

Indiana Harbor Coke Company 3210 Watling Street East Chicago, IN 46312

October 30, 2020

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, DC 20044-7611 Re: DOJ 90-5-2-1-08555/1

Compliance Tracker Air Enforcement and Compliance Assurance Branch U.S. Environmental Protection Agency – Region 5 77 West Jackson Blvd. AE-18J Chicago, IL 60604-3590 <u>r5airenforcement@epa.gov</u>

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Susan Tennenbaum U.S. Environmental Protection Agency Region 5, C-14J 77 West Jackson Blvd. Chicago, IL 60604 tennenbaum.susan@epa.gov

Elizabeth A. Zlatos Indiana Department of Environmental Management Office of Legal Counsel 100 North Senate Avenue MC-60-01 IGCN 1307 Indianapolis, IN 46204-2251 bzlatos@idem.in.gov

RE: Consent Decree, United States, et al. v. Indiana Harbor Coke Company, et al. Indiana Harbor Coke Company, LLC (TV Permit T089-41059-00382) Submission of the 2nd 2020 Semi-Annual Report

To Whom It May Concern,

The United States, the State of Indiana, Indiana Harbor Coke Company (IHCC), SunCoke Energy, Inc. (SunCoke), and Cokenergy, LLC (Cokenergy) are parties to a Consent Decree (CD) lodged in federal court on January 25, 2018 with an Effective Date of October 25, 2018.

Pursuant to the CD, IHCC is submitting the 1st 2020 Semi-Annual Report for IHCC. IHCC and SunCoke prepared the enclosed Report in accordance with Paragraph 51 of the CD. This Report contains the information required by Paragraphs 51.a. through q. of the CD, with respect to the time period from April 1, 2020 through September 30, 2020.

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SunCoke Energy

Indiana Harbor Coke Company 3210 Watling Street East Chicago, IN 46312

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If you have any questions regarding this report, please contact me at (219) 378-3903 or email me at nestrada@suncoke.com.

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Sincerely,

Manayestrala

Nancy Estrada Environmental Engineer

cc:

East Chicago Public Library 2401 E. Columbus Drive East Chicago, IN 46312

East Chicago Public Library 1008 W. Chicago Avenue East Chicago, IN 46312

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Indiana Harbor Coke Company SunCoke Energy, Inc.

Consent Decree Semi-Annual Report

Reporting Period: April 1, 2020 – September 30, 2020

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Report Table of Contents

1.0 Introduction
2.0 Work performed and progress made toward implementing the requirements of Section IV of the
CD (Compliance Requirements), including completion of any milestones;2
3.0 Any significant modifications to previously-submitted design specifications of any pollution control
system, or to monitoring equipment, required to comply with the requirements of Section IV
(Compliance Requirements);4
4.0 Any significant problems encountered or anticipated in complying with the requirements of Section
IV (Compliance Requirements), including implemented or proposed solutions;4
5.0 A summary of the emissions monitoring and testing data collected to demonstrate compliance with
a requirement of the Consent Decree;4
6.0 A list of all violations of Paragraph 12.a and 12.b, with the date, time and location of visible
emissions and the status of any Coke Oven RCFA conducted;5
7.0 All failures to comply with the emissions minimization requirements of Paragraph 17 of the
Consent Decree;
8.0 All RCFAs required by Paragraphs 13 and 18 of this Consent Decree;
9.0 The status of any corrective actions required under Paragraphs 13 and 18 that were not completed
at the time of the submission of any previous report required under Paragraphs 13 and 18;7
10.0 Any updated PMO Plan required by Paragraph 23 of this Consent Decree or any failure to follow a
PMO Plan;7
11.0 Submittal of the CAP when required by Paragraph 23.c of this Consent Decree, any updates to the
CAP, and any instances when the CAP had to be implemented to ensure compliance with PM or SO_2
limits;8
12.0 Status of permit applications and a summary of all permitting activity pertaining to compliance with
this Consent Decree;
13.0 A description of all noncompliance with the requirements in Section VII (Supplemental
Environmental Projects);8
14.0 All failures to comply with the reporting requirements in Paragraphs 51 through 55;9
15.0 Copies of all Quarterly Deviation and Compliance Monitoring Reports and semi-annual and annual
compliance certifications required under the Defendants' Permits to both EPA and IDEM;8
16.0 The dates, times, and duration of any Lightning Stand-Downs during the reporting period;9
17.0 The dates, times, and duration of any power outages during the reporting period;9
18.0 The dates, times, and duration of any Coke Oven Leaks caused by high winds and wind speed and
direction data for the time of the Coke Oven Leaks;9
19.0 Compliance with Bypass Venting Limits9
20.0 Mitigation Measures

Attachments

Attachment A – RCFA Reports and Corrective Actions for IHCC

Attachment B – Quarterly Deviation and Compliance Monitoring Reports & Semi-annual and Annual Compliance Certifications

Attachment C – List of Lightning Stand-downs

Attachment D – List of Coke Oven Leaks Caused by High Winds

Attachment E – Daily Bypass Venting Percentages

Attachment F – Visible Emissions from Crowns

1.0 Introduction

The United States, the State of Indiana, Indiana Harbor Coke Company (IHCC), SunCoke Energy, Inc., and Cokenergy, LLC (Cokenergy), are parties to a Consent Decree (CD) lodged in the U.S. District Court for the Northern District of Indiana with an Effective Date of October 25, 2018. *See United States, et al. v. Indiana Harbor Coke Company, et al.*, Civil Action No. 2:18-cv-35.

This report is being submitted pursuant to Paragraph 51 of the CD, and includes all information required to be submitted. This report covers the period of April 1, 2020 – September 30, 2020.

Work performed and progress made toward implementing the requirements of Section IV of the CD (Compliance Requirements), including completion of any milestones; 2.0

A. As previously reported, all Coke Oven Rebuild Requirements, pursuant to Section IV.A. of the CD, are complete.

Semi-Annual Report

B. Coke Oven Leak Requirements

Please see section 6.0 for more information regarding compliance with emissions minimization requirements for Coke Oven Leaks from Rebuilt Ovens during the reporting period, pursuant to Paragraph 12 of the Consent Decree. Please see section 8.0 for a list of all Coke Oven Leak RCFAs performed during the reporting period, pursuant to Paragraph 13 of the Consent Decree. A copy of each RCFA report for Coke Oven Leaks from Rebuilt Ovens (as defined in Paragraph 8.k. of the CD) that occurred during the reporting period, if any, is included in Attachment A1.

Paragraph 11 of the Consent Decree contains compliance requirements for Coke Oven Leaks from Non-rebuilt Ovens. IHCC completed all oven rebuilds by November 30, 2019.

