

JEFFERSON COUNTY DEPARTMENT OF HEALTH

AIR POLLUTION PROGRAM

Permittee: **ERP Compliant Coke Plant/Utilities/Wastewater**

Location: **3500 35th Avenue
Birmingham, Alabama 35207**

Permit No: **4-07-0355-03**

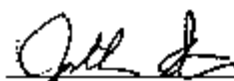
Issuance Date: **2/12/2016**

Expiration Date: **10/3/2019**

Nature of Business: **Manufacturing of Coke and Coke By-Products, Utilities Production, and Wastewater Treatment**

Emissions Unit No.	Description of Emissions Units
001	Coke By-Products Recovery Plant with Gas Blanketing, NESHAP, Part 61, Subparts FF, L, & V
009	Coke Battery No. 5 – Coking and Charging, NESHAP, Part 63, Subpart L
012	Coke Battery No. 4 – Coking and Charging, NESHAP, Part 63, Subpart L
015	Coke Battery No. 3 – Coking and Charging, NESHAP, Part 63, Subpart L
016	Underfire Stack of Coking Batteries Nos. 3 and 4, NESHAP, Part 63, Subpart CCCCC
017	Underfire Stack of Coking Battery No. 5, NESHAP, Part 63, Subpart CCCCC
018	South Coke Quenching Tower, NESHAP, Part 63, Subpart CCCCC
019	North Coke Quenching Tower, NESHAP, Part 63, Subpart CCCCC
021	Coke Pushing Operations of Coking Batteries Nos. 3, 4 and 5, NESHAP, Part 63, Subpart CCCCC
029	Steam Generator No. 1
031	Steam Generator No. 3
032	Steam Generator No. 4, NSPS Subpart Dh
034	Primary Crushers with Wet Suppression
035	Wheel Wash
036	Emergency Generators-5 (2 Diesel and 3 Natural Gas)

This Permit is issued pursuant to and is conditioned upon the compliance with the provisions of the Jefferson County Board of Health Air Pollution Control Rules and Regulations, Section 18 of the Alabama Air Pollution Control Act of 1971, Act No. 769 (Regular Session, 1971), Section 22-28-16 of the Alabama Air Pollution Control Act as amended, Orders of the Jefferson County Board of Health, Orders of the Director of the Alabama Department of Environmental Management, and any applicable local, state or federal Court Order. This Permit is subject to the accuracy of all information submitted relating to the permit application and to the conditions appended hereto. It is valid from the date of issuance until the expiration date and shall be posted or kept under file at the source location described above and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it. This Permit is not transferable. Pursuant to the Clean Air Act (Act), conditions of this permit are Federally enforceable by EPA, the Jefferson County Board of Health and citizens in general. Those provisions, which are not required by the Act, are considered to be Jefferson County provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate Sections of this Operating Permit.


Jonathan Stanton, Director
Environmental Health Services

Approved: Mark E. Wilson, M.D., Health Officer
ENV-AP-107-10/11



GENERAL PERMIT CONDITIONS

In addition to compliance with Alabama Air Pollution Control Act Number 769 (Regular Session, 1971) and Act Number 612 (Regular Session, 1982) and with all applicable Air Pollution Control Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit:

No.	Federally Enforceable General Permit Conditions	Regulations
1	<p><u>Definitions</u></p> <p>For the purposes of this Major Source Operating Permit, the following terms will have the meanings ascribed to in this permit:</p> <p>"40 CFR 60" shall be an acronym for Part 60 of Title 40 of the <u>Code of Federal Regulations</u>, as the same may be amended or revised.</p> <p>"40 CFR 61" shall be an acronym for Part 61 of Title 40 of the <u>Code of Federal Regulations</u>, as the same may be amended or revised.</p> <p>"40 CFR 63" shall be an acronym for Part 63 of Title 40 of the <u>Code of Federal Regulations</u>, as the same may be amended or revised.</p> <p>"40 CFR 68" shall be an acronym for Part 68 of Title 40 of the <u>Code of Federal Regulations</u>, as the same may be amended or revised.</p> <p>"40 CFR 82" shall be an acronym for Part 82 of Title 40 of the <u>Code of Federal Regulations</u>, as the same may be amended or revised.</p> <p>"Act" shall mean the Clean Air Act, as amended, 42 U.S.C. 7401, et seq.</p> <p>"ADEM" shall be an acronym for the Alabama Department of Environmental Management.</p> <p>"Air Permit" shall mean any permit issued pursuant to Chapter 2 of the Rules and Regulations.</p> <p>"Bypass/Bleeder Stack" shall mean a stack, duct, or offtake system that is opened to the atmosphere and used to relieve excess pressure by venting raw coke oven gas from the collecting main to the atmosphere from a by-product coke oven battery, usually during emergency conditions.</p> <p>"Battery Stack" shall mean the stack that is the point of discharge to the atmosphere of the combustion gases from a battery's underfiring system.</p> <p>"Coke By-product Recovery Plant" shall mean any plant designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery.</p> <p>"Coke Oven Battery" shall mean a group of ovens connected by common walls, where coal undergoes destructive distillation to produce coke. A coke oven battery includes by-product and non-recovery processes.</p> <p>"Coke Plant" shall mean a facility that produces coke from coal in either a by-product coke oven battery or a non-recovery coke oven battery.</p> <p>"Cokeside Shed" shall mean a structure used to capture pushing emissions that encloses the cokeside of the battery and ventilates the emissions to a control device.</p> <p>"Collecting Main" shall mean any apparatus that is connected to one or more offtake systems and that provides a passage for conveying gases under positive pressure from the by-product</p>	<p>1.3</p> <p>40 CFR 60</p> <p>40 CFR 61</p> <p>40 CFR 63</p> <p>40 CFR 68</p> <p>40 CFR 82</p>

