to the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the notification under paragraph (d)(1) of this section was not made, an explanation of why no such notification was made.
 - (e) Within 14 days of the notification made under paragraph (d) of this section, or after a startup or shutdown, the owner or operator shall submit a written report to the applicable permitting authority that:
 - (1) Describes the time and circumstances of the startup, shutdown, or malfunction; and
 - (2) Describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.
- Operations Maintenance Plan in SSM Plan sent to the Dept in 2015 permit renewal*

SECTION E. GROUP 4 – NESHAP VE WORK PLAN

Permit page 101

#002 Work Practice Plan – The facility has one and can be found in Lynn Khalife’s supporting documentation in the AQ Fac Op File #25-00025.

SECTION E. GROUP 5 – METHOD 303 TESTING

Permit page 106

Done on a daily basis by Direct Environmental

SOURCE 802: COKE OVEN BATTERY PUSHING OPERATIONS

Permit page 33

PROC 802→CNTL C802A→STAC S802A

SEE SECTION E. GROUP 7 - NESHAP FOR COKE OVENS (See below)

Permit page 115

SEE SECTION E. GROUP 9 - COKE SHED REQUIREMENTS (See cklst. pg. 14)

Permit page 151

- #001 (a) No person may permit the pushing of coke from a coke oven unless the pushing operation is enclosed during the removal of coke from a coke oven and pushing emissions are contained, except for such fugitive pushing emissions that are allowed by subsections (c) and (e).
- (c) Visible fugitive air contaminants in excess of 20% opacity from an air cleaning device installed for the control of pushing emissions under a plan approval from the Department shall be prohibited unless the Department finds that:
 - (1) The emissions are of minor significance with respect to causing air pollution.
 - (2) The emissions will not prevent or interfere with the attainment or maintenance of any ambient air quality standard.
- (e) No person may transport hot coke in the open atmosphere during the pushing operation, unless the visible fugitive air contaminants from the coke do not exceed 10% opacity.

Controlled by Coke Shed Bag House - see attachment B

SECTION E. GROUP 7 - NESHAP FOR COKE OVENS

Permit page 115

SUBPART CCCCC - National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks (Includes Sources 802, 803, and 805)

- #001(a)(1) Cannot exceed 0.01 grain per dry standard cubic foot (gr/dscf) if a cokeside shed is used to capture emissions.
- #002(1) (i) Quenching hot coke: cannot exceed 1,100 mg/h; Attachment G
- (2) Use acceptable makeup water for quenching.
- #003 No opacity greater than: see attachment F
- (b) Daily average of 20 percent opacity for a battery on batterywide extended coking.
-The opacity is verified through the COMS report.
- #004 Conduct performance tests:
The Coke Shed was put into operation on May 25, 2012. This condition was met when the performance testing was performed on the coke shed baghouse on December 19, 2012.
- #005 Conduct performance tests for PM in accordance with the annual testing requirement of Plan Approval 25-029C Section E Group 2 Condition 001(n) on Permit Page 152. Perform 2 tests / 5 year period.
- #006 Test Methods for PM emission limit testing: Permit Pages 116 & 117

- #007 Demonstrate initial compliance with the opacity limits:
- (a) You must conduct each performance test that applies to your affected source according to the requirements in paragraph (b) of this section.
 - (b) To determine compliance with the daily average opacity limit for stacks of 20 percent for a by-product coke oven battery on batterywide extended coking, follow the test methods and procedures in paragraphs
 - (b) (1) through (3) of this section.
 - (b) (1) Using the continuous opacity monitoring system (COMS) required in §63.7330(e), measure and record the opacity of emissions from each battery stack for a 24-hour period.
 - (2) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).
 - (3) Compute and record the 24-hour (daily) average of the COMS data.

#008 TDS limit for quench water *Attachment 6*

#009 Establish an operating limit: ~~_____~~

#010 (f) (1) Maintain the TDS content of the quench water at 1,100 mg/L or less
 (2) Determine the TDS content of the quench water at least weekly *Attachment 6*

- #011 Monitoring for fugitive pushing emissions: See permit pages 119 – 121 for all conditions.
- (a) (1) Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. (Erie Coke must do this and keep records) *see attachment H*
 - (2) If two or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery.
 - (3) Observe and record the opacity of fugitive pushing emissions for at least four consecutive pushes per battery each day
 - (4) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in your pushing schedule which results in a change in the sequence of consecutive pushes observed on any day.
 - (5) If the average opacity for any individual push exceeds 30 percent opacity for any short battery, you must take corrective action and/or increase coking time for that oven.

#012 Monitoring *Attachment B*

- (a) Use a bag leak detection system for the coke oven battery baghouse
 - (1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;
 - (2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;
 - (3) Check the compressed air supply for pulse-jet baghouses each day;
 - (4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;
 - (5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;
 - (6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (knead or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using selftensioning (spring-loaded) devices;
 - (7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and
 - (8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.
- (d) For each capture system applied to pushing emissions, you must at all times monitor the volumetric flow rate, the fan motor amperes, OR the static pressure or the fan RPM.
- (e) For each by-product coke oven battery, you must monitor at all times the opacity of emissions exiting each stack using a COMS. *see attachment F*

- #013 Must maintain a bag leak detection system: *2 alarms - baghouse control room and supervisor's office*
 - (a)(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;
 - (2) The system must provide output of relative changes in particulate matter loadings;
 - (3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;
 - (4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). You may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;
- (b) Install a CPMS sampling probe. See permit page 123 for the conditions.
- (j) Continuous Opacity Monitoring System (COMS) *see attachment F*

- #015 Demonstrate continuous compliance by meeting requirements listed on permit page 124 for one of the following:
 - (d) (1) Volumetric Flow Rate; OR *see attachment B*
~~(2) Fan Motor Amperes; OR~~
 (3) Static Pressure or Fan RPM
 - (e) Demonstrate continuous compliance with the opacity limit by
 - (1) Maintaining the daily average opacity at or below 20 percent for a battery on batterywide extended coking; and
 - (2) Operating and maintaining COMS and collecting and reducing the COMS data. *See attachment F*

#018, 019 Recordkeeping *attachment B*
 See permit page 128 - 130 for conditions #020, #021, #022, #023, #024, #025 for Subpart CCCCC.

- #026 Reporting requirements:
 - (a) (1) Quarterly compliance reports *Received*
 - (2) Semi-annual compliance report
 - (3) Quarterly reports due no later than 1 month following the end of the quarter
- (c) Semi-annual compliance report contents (Deviation Report): company name; certification of truth & accuracy, reporting period dates, any malfunctions, any deviations and statement of such, COMS down time, total operating time of each source, see permit page 131 and 132 for all report requirements.

#030 Work Practice Plan for soaking: see permit page 135. *Refer to EC WPP on file*

#031(b)(2) Do maintenance on the Quench Tower Baffles. *see attachment I*
 Wash the coke quench tower baffles: *Everyday washed except when below 30°F*

See permit pages 136 - 139 for Condition #032, #033, #034, #035, #036, #037, #038, #039.

Good working order conditions met during Standard Operating Procedures in accordance with their WPP and SSM plans

#001(a) Conduct a stack test at the outlet of the Coke Side Shed Baghouse (C802A) for PM
see ER Coke File

See permit pages 151 – 152 for all testing requirements of (b) through (m).

(n) A stack test shall be performed on an annual basis, in accordance with the provisions of Chapter 139. The stack test shall be performed while the aforementioned source is operating at the maximum or normal rated capacity as stated on the application. The stack test shall be conducted for PM, PM10 and PM2.5, including condensable particulate matter, at the outlet of the Coke Side Shed Baghouse (C802A). The testing shall be conducted in accordance with parts (a)-(m), see permit pages 151 – 152.

#002 Establish a pressure drop operating range for the Coke Side Shed Baghouse.
1-7

SOURCE 803: COKE QUENCHING OPERATIONS

Permit page 34

PROC 803 → STAC Z803

#001 The source shall be maintained and operated in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

SOURCE 804: COAL UNLOADING

Permit page 36

PROC 804 → STAC Z804

#001 The source shall be maintained and operated in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

SOURCE 805: COKE OVEN BATTERY UNDERFIRING SYSTEM

Permit page 37

FML03 → PROC 805 → CNTL C805A → STAC S805A

#001 (a) applies to coke oven battery waste heat stacks:
(1) Particulate matter emissions exceed .04 grain per dry standard cubic feet (gdscf) when the effluent gas volume is less than 150,000 dry standard cubic feet (dscf) per minute.

#002 (a) No person may permit the emission of byproduct coke oven gas into the outdoor atmosphere unless the gas is first burned.
(b) No person may permit the flaring or combustion of a coke oven byproduct gas which contains sulfur compounds, expressed as equivalent hydrogen sulfide, in concentrations greater than 50 grains per 100 dry standard cubic feet.
(c) Subsections (a) and (b) do not apply to emissions of coke oven gas from:
(1) An oven which is dampered off (i) Prior to and during the pushing operation of the oven.
(ii) Because of some malfunction associated with the oven.
(2) Unavoidable oven leakage occurring during the coking cycle.

#003, 004 NOx emissions from the Battery Underfire Operation System shall not exceed the following:

- (1) 19.9 lbs/hr
- (2) 87.16 tpy based on a 12-month consecutive period
- (3) 21.8 tons/quarter

#005 Compliance Assurance Monitoring (CAM) requirements:

- (a) The permittee shall maintain a manometer or similar device to measure the pressure drop across the control device. The manometer or similar device shall be mounted in an accessible area and maintained in good operating conditions at all times.
- (b) The permittee shall maintain a rotometer or similar device to monitor the liquid flow rate of the scrubber. The flow gauge or similar device shall be mounted in an accessible area and maintained in good operating conditions at all times.
- (c) The permittee shall conduct daily observations of the pressure drop and of the liquid flow rate of the scrubber.