C. Bypass Venting Requirements

Please see section 19.0 for more information regarding compliance with bypass venting limits and SO_2 limits during the reporting period, pursuant to Paragraphs 14, 15 and 16 of the Consent Decree. Please see section 7.0 for more information regarding emissions minimization during Bypass Venting Incidents during the reporting period, pursuant to Paragraph 17 of the Consent Decree. Please see section 8.0 for a list of all Bypass Venting Incident RCFAs performed during the reporting period, pursuant to Paragraph 18 of the Consent Decree. A copy of the RCFA report for each Bypass Venting Incident (as defined in Paragraph 8.d. of the CD) that occurred during the reporting period, if any, is included in Attachment A2.

D. Enhanced Monitoring Requirements

Please see section 5.0 for more information regarding emissions monitoring and stack testing that occurred during the reporting period, pursuant to Paragraphs 19 - 22 of the Consent Decree.

E. Preventative Maintenance and Operation ("PMO") Plan

Please see section 10.0 for more information regarding the PMO plan required by Paragraph 23 of the Consent Decree. Please see section 11.0 for more information regarding submittal of the Compliance Assurance Plan (CAP) under section 23.c. of the Consent Decree.

F. Mitigation Measures

Please see section 20.0 for more information regarding Mitigation Measures required by Paragraph 24 of the Consent Decree.

G. Permit Requirements

Please see section 12.0 for more information regarding the status of permit applications, pursuant to Paragraphs 27 through 29 of the Consent Decree.

3.0 Any significant modifications to previously-submitted design specifications of any pollution control system, or to monitoring equipment, required to comply with the requirements of Section IV (Compliance Requirements);

At this time, no significant modifications to previously submitted design specifications of any pollution control system or to monitoring equipment are required for compliance with Section IV of this Consent Decree.

4.0 Any significant problems encountered or anticipated in complying with the requirements of Section IV (Compliance Requirements), including implemented or proposed solutions;

No significant problems have been encountered in complying with Section IV of this Consent Decree.

Any non-conformances to the PMO plan required under section IV.D are included in Section 10.0.

5.0 A summary of the emissions monitoring and testing data collected to demonstrate compliance with a requirement of the Consent Decree;

A. Permanent Flow Monitor (Paragraph 19)

Paragraph 19 of the CD requires installation of a permanent flow monitor to continuously measure the flow rate in the Main Stack within ninety (90) days of the Effective Date of the CD.

The required flow monitor was installed and calibrated within 90 days of the Effective Date as required by the CD. Copies of the Relative Accuracy Test Audit (RATA) report were included in the first semi-annual report submitted on April 30, 2019.

B. Meteorological Station (Paragraph 20)

Paragraph 20 of the CD requires installation of a meteorological station at the Facility or purchase of a handheld weather device within thirty (30) days of the Effective Date of the CD.

The wind meters (HoldPeak 866B-WM Digital Anemometers) are being operated and maintained as required.

C. Emissions Tracking System (ETS) Updates (Paragraph 21)

Paragraph 21 of the CD requires IHCC to modify ETS in order to report emissions using the actual flow data from the Main Stack flow monitor within one hundred eighty (180) days of the installation of the Permanent Flow Monitor pursuant to Paragraph 19 of the CD.

As previously reported, ETS was modified to incorporate the new Main Stack flow monitor and began using actual flow data from the new flow monitor on November 28, 2018.

D. Bypass Vent Stack and Main Stack Testing (Paragraph 22)

Paragraph 22 of the CD requires stack testing measuring the emission rate of lead and VOCs from the Main Stack and at least one Bypass Vent Stack within five (5) years of the Effective Date of the CD. Two stack tests, separated by at least eighteen (18) months, are required for measuring the lead emissions and one test is required for VOCs.

Stack testing for lead and VOCs was conducted on the Main Stack and one Bypass Vent Stack, pursuant to Paragraph 22, in December 2019 and August 2020, respectively. The reports were submitted to IDEM on January 16, 2020 by Cokenergy and on September 28, 2020 by IHCC, respectively.

The test results from the completed testing are summarized in the table below.

Weighted Lead & VOC Results from Coking (lb/hr)									
Pollutant	Main Stack (Stack 201)		Vent Stack (A-3)						
	Measured Emissions ¹	Fraction	Measured Emissions	Fraction	Weighted Emissions	Permit Limit			
Lead	0.014 lb/hr	81%	0.085 lb/hr	19%	0.0275 lb/hr	0.19 lb/hr			
VOC	1.47 lb/hr	81%	ND	19%	1.19 lb/hr	2.28 lb/hr			

6.0 A list of all violations of Paragraph 12.a and 12.b, with the date, time and location of visible emissions and the status of any Coke Oven RCFA conducted;

Paragraph 12.a requires that visible emissions from a Rebuilt Oven Coke Oven door must be stopped within fifteen (15) minutes on the push side and forty-five (45) minutes on the coke shed side. Visible emissions from a Coke Oven door may be stopped from the push side within forty-five (45) minutes from the time the visible emissions are first observed for a maximum of two times per Battery in any semi-annual reporting period.

Paragraph 12.b requires that visible emissions from a Rebuilt Coke Oven crown, or from any other part of the Coke Oven that is not the Coke Oven door, must be stopped within thirty (30) minutes. If visible emissions from a Coke Oven crown continue longer than thirty (30) minutes, a Method 9 observation must be conducted no later than one-hundred twenty (120) minutes from the time the visible emissions are first observed provided conditions identified in Method 9 allow for an observation pursuant to Method 9.

The following table lists all instances where Coke Oven Leaks were not stopped within the time periods set forth in Paragraph 12.a or 12.b of the Consent Decree during this reporting period. This list does not include visible emissions from Coke Oven Crowns where the opacity was less than 20 percent based on a Method 9 reading or where the conditions did not allow for an observation pursuant to Method 9¹. More detailed information regarding Coke Oven Leaks caused by high winds, if any, is provided in Attachment D.

Battery	Ove n#	Leak Location	Date	Time Noticed	Time Ended	Duration (hours:minute s)	High Winds (Y/N)
С	26	Push Side Door	4/17/2020	7:43 AM	8:35 AM	0:52	N
В	1	Push Side Door	4/30/2020	7:18 AM	10:10 AM	2:52	Y
С	32	Coke Side Door	6/11/2020	1:38 PM	2:45 PM	1:07	Y
С	31	Push Side Door	4/22/2020	6:35 AM	6:46 AM	0:11	N
		(same coking cycle)	4/22/2020	1:20 AM	1:30 AM	0:10	N
С	31	Push Side Door	6/7/2020	6:15 AM	6:23 AM	0:08	N
		(same coking cycle)	6/8/2020	6:30 AM	6:38 AM	0:08	N

Coke Oven Leaks were evaluated to determine if they met the RCFA Trigger Level as discussed in Section 8.0.