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1	<p>coke oven battery to the by-product recovery system. "Department" shall mean the Jefferson County Department of Health.</p> <p>"Emissions Unit" shall mean any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act.</p> <p>"EPA" shall be an acronym for the U. S. Environmental Protection Agency.</p> <p>"Emergency" shall mean any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God. These are situations that require immediate corrective action(s) to restore normal operation, and that cause the facility to exceed a technology based emission limitation set by the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include exceedances of the permit emission limitations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.</p> <p>"Fossil Fuel" shall mean natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.</p> <p>"Foundry Coke" shall mean coke that is produced from raw materials with less than 26 percent volatile material by weight and that is subject to a coking period of 24 hours or more. Percent volatile material of the raw materials (by weight) is the weighted average percent volatile material of all raw material (by weight) charged to the coke oven per coking cycle.</p> <p>"Foundry Coke By-product Recovery Plant" shall mean a coke by-product recovery plant connected to coke batteries whose annual coke production is at least 75 percent foundry coke.</p> <p>"Fugitive Emissions" shall mean those emissions, which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.</p> <p>"HAP" shall be an acronym for hazardous air pollutant.</p> <p>"Hazardous Air Pollutant" shall mean any air pollutant listed in or pursuant to Section 112(b) of the Act.</p> <p>"In Benzene Service" shall mean a piece of equipment other than an exhauster, that either contains or contacts a fluid (liquid or gas) that is at least 10% benzene by weight or any exhauster that either contains or contacts a fluid (liquid or gas) at least 1% benzene by weight as determined by the provisions of 40 <u>CFR</u> 61.137(b). The provisions of 40 <u>CFR</u> 61.137(b) also specify how to determine that a piece of equipment is not in benzene service.</p> <p>"Incinerator" shall mean an enclosed air pollution control device that uses controlled flame combustion to convert combustible materials to noncombustible gases.</p> <p>"NESHAP" shall be an acronym for National Emission Standard for Hazardous Air Pollutants.</p> <p>"NSPS" shall be an acronym for New Source Performance Standard.</p> <p>"Operating Permit" shall mean any permit issued pursuant to Chapter 18 of the Rules and Regulations.</p> <p>"Oven" shall mean a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke.</p>	<p>1.3</p> <p>40 <u>CFR</u> 60</p> <p>40 <u>CFR</u> 61</p> <p>40 <u>CFR</u> 63</p> <p>40 <u>CFR</u> 68</p> <p>40 <u>CFR</u> 82</p>