#006 more (CAM) requirements:

- (a) The permittee shall record the following operational data from the control device (these records may be done with strip charts recorders, data acquisition systems, or manual log entries):
 - (i) Pressure drop of the scrubber at least once daily; and
 - (ii) Liquid flow rate of the scrubber at least once daily.
- (b) The permittee shall record all excursions and corrective actions taken in response to an excursion and the time elapsed until the corrective actions have been taken.
- (c) The permittee shall maintain records of all monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable). The permittee shall also record the dates, times and durations, probable causes and corrective actions taken for the incidents.
- (d) The permittee shall record all inspections, repairs, and maintenance performed on the monitoring equipment.
- (e) All required records shall be kept for a period of 5 years and shall be made available to the Department upon request.

- #007
- (a) Maintain monthly records of the NOx emissions. The emissions shall be determined by emission results from the most recent stack test performed and operating hours.
 - (b) Maintain onsite a record of the NOx emissions of the Coke Oven Battery underfire based on 12-month rolling totals.
 - (c) Maintain a record of the daily pressure drop and liquid flow rate readings of the scrubber.
 - (d) Maintain a record of all preventive maintenance inspections of the control device. The records of the maintenance inspections shall include, at a minimum, the dates of the inspections, any problems or defects identified, any actions taken to correct the problems or defects, and any routine maintenance performed.
 - (e) Maintain a record of the results of the testing that is required by this permit.

- #008
- (a) Submit quarterly NOx emission reports to the Department.
 - (b) Submit, within 60 days after completion of the stack test, two copies of the complete test reports, including all operational parameters, to the Department for approval.

#009 More CAM requirements:

- (a) The permittee shall report all excursions and corrective actions taken, the dates, times, durations and probable causes, every 6 months.
- (b) The permittee shall report all monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable), their dates, times and durations, probable causes and corrective actions taken, every 6 months.
- (c) The permittee shall report the following information to the Department every 6 months:
 - 1. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - 2. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable)
 - 3. A description of the actions taken to implement a quality improvement plan (QIP) during the semi-annual reporting period. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

#010 The source shall be operated and maintained in accordance with:

- 1. Good heating practices
- 2. The manufacturer's specifications
- 3. Good air pollution control practices

#011 More CAM requirements:

- (a) The permittee shall develop and implement a Quality Improvement Plan (QIP) as expeditiously as practicable if any of the following occur:
 - 1. Six (6) excursions occur in a 6-month reporting period.
 - 2. The Department determines after review of all reported information that the permittee has not responded acceptably to an excursion.
- (SEE PERMIT PAGE 40 & 41 FOR QIP REQUIREMENTS)

#012 More CAM requirements:

- (a) Pressure drop was determined to be at an optimum operating setting between 1" to 7" w.g.
- (b) Scrubber inlet liquid flow rate should be 50R.
- (c) QA/QC practices that are adequate to ensure continuing validity of data and proper performance of the control devices.
 - 1. Install detectors or sensors at a Department approved location for obtaining data that is representative of the monitored indicator.
 - 2. Develop verification procedures to confirm that the operational status of the monitoring devices is within the expected range.
 - 3. **Annually calibrate** and check the accuracy of the monitoring equipment according to the manufacturer's recommended procedures.
- (d) Maintain all monitoring equipment and stock spare parts as necessary for routine onsite repairs.
- (e) Ensure that at least 90% of the approved monitoring data has been properly and accurately collected.
- (f) Submit an implementation plan and schedule if the approved monitoring requires the installation, testing or other necessary activities. The schedule for completing installation and beginning operation of the monitoring may not exceed 180 days after startup of source.

#013 Scrubber Operational Requirements for Control Device C805A:

- (a) The permittee shall operate the control device at all times that the source is in operation.
- (b) The permittee shall conduct a weekly preventive maintenance inspection of the control device.

#014 Stack (S805A) Emission Observation Work Practices:

(a) Upon observing visible emissions from the Coke Oven Battery Stack (S805A), the permittee shall perform the following actions:

- (1) Record the date and time of the visible emission observation and the results of all subsequent investigations and corrective actions on the Stack Emission Observation form.
- (2) Investigate the cause of the visible emission and identify the coke oven believed to be the source of any observed visible emission from the Coke Oven Battery Stack. This investigation must include a visible observation and determination of the operational condition of the coke oven believed to be the source of the visible emissions prior to the next charge of that oven.
- (3) Identify any needed repairs and/or maintenance activities needed to a coke oven identified under paragraph (a)(2), above, prior to the next charge of the coke oven. These repairs shall include, but not be limited to: spray patching, Guniting, ceramic welding, dusting, and/or jamb repairs.

(b) The permittee shall prioritize, promptly schedule and perform all coke oven repairs and/or maintenance activities recommended under paragraph (a)(3), above. *If any of the repairs identified in paragraph (a)(3) cannot be completed within five (5) days of the initial determination that a repair is needed, the permittee will immediately notify the Department of the delayed repair, the reason for the delayed repair, and the planned date by which the repair will be completed.*

See attachment F for examples of stack monitoring

SOURCE 806: COKE OVEN BATTERY OVEN / DOOR LEAKS

Permit page 45

PROC 806 → CNL C802A → STAC S802A

SECTION E. GROUP 3 - NESHAP FOR COKE OVEN BATTERIES

(See cklst pg. 9)

Permit page 95

SECTION E. GROUP 4 - NESHAP VE WORK PLAN (See checklist page 10)

Permit page 101

SECTION E. GROUP 5 - METHOD 303 TESTING (See checklist page 10)

Permit page 106

SECTION E. GROUP 6 - COKE SHED ALT STD (See checklist page 20)

Permit page 110

SECTION E. GROUP 9 - COKE SHED REQUIREMENTS (See cklst. pg. 14)

Permit page 151

#001 Byproduct coke oven gas (COG)

(a) No person shall permit the emission of byproduct coke oven gas unless the gas is first burned.

(c) (a) does not apply to COG from:

- (1) An oven which is dampered off:
 - (i) Prior to and during pushing of an oven,
 - (ii) Because of some malfunction of the oven,
- (2) Unavoidable oven leakage during the coking cycle.

#002 Visible fugitive air contaminants *See attachment H*

(a) No person may permit the operation of a coke oven battery in such a manner that visible fugitive air contaminants are emitted in excess of the emissions allowed by the following limitations:

- (2) At no time may door area emissions from any coke oven exceed 40% opacity 15 minutes or longer after the last charge to that oven.
- (3) At no time shall there be any visible door area emissions from more than 10% of the door area of operating coke ovens, excluding the two-door area representing the last oven charged on any battery and any door areas obstructed from view.

#003(a)(3)(i) Cannot allow coke oven emissions to be discharged to the atmosphere from each affected existing byproduct coke oven battery that exceed 4.0 percent leaking coke oven doors for each by-product coke oven battery owned or operated by a foundry coke producer. *See 303 Reports*

#004 Limitations of visible fugitive air contaminants from operation of any coke oven battery
The measuring and recording techniques based on 25 Pa Code §123.44 are on permit pages 46 & 47.

#005 Coke Shed Inspection techniques: When batteries have sheds to control emissions, conduct the inspection from outside the shed unless the doors cannot be adequately viewed. In this case, conduct the inspection from the bench. Be aware of special safety considerations.

WORK PRACTICE REQUIREMENTS.

Permit page 47

#006 The source shall be operated and maintained in accordance with good air pollution control practices.

#007 Door maintenance, adjustment and replacement practices: *All SOP*

(1) Implement the following work practices in the event of a coke oven battery failure:

(ii) Luted doors. Work practices for luted doors shall conform to the following:

- (A) Luted doors leaking 15 minutes after the charge shall be immediately reluted.
- (B) Doors which fail to seal after the first reluting shall be recorded.
- (C) Leaks appearing after the first reluting shall be immediately reluted.

(iii) Chuck doors. Work practices for chuck doors shall conform to the following:

- (A) Within 1 hour after the charge of each oven, the chuck door shall be inspected, and any door found leaking shall be recorded.
- (B) Chuck doors leaking 1 hour after the charge shall be gasketed prior to the next charge to that oven.
- (C) If a freshly gasketed door is leaking 1 hour after the charge, it or the oven door shall be replaced prior to the next charge to that oven.

(iv) Cleaning. Doors and jambs shall be completely cleaned prior to each charge.

(2) Keep and maintain records of the inspections required by paragraph (1), including the names of inspectors, the date and time of each door inspection and ovens observed leaking.

(3) Within 90 days following a determination by the Department or the battery operator that this section is applicable, the person responsible for the operation of a coke oven battery shall submit to the Department for approval a **work practice and maintenance manual** which shall include, but not be limited to, the job titles of persons having responsibility for the various tasks required by paragraph (1), specify procedures to be followed to assure implementation of the requirements of paragraph (1), and state the numbers of replacement doors and jambs to be kept on site for each battery.

see 303 reports, Attachments A, B, E and H

SECTION E. GROUP 6: COKE SHED ALT STD

The company has to apply and receive approval for an alternate standard for coke oven doors that equipped with coke sheds. Therefore, this NESHAP, 40 CFR Part 63 Subpart L §63.305 is being eliminated from this checklist.

SOURCE 807: COKE OVEN BATTERY TOPSIDE LEAKS

Permit page 49

PROC 807 → STAC Z807

SEE GROUP 3 - NESHAP FOR COKE OVEN BATTERIES (See cklst. pg. 9)

Permit page 95

SEE GROUP 4 - NESHAP VE WORK PLAN (See checklist page 10)

Permit page 101

SEE GROUP 5 - METHOD 303 TESTING (See checklist page 10)

Permit page 106

#001 (a) No person may permit the emission of byproduct coke oven gas into the outdoor atmosphere unless the gas is first burned.

(c) Subsection (a) does not apply to emissions of coke oven gas from:

(1) An oven which is dampered off:

- (i) Prior to and during the pushing operation of the oven.
- (ii) Because of some malfunction associated with the oven.

(2) Unavoidable oven leakage occurring during the coking cycle.