7.0 All failures to comply with the emissions minimization requirements of Paragraph 17 of the Consent Decree;

Emissions Minimization Actions:

(1) IHCC shall reduce coal charge at each Oven from which gases are being bypassed to no more than a forty (40) ton average on a wet basis, if practicable.

There were no Bypass Venting Incidents, as defined in Paragraph 8.d. of the CD, during the reporting period.

8.0 All RCFAs required by Paragraphs 13 and 18 of this Consent Decree;

A. Coke Oven Leaks were evaluated to determine if any met the RCFA Trigger Level, as shown below. Note, Coke Oven Leaks caused by high winds, if any, are listed in Attachment D.

Battery	Oven #	Leak Location	Date	Time Noticed	Time Ended	Duration (hours:minutes)	High Winds (Y/N)	RCFA Triggered?
С	26	Push Side Door	4/17/2020	7:43 AM	8:35 AM	0:52	N	N
В	1	Push Side Door	4/30/2020	7:18 AM	10:10 AM	2:52	Y	N
С	32	Coke Side Door	6/11/2020	1:38 PM	2:45 PM	1:07	Y	N
С	31	Push Side Door	4/22/2020	6:35 AM	6:46 AM	0:11	N	N
		(same coking cycle	4/22/2020	1:20 AM	1:30 AM	0:10	N	N
С	31	Push Side Door	6/7/2020	6:15 AM	6:23 AM	0:08	N	N
		(same coking cycle)	6/8/2020	6:30 AM	6:38 AM	0:08	N	N

B. The following table provides a summary of the <u>Coke Oven RCFAs</u> completed during this reporting period, pursuant to Paragraph 13. Please see Attachment A1 for all Coke Oven RCFAs completed

¹ Please refer to Attachment F, Visible Emissions from Crowns, for a list of visible emissions from Coke Oven Crowns that did not qualify as Crown Opacity/Coke Oven Leaks during this reporting period.

during this reporting period. Additionally, a table showing the status of all corrective actions identified from each RCFA is included in Attachment A3.

RCFA #	Start Date	Battery	Oven #	Leak Location	Duration	RCFA Status
		No Coke	Oven RCF	As required during period.	this reporting	

C. The following table provides a summary of the <u>Bypass Venting Incident RCFAs</u> completed during this reporting period, pursuant to Paragraph 18. Please see Attachment A2 for all Bypass Venting Incident RCFAs completed during this reporting period. Additionally, a table showing the status of all corrective actions identified from each RCFA is included in Attachment A4.

RCFA #	Start Date	Description	RCFA Status
	-	No Bypass Venting Incidents, as defined in Paragraph 8.d., occurred during this reporting period.	

9.0 The status of any corrective actions required under Paragraphs 13 and 18 that were not completed at the time of the submission of any previous report required under Paragraphs 13 and 18;

Paragraph 51(h) requires reporting in this semi-annual report the status of all corrective actions not completed prior to the submission of the previous semi-annual report. Attachments A3 and A4 outline the status of all corrective actions identified from each Coke Oven Leak and Bypass Venting Incident RCFA in this semi-annual reporting period. Attachment A5 outlines the status of all corrective actions not completed prior to the submission of the previous semi-annual report.

10.0 Any updated PMO Plan required by Paragraph 23 of this Consent Decree or any failure to follow a PMO Plan;

The PMO Plan was submitted to EPA and IDEM on June 28, 2018. The PMO Plan was accepted by the agency on February 14, 2019.

There has been no noncompliance with the PMO Plan requirements during this reporting period.

11.0 Submittal of the CAP when required by Paragraph 23.c of this Consent Decree, any updates to the CAP, and any instances when the CAP had to be implemented to ensure compliance with PM or SO₂ limits;

Paragraph 23.c of the CD requires IHCC to evaluate monthly production and monthly sulfur content of the dry coal to identify when they exceed the levels specified in the CD for "High Production Level Months" in two consecutive months. This requirement has been included in the PMO Plan. As outlined in the table below, IHCC did not experience High Production Levels during two consecutive months during the reporting period.

Month/Year	Average Monthly Tons of Dry	Average Monthly Sulfur	High Production Level	
	Coal Charged	Content of Dry Coal	Month?	

April 2020	136,497	0.88%	N
May 2020	139,632	0.89%	N
June 2020	128,450	0.89%	N
July 2020	135,068	0.89%	N
August 2020	134,463 🤛	0.85%	N
September 2020	127,714	0.88%	N

12.0 Status of permit applications and a summary of all permitting activity pertaining to compliance with this Consent Decree;

IHCC permitting status and compliance:

- The permit application to incorporate the required elements of the CD into the facility operating permit was submitted within ninety (90) days of the effective date on January 4, 2019 as required by Paragraph 27.a. A copy of the submitted application was included in the semi-annual report submitted on April 30, 2019.
- The application seeking a site-specific revision to the Indiana State Implementation Plan ("SIP") was submitted within ninety (90) days of the effective date on December 19, 2018 as required by Paragraph 27.b. A copy of the submitted application was included in the semi-annual report submitted on April 30, 2019.
- On January 8, 2020, the Indiana Environmental Rules Board adopted amendments to 326 IAC 7-4.1 consistent with IHCC's application to seek a site-specific revision to the Indiana State Implementation Plan ("SIP") pursuant to Paragraph 27.b of the CD.

13.0 A description of all noncompliance with the requirements in Section VII (Supplemental Environmental Projects);

This is a Cokenergy-only obligation; therefore, details are not included in this report.

14.0 All failures to comply with the reporting requirements in Paragraphs 51 through 55;

There were no failures to comply with the reporting requirements set forth in Paragraphs 51 through 55 of the Consent Decree during this reporting period.

15.0 Copies of all Quarterly Deviation and Compliance Monitoring Reports and semi-annual and annual compliance certifications required under the Defendants' Permits to both EPA and IDEM;

For the IHCC facility, quarterly deviation and compliance monitoring reports submitted during the time period covered by this report are included in Attachment B1. All semi-annual and annual compliance certifications submitted during the reporting period are included in Attachment B2.

16.0 The dates, times, and duration of any Lightning Stand-Downs during the reporting period;

IHCC is not asserting that any Lightning Stand-Downs resulted in Coke Oven Leaks during the current reporting period. The dates, times, and duration of Lightning Stand-Downs during the reporting period can be found in Attachment C.

17.0 The dates, times, and duration of any power outages during the reporting period;

There were no instances of power outages during the reporting period.

18.0 The dates, times, and duration of any Coke Oven Leaks caused by high winds and wind speed and direction data for the time of the Coke Oven Leaks;

The dates, times, and duration of all coke oven leaks caused by high winds during the reporting period can be found in Attachment D. For each coke oven leak caused by high winds, wind speed and direction data is also included.

19.0 Compliance with Bypass Venting Limits

Paragraph 14.a of the CD limits annual bypass venting to a maximum of 12% from January 1, 2017, through December 31, 2019, and a maximum of 13% beginning January 1, 2020. Paragraph 15 of the CD limits daily bypass venting to a maximum of 19% on a twenty-four (24) hour basis.

No exceedances of the annual or daily bypass venting limits occurred during the reporting period. The table below lists the actual annual venting for calendar years 2017, 2018 and 2019. Actual daily bypass venting percentages for each day during the reporting period are included in Attachment E.

Year	Annual Bypass Venting
2017	7.72%
2018	6.01%
2019	5.46%

20.0 Mitigation Measures

Paragraph 25 of the CD requires IHCC to maintain two rebuilt quench towers equipped with 1.5" thick, 2" x 6" wooden baffles placed 30 degrees to the gas stream, and placed 3" apart.

IHCC has maintained the two rebuilt quench towers as required during the reporting period.

CERTIFICATION OF DOCUMENT

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Edward Glass on behalf of Patrick Nigl Operations Manager – Indiana Harbor and Coke Company 10/30/2020 Date Attachment A1

Coke Oven Leak RCFAs Completed

Semi-Annual Report

No Coke Ovens Leaks meeting the Coke Oven Leak RCFA Trigger Level, as defined in Paragraph 8.I. of the CD, occurred during the reporting period.

Attachment A2

Bypass Venting RCFAs Completed

No Bypass Venting Incidents, as defined in Paragraph 8.d. of the CD, occurred during the reporting period.

Attachment A3

Coke Oven Leak RCFA Corrective Actions

Corrective Actions for Current Reporting Period Coke Oven Leak RCFAs

Site	Description of Corrective Action	RCFA Report No.	Reporting Period	Status	Estimated Completion Date	Actual Completion Date
	N/A – No cok					

Corrective Action Status for Prior Reporting Period Coke Oven Leak RCFAs

Site	Description of Corrective Action	RCFA Report No.	Reporting Period	Status	Estimated Completion Date	Actual Completion Date
	N/A – Corrective actio					
	M. 1					

Attachment A4

Bypass Venting RCFA Corrective Actions

No Bypass Venting Incidents, as defined in Paragraph 8.d. of the CD, occurred during the reporting period, therefore, there are no corrective actions to report.

Attachment B

Quarterly Deviation and Compliance Monitoring Reports

&

Annual Compliance Certifications



Indiana Harbor Coke Company, L.P. 3210 Watling Street, MC 2-990 East Chicago, IN 46312 (219) 378-3949 FAX (219) 397-4590

July 30, 2020

Mr. Phil Perry Compliance and Enforcement Branch, Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue, Mail Code 61 – 53 IGCN – 1003 Indianapolis, IN 46204 – 2551

RE: Quarterly Report for Amended Q1 and Q2 2020; Title V Permit No. 089-36982-00382

Dear Mr. Perry:

Please find attached Indiana Harbor Coke Company's (IHCC's) Part 70 Operating Permit Certification and Quarterly Report for Coal Charged, an amended Quarterly Deviation and Compliance Monitoring Report for the 1st Quarter of 2020, and the Quarterly Deviation and Compliance Monitoring Report for the 2nd Quarter of 2020.

Sincerely,

strada

Nancy Estrada Environmental Engineer

cc:

Clifford Yukawa w/attachments IDEM/Northwest Regional Office 330 US Highway 30, Suite F Valparaiso, IN 46385

Attachments: Part 70 Operating Permit Certification Amended Q1 and Q2 Quarterly Report for Coal Charged Amended Q1 and Q2 Quarterly Deviation & Compliance Monitoring Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Source Address: Part 70 Permit Renewal No.:

Indiana Harbor Coke Company L.P., a contractor of ArcelorMittal 3210 Watling Street, East Chicago, Indiana 46312 T089-36982-00382

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

Annual Compliance Certification Letter

Test Result (specify)

Quarterly Report for 1st Quarter 2020 - REVISED

□ Notification (specify)

- □ Affidavit (specify)
- □ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: Printed Name: Patrick Nigl

Title/Position: General Manager

Phone: (219) 378-3902

Date: July 30, 2020

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE and ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Source Address: Part 70 Permit Renewal No.: Indiana Harbor Coke Company L.P., a contractor of ArcelorMittal 3210 Watling Street, East Chicago, Indiana 46312 T089-36982-00382

Reporting Period: January 1, 2020 - March 31, 2020 - REVISED

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☑ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #): D.1.6 (a)(4)

Dates of Deviation: 1/5, 1/7, 1/12, 1/13, 1/27, 2/2, 2/10, 2/16, 3/1, 3/8, 3/30

Duration of Deviation: 14, 3-minute averages

Number of Deviations: 14

Probable Cause of Deviation: IHCC's certified Method 9 observer recorded 14 fugitive visible emissions from charging operations exceeding the twenty percent (20%) opacity standard as a three (3) minute average.

Response Steps Taken: IHCC is continuing to implement an on-going oven maintenance and repair program, optimize burning practices and monitor oven trends to reduce potential for charging opacity. Additionally, IHCC has replaced certain sections of C and D common tunnels and will continue to implement its on-going common tunnel repair program.

	Permit Requirement (specify permit condition Dates of Deviation: 1/1-1/19, 1/21-2/8, 2/10-3/31	Duration of Deviation: Please see Table 1 (attached)
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Probable Cause of Deviation: For a total of 89 days, IHCC was unable to maintain a temperature of 1200 to 2400 degrees Fahrenheit in the common tunnels on C and D Batteries at various times.

For C Battery, the low common tunnel temperature readings are a result of scheduled inlet transition repairs by SunCoke and HRSG cleanings by Cokenergy.

For D Battery, the low common tunnel temperature readings are a result of down time from equipment malfunctions, common tunnel repairs, and scheduled inlet transition repairs by SunCoke and HRSG cleanings by Cokenergy.

Response Steps Taken: IHCC is continuing to implement its on-going common tunnel repair program with repairs on C and D common tunnels in order to help maintain common tunnel temperatures.