- #002 (a) No person may permit the operation of a coke oven battery in such a manner that visible fugitive air contaminants are emitted in excess of the emissions allowed by the following limitations:
- (4) At no time may there be visible topside emissions from more than 2.0% of the charging port seals on operating coke ovens in any battery, excluding visible emissions from no more than three ovens which may be dampered off.
 - (5) At no time may there be topside emissions from more than 5.0% of the offtake piping on operating coke ovens in any battery, excluding visible emissions from open standpipe caps on no more than three ovens which may be dampered off.
 - (6) At no time shall there be topside emissions from any point on the topside other than allowed emissions from charging port seals and offtake piping under paragraphs (4) and (5).
 - (7) At no time may there be any visible emissions from the coke oven gas collector main.

- #003 Subpart L--National Emission Standards for Coke Oven Batteries
- (a) No owner or operator shall cause to be discharged or allow to be discharged to the atmosphere, coke oven emissions from each affected existing byproduct coke oven battery that exceed any of the following emission limitations or requirements:
- (iii) 0.4 percent leaking topside port lids;
 - (iv) 2.5 percent leaking offtake system(s)

- #004 Limitations of visible fugitive air contaminants from operation of any coke oven battery:
- (b) (4) Observations of visible emissions from a coke oven topside - See permit page 50 & 51 for the formula used to calculate these emissions.

- #005 The source shall be operated and maintained in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

see daily 303 reports and attachments A, B, E, and H

SOURCE 808: COKE DUMPING, SCREENING, & LOADING INTO TRUCKS

Permit page 52

PROC 808→CNTL C808→STAC Z808

- #001 Maintain a record of all preventative maintenance inspections of the Foam Dust Suppression System. These records shall, at a minimum, contain the dates of the inspections, the name of the inspector, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.
- #002 Maintain a set of sprays at the screening stations and shall operate the sprays as necessary to achieve compliance with 25 Pa. Code 123.1.
- #003 (a) The permittee shall perform a weekly preventative maintenance inspection of the foam dust suppression system.
- (b) The permittee shall maintain and operate the source and control device in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

see attachment J and A

SOURCE 809: COKE OVEN BATTERY EMERGENCY FLARES

Permit page 54

FML03→PROC 809→STAC Z809

SEE SECTION E. GROUP 3 - NESHAP FOR COKE OVEN BATTERIES (See checklist page 9)

Permit page 95

- #001 Byproduct coke oven gas (COG)
- (a) No person may permit the emission of byproduct coke oven gas into the outdoor atmosphere unless the gas is first burned.
 - (b) No person may permit the flaring or combustion of a coke oven byproduct gas which contains sulfur compounds, expressed as equivalent hydrogen sulfide, in concentrations greater than 50 grains per 100 dry standard cubic feet. The sulfur compounds, expressed as equivalent hydrogen sulfide, emitted into the outdoor atmosphere from any tail gas sulfur recovery equipment utilized in a coke oven gas desulfurization system approved by the Department shall be included in the determination of these concentrations.
 - (c) Subsections (a) and (b) do not apply to emissions of coke oven gas from:
 - (1) An oven which is dampered off:
 - (i) Prior to and during the pushing operation of the oven.
 - (ii) Because of some malfunction associated with the oven.
 - (2) Unavoidable oven leakage occurring during the coking cycle.
- #002 Subpart L Standards for bypass/bleeder stacks:
- (c) Each flare installed to meet the requirements of this section shall be operated with no visible emissions, as determined by the methods specified in 63.309(h)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- #003 Subpart L Performance tests and procedures
- (h) For a flare installed to meet the requirements of §63.307(b):
 - (1) Compliance with the provisions in §63.307(c) (visible emissions from flares) shall be determined using Method 22 in appendix A to part 60 of this chapter, with an observation period of 2 hours; and
 - (2) Compliance with the provisions in §63.307(b)(4) (flare pilot light) shall be determined using a thermocouple or any other equivalent device.
 - (i) No observations obtained during any program for training or for certifying observers under this subpart shall be used to determine compliance with the requirements of this subpart or any other federally enforceable standard.
- #004 The permittee shall operate this source at all times that the coke oven battery is operational.
- see attachments A and C, K*

- #005 Subpart L Standards for bypass/bleeder stacks:
- (a) (1) Install a bypass/bleeder stack flare system that is capable of controlling 120 percent of the normal gas flow generated by the battery, which shall thereafter be operated and maintained.
 - (2) Coke oven emissions shall not be vented to the atmosphere through bypass/bleeder stacks, except through the flare system or the alternative control device as described in paragraph (d) of this section.
 - (b) Each flare installed pursuant to this section shall meet the following requirements:
 - (1) Each flare shall be designed for a net heating value of 8.9 MJ/scm (240 Btu/scf) if a flare is steam-assisted or air assisted, or a net value of 7.45 MJ/scm (200 Btu/scf) if the flare is non-assisted.
 - (2) Each flare shall have either a continuously operable pilot flame or an electronic igniter that meets the requirements of paragraphs (b)(3) and (b)(4) of this section.
 - (3) Each electronic igniter shall meet the following requirements:
 - (i) - (iv) Erie Coke does not have electronic igniters.
 - (4) Each flare installed shall be operated with a pilot flame present at all times
 - (d) As an alternative to the installation, operation, and maintenance of a flare system as required in paragraph (a) of this section, the owner or operator may petition the Administrator for approval of an alternative control device or system that achieves at least 98 percent destruction or control of coke oven emissions vented to the alternative control device or system.
 - (f) Any emissions resulting from the installation of flares (or other pollution control devices or systems approved pursuant to paragraph (d) of this section) shall not be used in making new source review determinations under part C and part D of title I of the Act.

see attachments C and A, K

SOURCE 901: TAR DECANTERS (2): BY-PRODUCT RECOVERY	Permit page 57
PROC 901→CNTL C805A→STAC S805A	
→CNTL C805B→STAC Z901	
SOURCE 902: TAR DEHYDRATORS (2): BY-PRODUCT RECOVERY	Permit page 58
PROC 902→CNTL C805A→STAC S805A	
→CNTL C805B→STAC Z902	
SOURCE 903: TAR STORAGE TANK: BY-PRODUCT RECOVERY	Permit page 59
PROC 903→CNTL C805A→STAC S805A	
→CNTL C805B→STAC Z903	
SOURCE 904: WEAK LIQUOR CIRCULATION TANK: BY-PROD RCVR	Permit page 60
PROC 904→CNTL C805A→STAC S805A	
→CNTL C805B→STAC Z904	
SOURCE 905 : EXHAUSTERS BY-PRODUCT RECOVERY (3)	Permit page 61
PROC 905→CNTL C805A→STAC S805A	
→CNTL C805B→STAC Z905	
SOURCE 908: HOT DRAIN TANK	Permit page 63
PROC 908→STAC Z908	

There are no Source Level Requirements for Sources 902, 903, 904, 905, and 908 other than Group 8 Restrictions for By-Product Recovery in Section E.

SECTION E. GROUP 8 - BY-PRODUCT RECOVERY

Includes sources 901, 902, 903, 904, 905, & 908

X #001 (b) To determine whether or not a piece of equipment is in benzene service, the methods in 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight

f #002 Subpart V Equipment Leaks (fugitive emissions) Test methods & procedures:
(b) (1) Monitoring shall comply with Method 21
(3) The instrument shall be calibrated before use on each day of its use
(4) Calibration gases shall be:
(i) Zero air (less than 10 ppm of hydrocarbon in air); and
(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
(5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible
(c) When equipment is tested for compliance with or monitored for no detectable emissions, the owner or operator shall comply with the following requirements: follow Method 21
(4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

A #003 Equipment Leaks:
(c) Each piece of equipment in benzene service to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.
(d) Each exhauster shall be monitored quarterly to detect leaks
(1) **If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.**
(2) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(g) Any exhauster that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (d) of this section if the exhauster:
(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background
(2) Is tested for compliance with paragraph (g)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

A #004 Alternative means of emission limitation.
(d) (2) When the Administrator evaluates requests for permission to use alternative means of emission limitation for sources subject to §§ 61.132 and 61.133 (except tar decanters) the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 98 percent. For tar decanters, the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 95 percent.

Equipment leaks see Aug 2017 LDAR Report Attachment L

- #005 Alternative standards for valves in VHAP service - **allowable percentage of valves leaking**
- (a) An owner or operator may elect to have all valves within a process unit to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
 - (b) The following requirements shall be met if an owner or operator decides to comply with an allowable percentage of valves leaking:
 - (1) An owner or operator must notify the Administrator that the owner or operator has elected to have all valves within a process unit to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in § 61.247(d).
 - (2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.
 - (3) If a valve leak is detected, it shall be repaired in accordance with § 61.242-7(d) and (e).
 - (c) Performance tests shall be conducted in the following manner:
 - (1) All valves in VHAP service within the process unit shall be monitored within 1 week by the methods specified in § 61.245(b).
 - (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (3) The leak percentage shall be determined by dividing the number of valves in VHAP service for which leaks are detected by the number of valves in VHAP service within the process unit.
 - (d) Owner or operators who elect to have all valves comply with this alternative standard shall not have a process unit with a leak percentage greater than 2.0 percent.

- #006 Alternative standards for valves in VHAP service--**skip period leak detection and repair.**
- (b) (2) After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in VHAP service.
 - (3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in VHAP service.

- #007 Recordkeeping and reporting:
- (a) Design of control equipment shall be recorded and kept in a readily accessible location:
 - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - (2) The dates and descriptions of any changes in the design specifications.
 - (b) Record and maintain the following information for 5 years following each semiannual (and other) inspection and each annual maintenance inspection:
 - (1) The date of the inspection and the name of the inspector.
 - (2) A brief description of each visible defect in the source or control equipment and the method and date of repair of the defect.
 - (3) The presence of a leak, as measured using the method described in 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak.
 - (4) A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made, the date of attempted repair, and the date of actual repair.
 - (d) For foundry coke by-product recovery plants, the annual coke production of both furnace and foundry coke shall be recorded and maintained for 5 years following each determination.

see attachment L

#008 Recordkeeping for equipment leaks (fugitive emissions)

(b) When each leak is detected:

- (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- (2) The identification on a valve may be removed after it has been monitored for 2 successive months and no leak has been detected during those 2 months.
- (3) The identification on equipment, except on a valve, may be removed after it has been repaired.