Permit Requirement	(specify	permit condition #)	E.2.2	(c)	
	A COLORADO DE LA COL			-	

Dates of Deviation: 1/11, 2/5, 2/7-2/12, 2/15-2/17, 2/19-2/22, 2/24, 3/2, 3/3, 3/5, 3/8, 3/11, 3/17, 3/19-3/24, 3/30

Duration of Deviation: Varies

Number of Deviations: 30

Probable Cause of Deviation: On 30 occasions, IHCC pressure monitoring cells indicated positive pressure readings on A, C, and/or D Battery common tunnels.

A Battery positive pressure readings are mainly a result of instrumentation issues which caused erroneous readings.

C Battery positive pressure readings are mainly a result of insufficient draft resulting from a need for HRSG cleaning.

D battery positive pressure readings are a result of common tunnel repairs to address low draft.

Response Steps Taken: IHCC operations personnel monitor oven conditions to maintain negative draft within the common tunnel. A battery instrumentation underwent recalibration, and certain sections of C common tunnel were replaced in 2019. In addition, IHCC plans to replace additional sections of C and D common tunnels.

Dates of Deviation: 2/1, 2/29	Duration of Deviation: 2 days
Number of Deviations: 2	
Probable Cause of Deviation: On 2 occasions, IHCC baffles on the quench towers were washed at least onc	

Permit Requirement (specify permit condition #) E.2.2 (c	/
Dates of Deviation: 1/3, 1/11, 1/17, 1/29, 3/21, 3/30	Duration of Deviation: Please see Table 2(attached)

Number of Deviations: 7

Probable Cause of Deviation: Door fires that occurred during the reporting period and lasted longer than 15 minutes on the push side or 45 minutes on coke side are the result of necessary maintenance, high winds, and door placement.

Corrective actions were taken, but operators were unable to stop the leaks, within the allowed 15 minutes or 45 minutes on certain ovens for the dates shown in Table 2.

Response Steps Taken: IHCC personnel monitor the ovens and perform all necessary mitigation steps to try to stop any door leaks. In addition, IHCC maintains an on-going oven maintenance and repair program, which includes inspecting and cleaning the common tunnel to maintain sufficient draft.

Signature:

NancyEstrado

Form Completed By: Title/Position: Phone: Date:

Nancy Estrada Environmental Engineer (219) 895-5976 July 30, 2020

Attachments:

Table 1: D.1.13, D.1.18 - Common tunnel temperature out of the 1200 to 2400 degree Fahrenheit

Incident Date / Time	Description / Asset
1/1/2020	C common tunnel
1/2/2020	C common tunnel
1/3/2020	C common tunnel
1/4/2020	C common tunnel
1/5/2020	C, D common tunnel
1/6/2020	C common tunnel
1/7/2020	C common tunnel
1/8/2020	C common tunnel
1/9/2020	C, D common tunnel
1/10/2020	C common tunnel
1/11/2020	C common tunnel
1/12/2020	C common tunnel
1/13/2020	C common tunnel
1/14/2020	The second state of the se
and the second se	C common tunnel
1/15/2020	C common tunnel
1/16/2020	C common tunnel
1/17/2020	C common tunnel
1/18/2020	C common tunnel
1/19/2020	C common tunnel
1/21/2020	D common tunnel
1/22/2020	D common tunnel
1/23/2020	D common tunnel
1/24/2020	D common tunnel
1/25/2020	D common tunnel
1/26/2020	D common tunnel
1/27/2020	D common tunnel
1/28/2020	D common tunnel
1/29/2020	D common tunnel
1/30/2020	D common tunnel
1/31/2020	C, D common tunnel
2/1/2020	D common tunnel
2/2/2020	D common tunnel
2/3/2020	D common tunnel
2/4/2020	D common tunnel
2/5/2020	D common tunnel
2/6/2020	D common tunnel
2/7/2020	D common tunnel
2/8/2020	D common tunnel
2/10/2020	D common tunnel
2/11/2020	D common tunnel
2/12/2020	D common tunnel
2/13/2020	
2/13/2020	C, D common tunnel
	D common tunnel
2/15/2020	D common tunnel
2/16/2020	D common tunnel
2/17/2020	D common tunnel
2/18/2020	D common tunnel
2/19/2020	D common tunnel
2/20/2020	D common tunnel
2/21/2020	D common tunnel
2/22/2020	D common tunnel
2/23/2020	D common tunnel
2/24/2020	D common tunnel
2/25/2020	D common tunnel
2/26/2020	D common tunnel
2/27/2020	D common tunnel

2/29/2020	D common tunnel
3/1/2020	D common tunnel
3/2/2020	D common tunnel
3/3/2020	D common tunnel
3/4/2020	C, D common tunnel
3/5/2020	C, D common tunnel
3/6/2020	C, D common tunnel
3/7/2020	C, D common tunnel
3/8/2020	C, D common tunnel
3/9/2020	C, D common tunnel
3/10/2020	C, D common tunnel
3/11/2020 -	C, D common tunnel
3/12/2020	C common tunnel
3/13/2020	C common tunnel
3/14/2020	C common tunnel
3/15/2020	C common tunnel
3/16/2020	C common tunnel
3/17/2020	C, D common tunnel
3/18/2020	C, D common tunnel
3/19/2020	C common tunnel
3/20/2020	C, D common tunnel
3/21/2020	C, D common tunnel
3/22/2020	C, D common tunnel
3/23/2020	C, D common tunnel
3/24/2020	C, D common tunnel
3/25/2020	C, D common tunnel
3/26/2020	C, D common tunnel
3/27/2020	C, D common tunnel
3/28/2020	C common tunnel
3/29/2020	C common tunnel
3/30/2020	C common tunnel
3/31/2020	C common tunnel

Table 2: E.2.2(c) - Door Fires

Date	Battery	Oven #	Time Observed	Time Out	P/S	c/s	Duration (hh:mm)	Cause(s)	Corrective Action(s)
1/3/2020	D	65	7:32 AM	<u>8:45 AM</u>	x		1:13	Buckstay damage	Adjusted sole flues and buckstay repairs
1/11/2020	Δ	3	<u>7:30 AM</u>	7:42 AM	×		<u>0:12</u>	Two door leaks in same coking cycle; High Winds (26.4 mph)	Adjusted sole flues
1/17/2020	D	66	8:25 AM	<u>9:30 AM</u>	x		1:05	Buckstay damage	Adjusted sole flues and buckstay repairs
1/29/2020	D	31	7:25 AM	<u>8:30 AM</u>	x		1:05	Crack in common tunnel	Repaired crack in common tunnel
3/21/2020	D	6	7:01 AM	10:00 AM	×		2:59	Door placement	Adjusted sole flues, opened uptake, raised draft and closed crown
3/30/2020	с	26	6:30 AM	8:35 AM	x		2:05	High Winds (17 mph)	Adjusted sole flues
3/30/2020	С	33	6:30 AM	8:35 AM	x		2:05	High Winds (17 mph)	Adjusted sole flues

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Source Address: Part 70 Permit Renewal No.:

Indiana Harbor Coke Company L.P., a contractor of ArcelorMittal 3210 Watling Street, East Chicago, Indiana 46312 T089-36982-00382

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit. Please check what document is being certified: Annual Compliance Certification Letter

- Test Result (specify)
- Quarterly Report for 2nd Quarter 2020
- Notification (specify)
- □ Affidavit (specify)
- □ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name: Patrick Nigl Title/Position: General Manager

ama

Phone: (219) 378-3902

Date: July 30, 2020

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT SECTION

Part 70 Quarterly Report

Source Name: Source Address: Part 70 Permit Renewal No.: Source/Facility: Limit: Indiana Harbor Coke Company L.P., a contractor of ArcelorMittal 3210 Watling Street, East Chicago, Indiana 46312 T089-36982-00382 IHCC 2,040,000 tons of dry coal charged per twelve (12) consecutive month period with compliance determined at the end of each month

Quarter:	2nd	Year:	2020

Month	12 Month Rolling Sum Tons of Coal Charged	1st Quarter Tons	2nd Quarter Tons	3rd Quarter Tons	4th Quarter Tons
January	1,458,858	142,029			
February	1,478,260	128,629	• •		
March	1,495,565	137,636			
April	1,516,365		136,497		
May	1,535,940		139,632		
June	1,555,471		128,450		
July					
August				1.00	
September					
October					
November					
December					

No deviation occurred in this guarter.

Deviation/s occurred in this quarter.
 Deviation has been reported on:

Submitted by: Patrick Nigl Title / Position: General Manager

Signature: Date: July 30, 2020

Phone: (219)-378-3902 V Attached a signed certification to complete this report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE and ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Source Address: Part 70 Permit Renewal No.: Indiana Harbor Coke Company L.P., a contractor of ArcelorMittal 3210 Watling Street, East Chicago, Indiana 46312 T089-36982-00382

Reporting Period: April 1, 2020 - June 30, 2020

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☑ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #): D.1.6 (a)(4)

Dates of Deviation: 4/5, 4/26, 5/3, 5/6, 5/10, 5/24, 5/30, 6/21

Duration of Deviation: 14 3-minute averages

Number of Deviations: 14

Probable Cause of Deviation: IHCC's certified Method 9 observer recorded 14 instances of fugitive visible emissions from charging operations exceeding the twenty percent (20%) opacity standard as a three (3) minute average.

Response Steps Taken: IHCC is continuing to implement an on-going oven maintenance and repair program, optimize burning practices and monitor oven trends to reduce potential for charging opacity. Additionally, IHCC has replaced certain sections of C and D common tunnels and will continue to implement its on-going common tunnel repair program, which is expected to reduce visible emissions during charging.

Permit Requirement (specify permit condition #) E.2.2 (c)

Dates of Deviation: 4/1, 4/3-4/5, 4/7, 4/9, 4/11, 4/14, 4/21, 4/22, 4/25, 4/27, 5/1, 5/3, 5/5-5/9, 5/13-5/15, 5/21, 5/23-5/25, 5/31, 6/2, 6/4, 6/5, 6/8, 6/12, 6/16, 6/18, 6/19, 6/21-6/24

Duration of Deviation: Varies

Number of Deviations: 39

Probable Cause of Deviation: On 39 occasions, IHCC pressure monitoring cells indicated positive pressure readings on C Battery common tunnel.

Positive pressure readings are mainly a result of insufficient draft resulting from partial common tunnel blockage at C2 and/or a need for HRSG cleaning, with 37 of 39 instances attributable to this cause. The remaining two instances were caused by common tunnel repair work.

Response Steps Taken: IHCC operations personnel monitor oven conditions to maintain negative draft within the common tunnel. Certain sections of C common tunnel were replaced in 2019, with additional sections of both C and D common tunnels in 2020. IHCC and Cokenergy communicate regularly to discuss HRSG cleaning schedules and the HRSG responsible for these draft issues was cleaned in July. A repair schedule is in progress to address partial common tunnel blockage at C2, and is expected to take place during Q3.

Permit Requirement (specify permit condition #) E.2.2 (c)

Dates of Deviation: 4/17, 4/22, 4/30, 6/8, 6/11

Duration of Deviation: Please see Table 1(attached)

Number of Deviations: 5

Probable Cause of Deviation: Door fires that occurred during the reporting period and lasted longer than 15 minutes on the push side or 45 minutes on coke side, and multiple door leaks in the same coking cycle are the result of high winds and door placement. Corrective actions were taken, but operators were unable to stop the leaks within the allowed 15 minutes or 45 minutes on certain ovens for the dates shown in Table 1.

Response Steps Taken: IHCC personnel monitor the ovens and perform all necessary mitigation steps to stop door leaks. In addition, IHCC maintains an on-going oven maintenance and repair program, which includes inspecting and cleaning the common tunnel to maintain sufficient draft, and has resulted in substantial improvement in oven performance.

Signature:

Manay estraceo

Form Completed By:' Title/Position: Phone: Date:

Nancy Estrada Environmental Engineer (219) 895-5976 July 30, 2020

Attachments:

Table 1: E.2.2(c) - Door Fires

Date	Battery	Oven #	Time Observed	Time Out	Duration (hh:mm)	P/S	c/s	Cause(s)	Corrective Action(s
4/17/2020	С	26	7:43 AM	8:35 AM	0:52	X		Door placement	Closed sole flues
4/22/2020	С	31	6:35 AM	N/A	N/A	x		Two door leaks in the same coking cycle	Adjusted sole flues
4/30/2020	В	1	7:18 AM	10:10 AM	2:52	x		High Winds (25 mph) and oven repairs on coke side	Closed dampers
6/8/2020	С	31	6:15 AM	N/A	N/A	х		Two door leaks in the same coking cycle	Adjusted sole flues
6/11/2020	C	32	1:38 PM	2:45 PM	1:07		x	High Winds and poor draft (15 mph)	Adjusted sole flues and closed door holes

☆ SunCoke Energy™

SunCoke Energy, Inc. 3210 Watting St MC 2-990 East Chicago, IN 46312 219-378-3900 Phone 219-397-4590 Fax

May 5, 2020

United States Environmental Protection Agency, Region V Air and Radiation Division Air Enforcement Branch – Indiana (AE-17J) 77 West Jackson Boulevard Chicago, IL 60604-3590

RE: Resubmission of 2019 Annual Compliance Certification - Permit No. T089-36982-00382

To whom it may concern:

Please find attached Indiana Harbor Coke Company's (IHCC's) revised Part 70 Operating Permit Annual Compliance Certification for the reporting period from January 1, 2019 to December 31, 2019. We are resubmitting the amended report to include permit #089-36826-00382 issued on March 15, 2016, and additional permit terms/conditions.