(c) Each leak shall be recorded in a log and kept for 5 years

- (1) The instrument and operator identification numbers and the equipment identification number.
- (2) The date the leak was detected and the dates of each attempt to repair the leak.
- (3) Repair methods applied in each attempt to repair the leak.
- (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm.
- (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
- (7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days unrepaired.
- (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- (9) The date of successful repair of the leak.

(e) The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:

- (1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.
- (2)
 - (i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.
 - (ii) The designation of this equipment for no detectable emissions shall be signed by the owner or operator.
- (4)
 - (i) The dates of each compliance test required
 - (ii) The background level measured during each compliance test.
 - (iii) The maximum instrument reading measured at the equipment during each compliance test.
- (5) A list of identification numbers for equipment in vacuum service.

(f) Valves & pumps information shall be recorded in a log:

- (1) A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump.
- (2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

(g) Record the following for valves

- (1) A schedule of monitoring,
- (2) The percent of valves found leaking during each monitoring period.
 - (i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:
 - (1) An analysis demonstrating the design capacity of the process unit, and
 - (2) An analysis demonstrating that equipment is not in VHAP service.

see attachment C

SECTION E. GROUP 8 - BY-PRODUCT RECOVERY (continued)

Permit page 144

#008 (j) Information and data used to demonstrate that a piece of equipment is not in VHAP service shall be recorded in a log that is kept in a readily accessible location.

#009 Subpart L Recordkeeping & Reporting requirements - See permit pages 145 & 146

- (e) (3) In the case of a new source the statement shall be submitted with the plan application
- (4) The statement is to contain the following information for each source:
- (i) Type of source (e.g., a light-oil sump or pump).
 - (ii) For equipment in benzene service, equipment identification number and process unit identification; percent by weight benzene in the fluid at the equipment; and process fluid state in the equipment (gas/vapor or liquid).
 - (iii) Method of compliance with the standard (e.g., "gas blanketing," "monthly leak detection and repair," or "equipped with dual mechanical seals").
- (f) Submit a semiannual report including:
- (1) (i) A brief description of any visible defect in the source or ductwork,
 - (ii) The number of leaks detected and repaired, and
 - (iii) A brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.
- (3) For exhausters during the semiannual reporting period
- (i) The number of exhausters for which leaks were detected
 - (ii) The number of exhausters for which leaks were repaired
 - (iii) The results of performance tests conducted within the semiannual reporting period.
- (4) A statement signed by the owner or operator stating whether all provisions of 40 CFR part 61, subpart L, have been fulfilled during the semiannual reporting period.
- (5) For foundry coke by-product recovery plants, the annual coke production of both furnace and foundry coke, if determined during the reporting period.
- (g) In the first report submitted, the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule unless a revised schedule has been submitted in a previous semiannual report.

#010 Process vessels, storage tanks, and tar-intercepting sumps

- (a) (1) Enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.
- (2) The owner or operator shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed to less than 500 ppm above background and visual inspections. See permit page 147 for exceptions to (2).
- (b) Monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.
- (1) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, a leak is detected.
 - (2) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.
 - (3) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
 - (4) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

See attachment C

(c) Following the installation of any control system used to meet the requirements of paragraph (a) of this section, the owner or operator shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

#011 Delay of repairs:

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

(b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.

*see Full LDAR report on F1E form
Aug 2017, attachment 1*

SOURCE 907: BET WASTEWATER TREATMENT PLANT
PROC 907→STAC Z907

Permit page 62

There are no AQ Conditions listed for this source.

Erie Coke Corporation
Daily Monitoring - Fugitive Emissions and Malodors
Results are from daily walk-arounds and visual observations

Date 2017	Fugitive Emissions		Malodor		Cause of Emissions
	Yes	No	Yes	No	
8/1/2017		X		X	
8/2/2017		X		X	
8/3/2017		X		X	
8/4/2017		X		X	
8/5/2017		X		X	
8/6/2017		X		X	
8/7/2017		X		X	
8/8/2017		X		X	
8/9/2017		X		X	
8/10/2017		X		X	
8/11/2017		X		X	
8/12/2017		X		X	
8/13/2017		X		X	
8/14/2017		X		X	
8/15/2017		X		X	
8/16/2017		X		X	
8/17/2017		X		X	
8/18/2017		X		X	
8/19/2017		X		X	
8/20/2017		X		X	
8/21/2017		X		X	
8/22/2017		X		X	
8/23/2017		X		X	
8/24/2017		X		X	
8/25/2017		X		X	
8/26/2017		X		X	
8/27/2017		X		X	
8/28/2017		X		X	
8/29/2017		X		X	
8/30/2017		X		X	
8/31/2017		X		X	

Erie Coke Corporation
Coke Side Shed Baghouse Log
1-Aug-2017

1-Aug 2-Aug 3-Aug 4-Aug 5-Aug 6-Aug 7-Aug 8-Aug 9-Aug 10-Aug 11-Aug 12-Aug 13-Aug 14-Aug 15-Aug 16-Aug 17-Aug 18-Aug 19-Aug 20-Aug 21-Aug 22-Aug 23-Aug 24-Aug 25-Aug 26-Aug 27-Aug 28-Aug 29-Aug 30-Aug 31-Aug

Daily Recordkeeping

Operating Baghouse

	West	West	West	West	West	West	West	West	West	West	West	West	West	West	West	West	West	East	East	East	East	East	East	East	East	East	East	East	East	
Fan Motor Amperage	236	234	223	224	225	224	224	229	215	225	225	225	225	225	225	225	225	224	221	220	220	220	220	220	220	220	220	220	220	214
2:00 AM	220	215	216	228	213	210	220	222	218	220	222	222	222	222	222	222	222	219	218	220	219	219	219	219	219	219	219	219	219	219
10:00 AM	217	215	222	224	223	223	222	220	223	223	222	222	222	222	222	222	222	219	218	220	219	219	219	219	219	219	219	219	219	219
6:00 PM	223	223																												
Lowest Value	223																													
Highest Value	223																													
Average Value	222																													

Percent Motor Current

2:00 AM	68	67	67	67	67	67	67	68	65	68	68	68	68	68	68	68	68	68	67	67	67	67	67	67	67	67	67	67	67	66
10:00 AM	67	65	64	64	67	66	66	67	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
6:00 PM	65	65	67	68	68	67	67	66	67	67	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
Lowest Value	63																													
Highest Value	70																													
Average Value	67																													

Motor RPM's (Limit 1035)

Lowest Value	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1044
Highest Value	1043																													
Average Value	1046																													

Pressure Drop (3-7)

Lowest Value	6	6.5	6.5	4.5	4.5	5.3	5.7	5.8	5.2	5.4	6.2	6.2	6.3	6.3	4.4	4.8	5.3	5.6	6	5.8	6	5.8	4.7	5.3	5.7	6.1	6.7	4.5	3.1	6.5	7	4.3	5.3	6	
Highest Value	7																																		
Average Value	6																																		

Dust Hopper Level

	0.25	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
--	------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

Compress Air Pressure

PSI	100																																		
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Flow Strong and Dry

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date & Time Cleaning Cycle

Date
Time

Monthly Check

Monthly inspection includes

Bag Cleaning Mechanisms

Solenoid

Screws

Rotary Valves

- 8/11/2017 Cleaned bags on west side. Emptied west hopper
- 8/17/2017 Inspected East bag house & all equipment everything ok. Change over from west to east
- 8/18/2017 Cleaned bags on west side. Greased both fans bearing
- 8/24/2017 Inspected west bag house & all equipment everything ok. Cleaned bags on east side
- 8/28/2017 Cleaned bags east side. Emptied hopper

Attachment C

Erie Coke Corporation
Coke Oven Gas - 2017

H ₂ S grains/100 cu. ft. (After Perox Unit)												
Day	January	February	March	April	May	June	July	August	September	October	November	December
1		25	30					20				
2					20							
3	20			30			20					
4									25			
5												
6						20		20				
7								30				
8			25					20				
9					10							
10									***			
11							15					
12				20								
13						10						
14												
15			20									
16												
17								10				
18												
19	50						30					
20												
21					10							
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
Average	30	25	23	23	16	15	19	21	25			

Yearly Average 22

21

Erie Coke Corporation

Daily Laboratory Report

Sample Date: 9/1/2017

Bin # & Sample	Moisture	V.M.	F.C.	Ash	Sulfur	Pulverization			Gieseler		Bulk Density	% Trans.
						+ 1/4"	+ 1/8"	- 1/8"	DDPM	@ °C		
Foundry Mix	7.4	22.34	72.28	5.38	0.742	1.3	8.2	91.8	201	462	47.3	
SMC Mix	5.6	29.60	63.80	6.60	0.909	0.8	6.7	93.3	13111	445	47.1	
B-1 Rhino/Robin	5.7	29.73	63.62	6.65	0.967							
B-2 Sewell/Spill	8.2	19.90	75.51	4.59	0.681							
B-3 Maple Eagle	4.9	32.09	61.91	6.00	0.837							
B-4 LCT	5.2	18.91	74.58	6.51	1.195							
B-5 Island	5.6	24.75	69.59	5.66	1.166				1203	457		
B-6 Breeze	8.2	1.55	89.57	8.88	0.694							
Stock Breeze	7.5	1.60	89.12	9.28	0.678							

Sample	Moisture	V.M.	F.C.	Ash	Sulfur	Shatter Test			Tumbler Test		
						+ 4"	+ 3"	+ 2"	Stab.	Hard.	
Foundry Coke	0.1	0.35	92.97	6.68	0.674	91.2	92.2	94.0			
Industrial Coke	0.7	0.35	91.18	8.47	0.804				66.4	71.3	
1 x 2 Coke	14.9	0.27	90.34	9.39	0.692	Industrial Coke Screen					
2 x 4 Coke	1.7	0.39	91.77	7.84	0.754	+ 4"	+ 3"	+ 2"	+ 1 3/8"	+ 1"	- 1"
						9.8	17.1	86.7	98.1	99.2	0.8