If you should any questions regarding this report, please contact me at (219) 378-3903 or at nestrada@suncoke.com.

Sincerely,

Estradas

Nancy Estrada Environmental Engineer

cc:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, IN 46204 – 2251

Attachments: Part 70 Operating Permit - Annual Compliance Certification Report for 2019

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, IN 45204-2251

PART 70 / FESOP PERMIT- ANNUAL COMPLIANCE CERTIFICATION

This form can be used to satisfy the annual compliance certification requirements for Part 70 sources under 326 IAC 2-7-5, 326 IAC 2-7-6(5)(C)and FESOP sources under 326 IAC 2-8-5(a)(1)(C).

sources under sea into s-a-a/a// 1//a/.					
	SOURCE INFORMATION	ATION			
(1) Source name:	Indiana Harbor Coke Company L.P contractor of Arcelor Mittal Steel - Indiana Harbor East	Arcelor Mittal Steel – I	ndiana Harbor Ea	ast	
(2) Source address:	3210 Watling Street, MC 2 – 990	•		-	
(3) City:	East Chicago	(4) State:	Indiana (5)	(5) Zip code: 46	46312
(6) Mailing address: (if different from above)	(6) Mailing address: (if different from above) 3210 Wattling Street, MC 2 – 990				
(7) Mailing City:	East Chicago	(8) Mailing State:	Indiana (9) Ma	ailing Zip	46312
(10) Permit numbers:	T089-36826-00382.T089-36982-00382	(11) Reporting Period:	January 1, 2019 to December 31, 2019	o December 31,	2019
(12) Contact person:	Nancy Estrada	(13) Email Address:	nestrada@suncoke.com	oke.com	-
(14) Phone number:	219-378-3903	(15) Fax number:	219-397-4590		
(16) Comments:					
				-	
	SOURCE COMPLIANCE INFORMATION	NFORMATION		<u> </u>	
(17) CHECK THE BOX page).	(17) CHECK THE BOX NEXT TO EITHER (A) OR (B) BELOW. (The terms "continuous compliance" and "intermittent compliance" are defined on the Definitions page).	s compliance" and "interm	ittent compliance" are	e defined on the [Definitions

	×	ttent during the
(A) This source was in CONTINUOUS COMPLIANCE with all of the permit terms and conditions that impose a work practice or emission standard or requires performance testing, monitoring, record keeping or reporting based on the monitoring methods in the permit	(B) This source was in CONTINUOUS COMPLIANCE with all of the permit terms and conditions that impose a work practice or emission standard or requires performance testing, monitoring, record keeping or reporting based on the monitoring methods in the permit, except for the terms and conditions listed in the following table for which the source reported intermittent compliance.	IMPORTANT: If you select option (B), you must complete the following table in which you list any permit terms for which compliance was intermittent during the permit for the reporting period covered by this Compliance Certification.

Source Name: Indiana - Indiana Harbor East	Indiana Harbor Coke Company L.P	contract	contractor of Arcelor Mittal Steel Source Permit Number: T089-36982-00382
Permit Term/ Condition	Description of Permit Condition	*Method Codes	Report Date/Comments
<u>C.5(k).</u> D.1.6(a)(4)	Fugitive PM Emissions	VE INSP RR	1 st Quarterly Deviation Report, submitted April 29, 2019 Revised report submitted on January 29, 2020 2 nd Quarterly Deviation Report, submitted July 30, 2019 Revised report submitted on January 29, 2020 3 rd Quarterly Deviation Report, submitted on October 30, 2019 Revised report submitted on January 29, 2020 4 th Quarterly Deviation Report, submitted on January 29, 2020
D.1.12 (b). D.1.13(b)	Particulate Matter Control	Я Х Х	
D.1.4 (a)	Lead Limitation	Calc RR	EOR submitted May 30, 2019
D.1.15, <u>D.1.13</u> D.1.18, D.1.19	Duct Temperature	RK	1 st Quarterly Deviation Report, submitted April 29, 2019 Revised report submitted on January 29, 2020 2 nd Quarterly Deviation Report, submitted July 30, 2019 Revised report submitted on January 29, 2020 3 rd Quarterly Deviation Report, submitted on October 30, 2019 Revised report submitted on January 29, 2020 4 th Quarterly Deviation Report, submitted on January 29, 2020
E.2.2(c)	NESHAP – Door Leaks	WP RK	1 st Quarterly Deviation Report, submitted April 29, 2019 Revised report submitted on January 29, 2020 2 nd Quarterly Deviation Report, submitted July 30, 2019 Revised report submitted on January 29, 2020 3 nd Quarterly Deviation Report, submitted on October 30, 2019 Revised report submitted on January 29, 2020 3 nd Quarterly Deviation Report, submitted on October 30, 2019 Revised report submitted on January 29, 2020 1 st Half Semiannual Compliance Certification submitted on July 30, 2019 Revised report submitted on January 29, 2020 2 nd Half Semiannual Compliance Certification submitted on January 29, 2020
		0	N

and belief formed after reasonable inquiry, the statemen	based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accur take And	continuous opacity monitoring system; ST = stack test; VE = visible emissions; RK = record keeping; RR = review of tanalysis; WP = work practice; PM = parametric monitoring; Calc = calculations; O = other (specify in Comments) certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
Patrick NgL Mal Date: 219-378-3902 Email Address:	Table A Mag Title/Position: Patrick Ngl Date: 219-378-3902 Email Address:	ite, and complete.
Patrick Mgl Date: Date: 219-378-3902	Patrick Ngl Date: 219-378-3902 Email Address:	
219-378-3902 V Email Address:	219-378-3902 V Email Address:	

Attachment C

List of Lightning Stand-downs

Date	Lightning Stand Down Start Time	Lightning Stand Down End Time
5/15/2020	02:53	04:24
5/15/2020	04:46	07:10
6/13/2020	06:10	09:42
7/1/2020	20:13	21:28

Attachment D

List of Coke Oven Leaks Caused by High Winds

Battery	Oven	Leak Location	Date	Time Noticed	Time Ended	Duration (hours:min)	Wind Dir	Wind Speed (mph)	High Winds?
В	1	Push Side Door	4/30/2020	7:18 AM	10:10 AM	2:52	NNW	26	Y
С	32	Coke Side Door	6/11/2020	1:38 PM	2:45 PM	1:07	WSW	15	Y

Attachment E

Daily Bypass Venting Percentages

-	
6	1
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Date	Daily
4/1/2020	6.26
4/2/2020	3.91
4/3/2020	0.00
4/4/2020	0.00
4/5/2020	0.00
4/6/2020	3.36
4/7/2020	6.25
4/8/2020	6.25
4/9/2020	6.25
4/10/2020	6.25
4/11/2020	6.25
4/12/2020	6.26
4/13/2020	6.25
4/14/2020	6.25
4/15/2020	4.47
4/16/2020	0.00
4/17/2020	0.00
4/18/2020	0.00
4/19/2020	0.00
4/20/2020	0.00
4/21/2020	0.55
4/22/2020	0.00
4/23/2020	0.00
4/24/2020	0.00
4/25/2020	0.02
4/26/2020	0.12
4/27/2020	0.14
4/28/2020	0.01
4/29/2020	1.78
4/30/2020	0.26
5/1/2020	0.00
5/2/2020	0.00
5/3/2020	0.00
5/4/2020	0.00
5/5/2020	0.04
5/6/2020	0.24
5/7/2020	0.09
5/8/2020	0.00
5/9/2020	0.00
5/10/2020	0.00
5/11/2020	0.00
5/12/2020	0.18
5/13/2020	0.01
5/14/2020	0.00
5/15/2020	0.00
5/16/2020	0.00
5/ 10/ 2020	0.00

Semi-Annual Report

5/17/2020	0.00
5/18/2020	0.17
5/19/2020	0.00
5/20/2020	0.72
5/21/2020	3.19
5/22/2020	0.01
5/23/2020	0.01
5/24/2020	0.00
5/25/2020	0.00
5/26/2020	
	0.07
5/27/2020	0.00
5/28/2020	0.30
5/29/2020	0.00
5/30/2020	0.07
5/31/2020	0.00
6/1/2020	0.04
6/2/2020	0.00
6/3/2020	0.00
6/4/2020	0.00
6/5/2020	0.19
6/6/2020	0.02
6/7/2020	0.00
6/8/2020	4.65
6/9/2020	5.89
6/10/2020	6.43
6/11/2020	5.88
6/12/2020	6.29
6/13/2020	5.88
6/14/2020	5.88
6/15/2020	6.34
6/16/2020	5.88
6/17/2020	5.88
6/18/2020	6.02
6/19/2020	5.88
6/20/2020	5.88
6/21/2020	5.88
6/22/2020	5.88
6/23/2020	5.88
6/24/2020	5.88
6/25/2020	10.52
6/26/2020	12.13
6/27/2020	12.13
	1000 000 000000 000000
6/28/2020	12.13
6/29/2020	12.15
6/30/2020	12.85
7/1/2020	12.13
7/2/2020	10.84

April 1, 2020 - September 30, 2020

7/3/2020	12.14
7/4/2020	12.13
7/5/2020	12.13
7/6/2020	12.81
7/7/2020	12.17
7/8/2020	14.59
7/9/2020	13.42
7/10/2020	9.01
7/11/2020	6.33
7/12/2020	6.25
7/13/2020	6.25
7/14/2020	6.29
7/15/2020	6.25
7/16/2020	8.68
7/17/2020	5.88
7/18/2020	5.88
7/19/2020	6.25
7/20/2020	5.51
7/21/2020	5.51
7/22/2020	5.51
7/23/2020	10.28
7/24/2020	9.45
7/25/2020	6.25
7/26/2020	6.25
7/27/2020	6.51
7/28/2020	6.66
7/29/2020	6.25
7/30/2020	4.21
7/31/2020	0.00
8/1/2020	0.00
8/2/2020	0.01
8/3/2020	0.00
8/4/2020	0.00
8/5/2020	0.00
8/6/2020	1.73
8/7/2020	0.87
8/8/2020	0.00
8/9/2020	1.43
8/10/2020	3.14
8/11/2020	0.61
8/12/2020	0.88
8/13/2020	7.93
8/14/2020	8.65
8/15/2020	11.34
8/16/2020	11.76
8/17/2020	11.76
8/18/2020	11.76

April 1, 2020 - September 30, 2020

8/19/2020 9.16 8/20/2020 10.46 8/21/2020 9.37 8/22/2020 6.25 8/23/2020 6.36 8/24/2020 6.25 8/25/2020 6.25 8/26/2020 6.25 8/26/2020 6.25 8/27/2020 3.78	
8/21/2020 9.37 8/22/2020 6.25 8/23/2020 6.36 8/24/2020 6.25 8/25/2020 6.25 8/26/2020 6.25	
8/22/2020 6.25 8/23/2020 6.36 8/24/2020 6.25 8/25/2020 6.25 8/26/2020 6.25	
8/23/2020 6.36 8/24/2020 6.25 8/25/2020 6.25 8/26/2020 6.25	
8/24/20206.258/25/20206.258/26/20206.25	
8/25/20206.258/26/20206.25	
8/26/2020 6.25	
8/27/2020 3.78	
8/28/2020 0.62	
8/29/2020 0.00	
8/30/2020 0.00	
8/31/2020 0.00	
9/1/2020 0.00	
9/2/2020 0.12	
9/3/2020 0.00	
9/4/2020 0.00	
9/5/2020 2.47	
9/6/2020 6.25	
9/7/2020 6.35	
9/8/2020 6.27	
9/9/2020 6.25	
9/10/2020 6.26	
9/11/2020 6.25	1
9/12/2020 6.25	
9/13/2020 6.25	
9/14/2020 6.25	
9/15/2020 6.25	
9/16/2020 6.25	
9/17/2020 6.25	
9/18/2020 6.25	
9/19/2020 4.23	
9/20/2020 0.00	
9/21/2020 0.37	
9/22/2020 0.00	
9/23/2020 0.00	
9/24/2020 1.62	
9/25/2020 0.00	
9/26/2020 0.00	
9/27/2020 0.00	
9/28/2020 0.04	
9/29/2020 3.52	
9/30/2020 0.04	

Semi-Annual Report

Attachment F

Visible Emissions from Crowns

F-1

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Battery	Oven	Leak Location	Date	Time Noticed	Time Ended	Duration hours:minutes	Coke Oven Leak?	RCFA?
D	39	Crown	5/29/2020	7:24 AM	10:30 AM	3:06	N	N
D	7	Crown	8/10/2020	6:18 AM	8:30 AM	2:12	N	N
D	12	Crown	7/23/2020	12:18 PM	1:00 PM	0:42	N	N