Crushed Breeze Screen	
Mesh Size	%
+ 20 Mesh	16.7
+ 60 Mesh	55.3
+ 100 Mesh	74.0
+ 200 Mesh	89.8
- 200 Mesh	10.2

Foundry Coke Screen						
Size	+ 6"	+ 5"	+ 4"	+ 3"	+ 2"	+ 1"
6 x 9	97.7	100.0	100.0	100.0	100.0	***
2 x 4	***	***	0.0	57.2	95.4	***
1 x 2	***	***	***	***	22.0	82.4

Tar Analysis						
Car / Truck #	Tank	Date	Moist.	Sp. Gr.	Q.I.	Ash

	FDY.	IND.
Appearance OK	Yes	Yes
Size OK	Yes	Yes
Specifications OK	Yes	No
Sample Date	9/1/17	
Samplers Initials	RL & WCS	

Coke Oven Gas		
H ₂ S	***	gr./100 ft. ³

W. Senyo

9/2/2017

Approval Signature

Date

* Note: Any result that does not meet required specifications will be shaded in yellow or gray

Distribution: Server, TCC, Coal Handling Supervisor and By-Products Supervisor

LR8.0

Revision Date: 2/11/09

C2

Attachment D

Date	COG Reading 12:00 AM # 2 Boiler	Days Usage	COG Reading 12:00 AM # 1 Boiler	Days Usage	Date	Natural Gas 12:00 AM # 2 Boiler	Days Usage	Natural Gas 12:00 AM # 1 Boiler	Days Usage	Total Cu Ft	Percent COG	Percent Natural Gas
8/1/2017	610649889	1074408				446874896	13059			1087467	98.8%	1.2%
8/2/2017	611753815	1103826				446875228	332			1104158	100.0%	0.0%
8/3/2017	613029385	1275570				446921442	46214			1321784	96.5%	3.5%
8/4/2017	614344490	1405105				446967965	45523			1451628	96.8%	3.2%
8/5/2017	615838078	1403588				446993531	25566			1429154	98.2%	1.8%
8/6/2017	617152132	1314054				447076512	82981			1397085	94.1%	5.9%
8/7/2017	618525568	1373436				447090915	14403			1387839	99.0%	1.0%
8/8/2017	619805211	1279643				447240931	150016			1429659	89.5%	10.5%
8/9/2017	621209436	1404225				447261440	20509			1424734	98.6%	1.4%
8/10/2017	622710548	1501112				447261918	478			1501590	100.0%	0.0%
8/11/2017	624229651	1519103				447262310	392			1519495	100.0%	0.0%
8/12/2017	625829007	1599556				447262731	421			1599777	100.0%	0.0%
8/13/2017	627466998	1637991				447263221	490			1638481	100.0%	0.0%
8/14/2017	629048516	1581518				447263772	551			1582069	100.0%	0.0%
8/15/2017	630831852	1783336				447264243	471			1783807	100.0%	0.0%
8/16/2017	632452808	1620956				447264608	365			1621321	100.0%	0.0%
8/17/2017	634033868	1951060				447265051	443			1951503	100.0%	0.0%
8/18/2017	636550611	2146743				447265805	754			2147497	100.0%	0.0%
8/19/2017	638688449	2137838				447300876	35071			2172509	98.4%	1.6%
8/20/2017	640661858	1973409				447337458	36582			2009591	98.2%	1.8%
8/21/2017	642735333	2073675				447355109	17651			2091326	98.2%	0.8%
8/22/2017	644876972	2141439				447379017	23908			2165347	98.9%	1.1%
8/23/2017	647098285	2221313				447427442	48425			2269738	97.9%	2.1%
8/24/2017	649258951	2160666				447438090	10648			2171314	99.5%	0.5%
8/25/2017	651461106	2202155				447467215	29125			2231280	98.7%	1.3%
8/26/2017	653565000	2101894				447468639	1474			2103368	99.9%	0.1%
8/27/2017	655642928	2079928				447469461	772			2080700	100.0%	0.0%
8/28/2017	657715194	2072266				447469958	497			2072763	100.0%	0.0%
8/29/2017	659814066	2098872				447514897	44939			2143811	97.9%	2.1%
8/30/2017	661988377	2174311				447515442	545			2174856	100.0%	0.0%
8/31/2017	664254445	2266068				447516029	587			2266655	100.0%	0.0%
Total		54678864					654192			55333056	98.8%	1.2%

Total COG	54678864
Tot NG Usage	654192
COG Ave/Day	1822629
NG Ave/Day	21806
# 2 MMBtu - COG	27886
# 2 MMBtu - NG	2.79
# 2 MMBtu - NG	667
# 1 MMBtu - COG	0
# 1 MMBtu - NG	0.0
# 1 MMBtu - NG	0
# 1 MMBtu - NG	0.0

21

Charging Report

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
8/1/2017								3.5																																
8/2/2017								2.5																																
8/3/2017					4.5	3.1																																		
8/4/2017								8.5																																
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8/31/2017																																								

Attachment E

E



Opacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

Red = Sample Invalid

Date/Time	Stack 1 Opac, Pct 1 Minute(s)
09/12/2017 01:00	13.00
09/12/2017 01:01	11.99
09/12/2017 01:02	9.29
09/12/2017 01:03	9.97
09/12/2017 01:04	9.66
09/12/2017 01:05	9.65
09/12/2017 01:06	9.80
09/12/2017 01:07	9.98
09/12/2017 01:08	10.00
09/12/2017 01:09	10.09
09/12/2017 01:10	8.82
09/12/2017 01:11	3.94
09/12/2017 01:12	12.58
09/12/2017 01:13	11.58
09/12/2017 01:14	6.49
09/12/2017 01:15	5.66
09/12/2017 01:16	5.69
09/12/2017 01:17	8.17
09/12/2017 01:18	10.91
09/12/2017 01:19	15.30
09/12/2017 01:20	17.84
09/12/2017 01:21	14.78
09/12/2017 01:22	16.04
09/12/2017 01:23	16.63
09/12/2017 01:24	18.23
09/12/2017 01:25	19.17
09/12/2017 01:26	18.87
09/12/2017 01:27	18.14
09/12/2017 01:28	18.59
09/12/2017 01:29	38.91

Stack1_1MinuteData

Attachment F



Opacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

Red = sample invalid

Date/Time	Stack 1 Opac, Pct	1 Minute(\$)
09/12/2017 01:30		38.84
09/12/2017 01:31		21.37
09/12/2017 01:32		7.57
09/12/2017 01:33		2.52
09/12/2017 01:34		2.30
09/12/2017 01:35		2.41
09/12/2017 01:36		3.12
09/12/2017 01:37		3.89
09/12/2017 01:38		4.13
09/12/2017 01:39		5.08
09/12/2017 01:40		3.76
09/12/2017 01:41		3.61
09/12/2017 01:42		4.92
09/12/2017 01:43		8.47
09/12/2017 01:44		9.55
09/12/2017 01:45		9.36
09/12/2017 01:46		8.34
09/12/2017 01:47		8.16
09/12/2017 01:48		8.60
09/12/2017 01:49		5.97
09/12/2017 01:50		3.90
09/12/2017 01:51		6.25
09/12/2017 01:52		7.25
09/12/2017 01:53		6.23
09/12/2017 01:54		10.24
09/12/2017 01:55		13.94
09/12/2017 01:56		14.77
09/12/2017 01:57		15.19
09/12/2017 01:58		15.85
09/12/2017 01:59		15.80



Capacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

ed = sample invalid

Date/Time	Opac, Pct	1 Minute (\$)
09/12/2017 02:00	18.41	
09/12/2017 02:01	24.78	
09/12/2017 02:02	30.62	
09/12/2017 02:03	30.14	
09/12/2017 02:04	28.53	
09/12/2017 02:05	35.73	
09/12/2017 02:06	51.11	
09/12/2017 02:07	54.99	
09/12/2017 02:08	54.43	
09/12/2017 02:09	51.46	
09/12/2017 02:10	41.32	
09/12/2017 02:11	61.64	
09/12/2017 02:12	59.85	
09/12/2017 02:13	37.03	
09/12/2017 02:14	27.50	
09/12/2017 02:15	23.58	
09/12/2017 02:16	20.35	
09/12/2017 02:17	19.28	
09/12/2017 02:18	17.05	
09/12/2017 02:19	14.21	
09/12/2017 02:20	12.54	
09/12/2017 02:21	11.55	
09/12/2017 02:22	11.45	
09/12/2017 02:23	11.27	
09/12/2017 02:24	10.86	
09/12/2017 02:25	10.68	
09/12/2017 02:26	9.92	
09/12/2017 02:27	9.74	
09/12/2017 02:28	9.50	
09/12/2017 02:29	9.58	



Opacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

ted = Sample Invalid

Date/Time	Stack 1 Opac, Pct 1 Minute(s)
09/12/2017 02:30	8.36
09/12/2017 02:31	7.61
09/12/2017 02:32	16.22
09/12/2017 02:33	19.04
09/12/2017 02:34	18.75
09/12/2017 02:35	18.88
09/12/2017 02:36	18.80
09/12/2017 02:37	18.92
09/12/2017 02:38	18.56
09/12/2017 02:39	18.68
09/12/2017 02:40	18.58
09/12/2017 02:41	18.83
09/12/2017 02:42	18.45
09/12/2017 02:43	19.11
09/12/2017 02:44	19.44
09/12/2017 02:45	19.30
09/12/2017 02:46	18.33
09/12/2017 02:47	10.48
09/12/2017 02:48	7.73
09/12/2017 02:49	8.66
09/12/2017 02:50	8.39
09/12/2017 02:51	1.96
09/12/2017 02:52	10.21
09/12/2017 02:53	2.48
09/12/2017 02:54	1.90
09/12/2017 02:55	2.68
09/12/2017 02:56	2.54
09/12/2017 02:57	4.38
09/12/2017 02:58	3.27
09/12/2017 02:59	2.82



Capacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

led = sample invalid

Date/Time	Stack 1 Opac, Pct 1 Minute(s)
09/12/2017 03:00	2.46
09/12/2017 03:01	3.74
09/12/2017 03:02	8.09
09/12/2017 03:03	11.09
09/12/2017 03:04	11.60
09/12/2017 03:05	12.23
09/12/2017 03:06	14.16
09/12/2017 03:07	14.85
09/12/2017 03:08	13.38
09/12/2017 03:09	13.03
09/12/2017 03:10	11.47
09/12/2017 03:11	5.76
09/12/2017 03:12	18.06
09/12/2017 03:13	21.54
09/12/2017 03:14	22.01
09/12/2017 03:15	21.84
09/12/2017 03:16	22.23
09/12/2017 03:17	20.75
09/12/2017 03:18	12.87
09/12/2017 03:19	8.72
09/12/2017 03:20	10.28
09/12/2017 03:21	12.28
09/12/2017 03:22	13.96
09/12/2017 03:23	15.78
09/12/2017 03:24	15.64
09/12/2017 03:25	15.25
09/12/2017 03:26	15.11
09/12/2017 03:27	14.49
09/12/2017 03:28	13.98
09/12/2017 03:29	14.95



Capacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

ed - Sample Invalid

Date/Time	Opac, Pct	1 Minute(s)
09/12/2017 03:30	16.20	
09/12/2017 03:31	8.46	
09/12/2017 03:32	32.41	
09/12/2017 03:33	20.08	
09/12/2017 03:34	12.77	
09/12/2017 03:35	7.25	
09/12/2017 03:36	7.32	
09/12/2017 03:37	7.15	
09/12/2017 03:38	7.23	
09/12/2017 03:39	7.42	
09/12/2017 03:40	7.37	
09/12/2017 03:41	7.51	
09/12/2017 03:42	7.95	
09/12/2017 03:43	8.94	
09/12/2017 03:44	8.99	
09/12/2017 03:45	9.10	
09/12/2017 03:46	9.62	
09/12/2017 03:47	9.30	
09/12/2017 03:48	7.42	
09/12/2017 03:49	3.11	
09/12/2017 03:50	2.22	
09/12/2017 03:51	5.52	
09/12/2017 03:52	9.33	
09/12/2017 03:53	6.84	
09/12/2017 03:54	6.09	
09/12/2017 03:55	5.56	
09/12/2017 03:56	5.48	
09/12/2017 03:57	5.01	
09/12/2017 03:58	5.20	
09/12/2017 03:59	5.42	

Stack1_1MinuteData



Opacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

Red = Sample Invalid

Date/Time	Stack 1 Opac, Pct 1 Minute(s)
09/12/2017 04:00	6.07
09/12/2017 04:01	6.90
09/12/2017 04:02	7.63
09/12/2017 04:03	8.92
09/12/2017 04:04	9.56
09/12/2017 04:05	9.85
09/12/2017 04:06	9.11
09/12/2017 04:07	9.21
09/12/2017 04:08	9.43
09/12/2017 04:09	9.21
09/12/2017 04:10	7.60
09/12/2017 04:11	11.72
09/12/2017 04:12	24.82
09/12/2017 04:13	11.36
09/12/2017 04:14	9.27
09/12/2017 04:15	9.02
09/12/2017 04:16	8.81
09/12/2017 04:17	9.00
09/12/2017 04:18	9.03
09/12/2017 04:19	9.20
09/12/2017 04:20	9.32
09/12/2017 04:21	9.50
09/12/2017 04:22	9.68
09/12/2017 04:23	11.04
09/12/2017 04:24	10.86
09/12/2017 04:25	10.96
09/12/2017 04:26	11.17
09/12/2017 04:27	11.02
09/12/2017 04:28	11.44
09/12/2017 04:29	13.23



Opacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

ted = sample invalid

Date/Time	Stack 1 Opac. Pct 1 Minute(s)
09/12/2017 04:30	11.39
09/12/2017 04:31	6.55
09/12/2017 04:32	9.66
09/12/2017 04:33	8.56
09/12/2017 04:34	8.34
09/12/2017 04:35	8.12
09/12/2017 04:36	7.97
09/12/2017 04:37	8.32
09/12/2017 04:38	8.69
09/12/2017 04:39	8.95
09/12/2017 04:40	8.32
09/12/2017 04:41	8.02
09/12/2017 04:42	7.74
09/12/2017 04:43	8.41
09/12/2017 04:44	9.24
09/12/2017 04:45	9.32
09/12/2017 04:46	9.90
09/12/2017 04:47	9.75
09/12/2017 04:48	9.57
09/12/2017 04:49	9.53
09/12/2017 04:50	7.79
09/12/2017 04:51	14.04
09/12/2017 04:52	24.96
09/12/2017 04:53	11.69
09/12/2017 04:54	9.96
09/12/2017 04:55	9.59
09/12/2017 04:56	9.59
09/12/2017 04:57	9.64
09/12/2017 04:58	9.79
09/12/2017 04:59	9.77



Opacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

led = Sample InvzId

Date/Time	Stack 1 Opac, Pct 1. Minute(\$)
09/12/2017 05:00	9.61
09/12/2017 05:01	9.63
09/12/2017 05:02	10.24
09/12/2017 05:03	11.41
09/12/2017 05:04	11.16
09/12/2017 05:05	11.27
09/12/2017 05:06	11.07
09/12/2017 05:07	10.98
09/12/2017 05:08	11.52
09/12/2017 05:09	11.43
09/12/2017 05:10	9.80
09/12/2017 05:11	6.51
09/12/2017 05:12	14.04
09/12/2017 05:13	8.87
09/12/2017 05:14	9.01
09/12/2017 05:15	9.64
09/12/2017 05:16	10.24
09/12/2017 05:17	10.81
09/12/2017 05:18	10.99
09/12/2017 05:19	11.38
09/12/2017 05:20	11.43
09/12/2017 05:21	11.52
09/12/2017 05:22	11.81
09/12/2017 05:23	13.06
09/12/2017 05:24	12.82
09/12/2017 05:25	13.02
09/12/2017 05:26	13.17
09/12/2017 05:27	13.35
09/12/2017 05:28	13.34
09/12/2017 05:29	13.67



Opacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

ted = sample invalid

Date/Time	Stack 1 Opac, Pct 1 Minute(s)
09/12/2017 05:30	10.76
09/12/2017 05:31	13.87
09/12/2017 05:32	26.12
09/12/2017 05:33	11.92
09/12/2017 05:34	10.45
09/12/2017 05:35	10.82
09/12/2017 05:36	10.93
09/12/2017 05:37	8.57
09/12/2017 05:38	2.91
09/12/2017 05:39	1.94
09/12/2017 05:40	1.92
09/12/2017 05:41	1.94
09/12/2017 05:42	3.37
09/12/2017 05:43	3.06
09/12/2017 05:44	2.98
09/12/2017 05:45	2.83
09/12/2017 05:46	3.04
09/12/2017 05:47	4.32
09/12/2017 05:48	3.95
09/12/2017 05:49	3.19
09/12/2017 05:50	2.78
09/12/2017 05:51	3.79
09/12/2017 05:52	4.94
09/12/2017 05:53	4.44
09/12/2017 05:54	4.93
09/12/2017 05:55	5.52
09/12/2017 05:56	6.51
09/12/2017 05:57	7.18
09/12/2017 05:58	7.55
09/12/2017 05:59	7.95



Opacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

Reg = Sample Invalid

Date/Time	Stack 1 Opac, Pct	1 Minute(S)
09/12/2017 06:00	8.16	
09/12/2017 06:01	8.55	
09/12/2017 06:02	8.47	
09/12/2017 06:03	9.47	
09/12/2017 06:04	9.56	
09/12/2017 06:05	9.47	
09/12/2017 06:06	9.74	
09/12/2017 06:07	9.85	
09/12/2017 06:08	9.98	
09/12/2017 06:09	10.16	
09/12/2017 06:10	8.46	
09/12/2017 06:11	14.10	
09/12/2017 06:12	28.42	
09/12/2017 06:13	14.22	
09/12/2017 06:14	12.35	
09/12/2017 06:15	12.17	
09/12/2017 06:16	12.17	
09/12/2017 06:17	11.99	
09/12/2017 06:18	12.53	
09/12/2017 06:19	12.51	
09/12/2017 06:20	13.12	
09/12/2017 06:21	12.44	
09/12/2017 06:22	6.34	
09/12/2017 06:23	2.56	
09/12/2017 06:24	2.44	
09/12/2017 06:25	2.27	
09/12/2017 06:26	2.18	
09/12/2017 06:27	2.29	
09/12/2017 06:28	2.36	
09/12/2017 06:29	2.38	



Capacity Filter Audit Report Stack 1

From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

ed = sample invalid

Date/Time	Stack 1 Opac, Pct	1 Minute(s)
09/12/2017 06:30	2.11	
09/12/2017 06:31	2.72	
09/12/2017 06:32	3.36	
09/12/2017 06:33	3.53	
09/12/2017 06:34	3.63	
09/12/2017 06:35	3.67	
09/12/2017 06:36	3.61	
09/12/2017 06:37	3.96	
09/12/2017 06:38	4.37	
09/12/2017 06:39	4.72	
09/12/2017 06:40	5.42	
09/12/2017 06:41	6.52	
09/12/2017 06:42	7.49	
09/12/2017 06:43	8.42	
09/12/2017 06:44	11.94	
09/12/2017 06:45	14.32	
09/12/2017 06:46	15.00	
09/12/2017 06:47	15.78	
09/12/2017 06:48	15.92	
09/12/2017 06:49	16.37	
09/12/2017 06:50	14.09	
09/12/2017 06:51	14.69	
09/12/2017 06:52	35.65	
09/12/2017 06:53	21.54	
09/12/2017 06:54	19.88	
09/12/2017 06:55	20.06	
09/12/2017 06:56	20.29	
09/12/2017 06:57	20.51	
09/12/2017 06:58	20.98	
09/12/2017 06:59	21.27	

Opacity Filter Audit Report

Stack 1



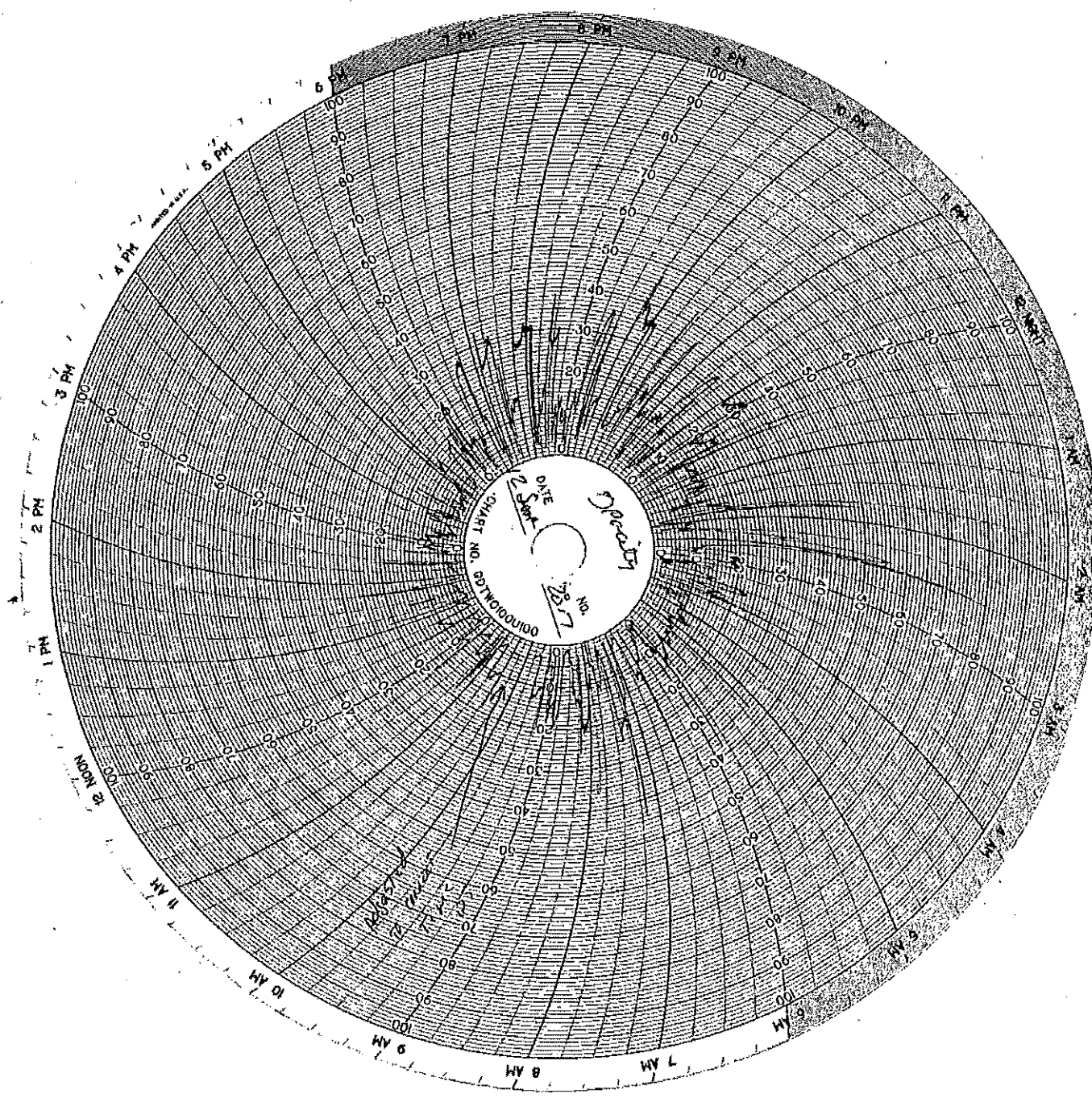
From: 09/12/2017 01:00 To: 09/12/2017 07:00 Facility Name: Erie Coke Corporation
Generated: 09/18/2017 12:55 Location: Erie, PA

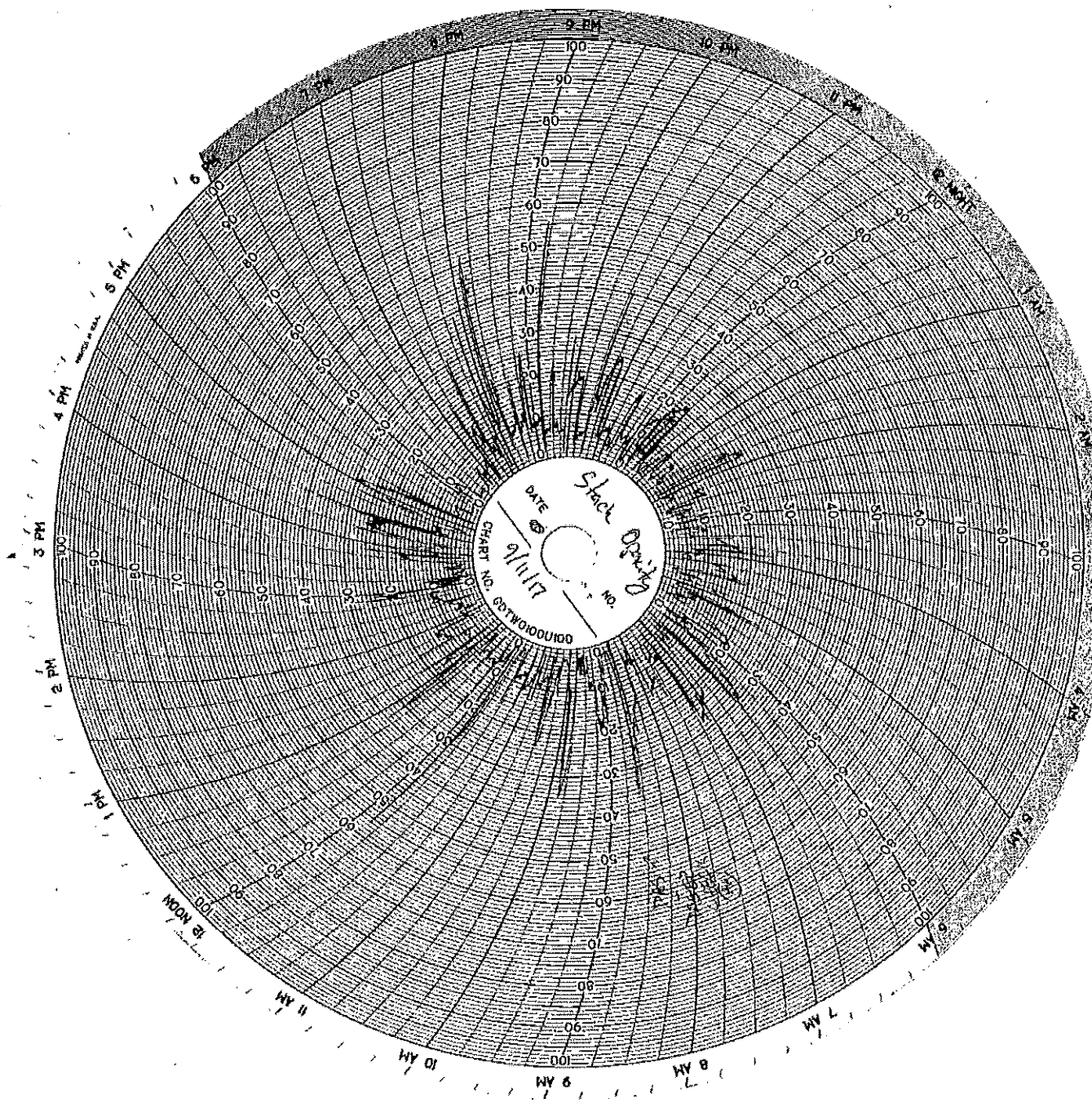
Red = Sample Invalid

Date/Time	Opac, Pct
09/12/2017 07:00	21.62

Valid Data Points 361
Averages 11.91







Erie Coke Corporation
 Quench Water Analysis & Baffel Inspection
 DEP Limit is 1100 mg/L
 2017

Water Analysis

Date	Results	Ave/Month mg/L
1/4/2017	See Note	256
1/11/2017	294	
1/18/2017	237	
1/25/2017	236	
Total	767	
Note: On 1/4/17 quench water was sampled for TSS instead of TDS		
2/1/2017	232	240.5
2/8/2017	240	
2/15/2017	253	
2/22/2017	237	
Total	962	
3/1/2017	255	236.2
3/8/2017	228	
3/13/2017	241	
3/22/2017	225	
3/29/2017	232	
Total	1181	
4/5/2017	222	230.75
4/12/2017	207	
4/19/2017	234	
4/26/2017	260	
Total	923	
5/3/2017	235	228.4
5/10/2017	236	
5/17/2017	244	
5/24/2017	220	
5/31/2017	207	
Total	1142	
6/7/2017	239	235.3
6/14/2017	246	

6/21/2017	230
6/28/2017	226
Total	941

7/5/2017	264	253.75
7/12/2017	247	
7/19/2017	247	
7/26/2017	257	
Total	1015	

8/2/2017	222
8/9/2017	238
8/16/2017	216
8/23/2017	232
8/30/2017	

JULY 2017

Attachment I

Erie Coke Corporation
 Quench Tower Rinse Cycle

NOTE: We are not required to rinse the baffles if the ambient temperature is below 30 degrees fahrenheit during the 24-hour period. If the temperature rises above 30 degrees fahrenheit during the period the rinse cycle must be completed.

Date	Time	Provide signature if rinse cycle is completed	Initial and record temperature if it is below 30 degrees		
			12:00 am - 8:00 am	8:00 am - 4:00 pm	4:00 pm - 12:00 am
1	6:30	<i>[Signature]</i>			
2	5:45	<i>[Signature]</i>			
3	7:10	<i>[Signature]</i>			
4	6:30	<i>[Signature]</i>			
5	6:50	<i>[Signature]</i>			
6	6:45	<i>[Signature]</i>			
7	7:00	<i>[Signature]</i>			
8	6:30	<i>[Signature]</i>			
9	7:25am	<i>[Signature]</i>			
10	7:00	<i>[Signature]</i>			
11	7:10	<i>[Signature]</i>			
12	6:50	<i>[Signature]</i>			
13	7:10	<i>[Signature]</i>			
14	6:15	<i>[Signature]</i>			
15	6:40	<i>[Signature]</i>			
16	6:25am	<i>[Signature]</i>			
17	6:30	<i>[Signature]</i>			
18	6:20	<i>[Signature]</i>			
19	6:40	<i>[Signature]</i>			
20	7:00	<i>[Signature]</i>			
21	6:30	<i>[Signature]</i>			
22	6:30	<i>[Signature]</i>			
23	6:00am	<i>[Signature]</i>			
24	6:30	<i>[Signature]</i>			
25	6:20	<i>[Signature]</i>			
26	6:40	<i>[Signature]</i>			
27	6:30	<i>[Signature]</i>			
28	6:20	<i>[Signature]</i>			
29	7:40	<i>[Signature]</i>			
30	7:20am	<i>[Signature]</i>			
31	7:10am	<i>[Signature]</i>			

- 7-11-17 - #1 Boiler 200 psi safety valve Replaced
- 7-12-17 #1 Boiler Hydro pass
- 7-12-17 #2 Boiler ~~stop~~ quick open valve failure # switching Boilers for Repair.
- 7-14-17 #2 Boiler hydro 20 min @ 145 psi - Pass no leaks
- 8-24-17 #1 Boiler Fan Trip at 581 RPM
- 9-1-17 Boiler #2 Safety valve Tested - OK
Boiler #2 COPEES valve leak switch to #1 @ 102.1 for COPEES Repair
Boiler #2 Safety valve or drum leak at Flange Repair
- 9-7-17 - 9-7-17 - Copes valve Replaced new diaphragm, Repair valves #2 Boiler
- 9-8-4-12-17 - Repair & replace gasket on safety valve, lube all valves on #2 Boiler Boiler #2 Ready for service Replaced quick open valve
- 9-12-17 Cleared out Big Blue pump (Plant water)

- 3-9-17 - Tested safety valves on #2
Superheat safety valve failed no spring tension will need
to be replaced
- 3-7-17 #2 Boiler online / #1 offline Tube leak
- 3-10-17 - Plugged tube #1 ~~in~~ Tube from North
~~#1 Boiler~~
- 3-12-17 Replaced Two water wall tubes north corner #6
↓
Repaired Refractory ~~for~~ Hydro test Passed
- 3-23-17 #1 Boiler Back in service
- 3-28-17 #1 Boiler online #2 Boiler offline Preparing
for inspection
- 4-6-17 Replaced Bonnet on water softener Bypass valve
at
- 4-7-17 #2 Boiler ID Fan Trip test 560 RPM
#2 Boiler ID Fan Inspection - complete
- 4-17-17 #2 Boiler Fire Box Repair Begins
- 5-12-17 #2 Boiler superheat safety valve Replaced
- 5-12-17 #2 Boiler Fire Box Repair Complete
- 5-26-17 Repair steam tank on steam line to Feed water pump
and make up Exhaust steam
- 6-14-17 #2 Boiler Inspection - complete Hydro Boiler found Tube leak
- 6-15-17 #15 tube 24 in from north End and will be
plugged - Tube Plugged - #2 Boiler
- 6-16-17 - Pressure #2 Boiler #24 Super Heater Tube Bad
- 6-14-17 - #2 Boiler #24 Super Heater Tube Plugged
Pressure #2 Boiler at 80 psi another tube leak will
check on 6-20-17 - ceiling tube leak
- 6-28-17 #2 Boiler Hydro complete ~~Back online~~
- 6-29-17 #2 Boiler online #1 offline check safety
valves. 200 lbs safety valve failure on drum M2
- 7-5-17 Low test on #1 Boiler to check valve operation. valve closed and ~~pass~~
pass

74

Boiler House MAINTENANCE LOG

Attachment M

12-12-16 #1 Steam Feed OCC Due to Bearing

2017 2017

1-4-17 Repair leak at union in #2 Boiler COPIES water side

1-4-17 Repair packing on #2 mud drum quick opening valve

1-5-17 Tighten nut on Governor hydraulic line - Test no leaks

1-18-17 2300 Plant water pump Bearing Bad OCC

↓
1-23-17 2300 Plant water pump Bearings changed and back in service

1-23-17 Cleaned out Big Blue sand and ~~other~~^{other} earthy material removed

1-23-17 - Tested #1 Boiler Low water and activated fuel cut-off circuit

1-26-17 installed New Advantage 1400 Plus system

1-31-17 installed New Amasite 2 system

2-1-17 Generator out of service - HPU system down for repairs and maintenance, changed oil - (Turbo oil #32), Clean suction screens, changed filters, changed timing cuplings, clean screen or actuator for Governor Tested system for leaks

↓
2-8-17 Run Generator at 500 rpm then 3600 rpm start time 1240 End Time 1415 - Test complete system ready for service

2-8-17 Clean strainer on new Cond. Trap for Generator

3-2-17 - Tested valves on #1 software for proper operation - Tested OK No issues

3-9-17 Boiler #2 OFFLINE Preparing for Inspection M.I

Attachment L

August 14, 2017

To: Mr. Randy Wiler

From: K. Thrun

Re: Monthly LDAR Monitoring Report – AUGUST 2017

The following report represents the results for the August 2017 LDAR Monthly Report monitoring period, which was performed on August 3, 2017.

During this month's monitoring an independent third party auditor (Montrose Air Quality Services) was on site from August 2, 2017 to August 4, 2017 collecting data on this program, consistent with the requirements of the Program Plan and Consent Decree. As of this report date no results have been received, but we have taken progressive actions to execute a number of the auditor's recommendations.

Monthly Control System Monitoring – AUGUST 2017

<i>Citation</i>	<i>Affected Components</i>	<i>Leak Definition (ppm-v)</i>	<i>Number of Components Screened</i>	<i>Number of Leaking Components</i>	<i>Leaking Component Identification Number(s)</i>
61.132(b)	Valves	500	51	0	0
61.132(b)	Control System Connections and Seals	500	209	0	0
61.135(d)	Exhausters	500	3	0	0
	Total Components		263	0	0

RESULTS: No components were identified as leaking during this survey period.

During this monitoring period Vessel T3 - Tar Dehydrator (new Figure 8) was brought into service for the short term, while the Tar Storage Tank (Figure 1) was temporarily take out of service (6/13/17) for maintenance/inspection. Once the Tar Storage Tank is brought back on-line Vessel T3 will be taken out of service.

The total component count takes into account the number of components added, removed, or re-instated from each category. Any component point additions, removals, re-instatement of points, or corrections (redundant) points appear in the above table and listed the Program Changes Table. The documented drawings (Appendix C, D) and the survey data list (Appendix A) categorizing the components also reflect any changes. This is to ensure that the protocol in improving component categorization and equipment clarity is followed.

LI

5-31-17 Change Small ~~of~~ booster oil + Filter
AND Clean Sump Screen

6-1-17 Changed Big Booster oil + Filter
AND Cleaned Sump Screen

6-8-17 Leak NE Decanter nestaf

6-9-17 Repaired Leak NE TOP ED Ready
notified

7-25-17 changed exhaust air filter

8-14-17 Absorber ^{Down} for Hot Flusk 8am

8-15-17 " Break on Line 1:50pm
O'Leak Valve installed

8-18-17 Thwiza Broken Line Broken - Blower Turned
off + Absorber Bypassed 6am

8-18-17 10:45 AM ↑ system BACK TO NORMAL

By-Products MAINTENANCE LOG

- 1-12-17 9AM ABSORBER down for Servicing
- 1-13-17 9AM ABSORBER BACK ONLINE
- 1-23 THINNING LINE BROKE LINE
- 1-23 - 3:15 ABSORBER OFFLINE - HOT FLUSH
- 1-24 - 2:15 THINNING BLOWER & ABSORBER BACK ONLINE
- 1-24-17 - ABSORBER PUMP ^{VFD} FAILED - 3:30PM OFFLINE
- 1-24-17 - CHANGED PUMP BACK ONLINE 6PM
- 1-24-17 ABSORBER ^{VFD} OVER HEAT 7:15PM OFFLINE
- 1-25-17 Cleaned INTERNAL VFD AND DIFF SENSOR ON TANK 9:26AM OFFLINE BUT TESTING SYSTEM
- 1-25-17 11:15AM ABSORBER BACK ONLINE
- 3-6-17 CHANGED OIL + FILTER ~~EXHAUSTOR~~ AIR COMPRESSOR
- 3-6-17 CHANGED OIL + FILTER EXHAUSTOR
- 3-14-17 CHANGED OIL FILTER BOTH BEASTS
- 3-27-17 ABSORBER OFFLINE - HOT FLUSH
- 3-28-17 Replaced THINNING INLET PIPE AND VALVE
- 3-28-17 2:35 ABSORBER BACK ONLINE
- 5-19-17 CHANGED ELECTRIC EXHAUSTOR FILTER

truck station

Dust system

"NOTES"

Date

8-21-17

OK

8-28-17

OK

9-5-17

OK

9-11-17

OK

Attachment J

COKE LOADING DUST SUPPRESSION SYSTEM ~~LOG~~ MAINTENANCE LOG

DUST SUPPRESSANT SYSTEM HEADS CLEANED AND CHANGED ON 4-10-17

SYSTEM CHECKED

DATE:

NOTES:

✓	4-11-17	
✓	4-12-17	
✓	4-13-17	✓ AND RUNNING FOR HOLIDAY WEEKEND
✓	4-17-17	OK
✓	4-24-17	OK
✓	5-1-17	OK
✓	5-8-17	OK
✓	5-14-17	OK
✓	5-22-17	OK
✓	5-29-17	OK
✓	6-5-17	OK
✓	6-12-17	OK
✓	6-19-17	OK
✓	6-26-17	OK
✓	7-3-17	OK
✓	7-10-17	OK
✓	7-17-17	OK
✓	7-24-17	OK
✓	7-31-17	OK
✓	8-7-17	OK

J1