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1	<p>"Permittee" shall mean the holder of a permit issued by the Department.</p> <p>"Pushing" shall mean the process of removing the coke from the oven.</p> <p>"Pushing begins when coke first begins to fall from the oven into the quench car and ends when the quench car enters the quench tower.</p> <p>"Quenching" shall mean the wet process of cooling (wet quenching) the hot incandescent coke by direct contact with water that begins when the quench car enters the quench tower and ends when the quench car exits the quench tower.</p> <p>"Quench Tower" shall mean the structure in which hot incandescent coke in the quench car is deluged or quenched with water.</p> <p>"Rules and Regulations" shall mean the Jefferson County Board of Health Air Pollution Control Rules and Regulations, as the same may be amended or revised.</p> <p>"Short Battery" shall mean a by-products coke oven battery with ovens less than 5 meters in height.</p> <p>"Source" shall mean any building, structure, facility, installation, article, machine, equipment, device, or other contrivance that emits or may emit any air contaminant. Any activity, which utilizes abrasives or chemicals for cleaning, or any other purpose (such as cleaning the exterior of buildings), which emits air contaminants, shall be considered a source.</p> <p>"Standpipe" shall mean an apparatus on the oven that provides a passage for gases from an oven to the collecting main or to the atmosphere when the oven is dampered off the collecting main and the standpipe cap is opened.</p> <p>"Stationary Source" shall mean any building, structure, facility, or installation that emits or may emit any regulated air pollutant as defined in Part 18.1 of the Rules and Regulations or any pollutant listed in Appendix D of the Rules and Regulations.</p> <p>"Steam Generating Unit" shall mean a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in subpart 40 CFR 60.41b.</p> <p>"VOC" shall be an acronym for volatile organic compound.</p> <p>"VHAP" Shall be an acronym for volatile hazardous air pollutant.</p> <p>In addition, the individual definitions as specified in each applicable rule, regulation, or standard shall be utilized where applicable.</p>	<p>1.3</p> <p>40 CFR 60</p> <p>40 CFR 61</p> <p>40 CFR 63</p> <p>40 CFR 68</p> <p>40 CFR 82</p>
2	<p><u>Applicability</u></p> <p>The Major Source permitted herein shall include all of the equipment and operations of the manufacturing of coke and coke by-products, steam generation and the biological treatment facility including but not limited to, coke oven batteries, gas-fired steam generators, coke quenching towers, coke pushing controls, underfire stacks, by-pass bleeder flare, particulate emissions collection and control systems, raw materials handling operations, raw materials storage areas, product handling operations, storage tanks, in-plant vehicles, plant roads, and parking areas. The facility's particulate, visible, coke oven, coke quenching, gaseous and The</p>	<p>Chapter 1</p> <p>Chapter 2</p> <p>Chapter 4</p> <p>Chapter 6</p> <p>Chapter 7</p> <p>Chapter 8</p> <p>Chapter 14</p> <p>Chapter 16</p>

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2	<p>fugitive emissions are subject to the restrictions of Chapter 6 of the Rules and Regulations. The coke manufacturing operations are subject to the NESHAP regulations under 40 CFR 61, 40 CFR 63 and Chapter 14 of the Rules and Regulations. The coke manufacturing operations are subject to the general provisions of 40 CFR 60, Subpart A, general provisions of 40 CFR 61 that list the substances pursuant to section 112 of the Act, and 40 CFR 63 to the general provisions that contain the national emissions standards for hazardous air pollutants established pursuant to section 112 of the Act and the specific standards that regulate specific categories of stationary sources. The coke plant is subject to the requirements of Chapters 6 and 8 of the Rules and Regulations. The Steam Generator No. 4 is subject to the requirements of NSPS requirement under 40 CFR 60 and Chapter 13 of the Rules and Regulations. The cog and natural gas boilers are subject to the requirements of Chapters 6 and 7. The facility is subject to the Operating Permit emissions fees of Chapter 16 and to the major source Operating Permit requirements of Chapter 18 of the Rules and Regulations.</p>	<p>Chapter 18 40 CFR 60 Subpart A 40 CFR 61 Subpart A 40 CFR 6340 CFR 63 Subpart A</p>
3	<p><u>Basis for Permit</u> This Operating Permit is issued based on provisions contained in all existing Rules and Regulations. In the event amendments, revisions or additions are made to these Rules and Regulations, it shall be the responsibility of the permit holder (hereinafter called the permittee in this permit) to comply with such new Rules and Regulations. Additions and revisions to the conditions in this Operating Permit will be made by the Department, if necessary, to assure that the Rules and Regulations are not violated.</p>	<p>AL Act 769 AL Act 612</p>
4	<p><u>Authority</u> Nothing in this Operating Permit or conditions appended thereto shall negate any authority granted to this Department or the Health Officer pursuant to Alabama Air Pollution Control Act No. 769 (Regular Session, 1971) and Act No. 612 (Regular Session, 1982) or any regulations promulgated thereunder.</p>	<p>AL Act 769 AL Act 612</p>
5	<p><u>Emission Reduction Plan</u> Upon notification by this Department, the permittee shall submit an Air Pollution Emission Reduction Plan in a format approved by this Department concerning air contaminant emissions reductions to be taken during declared episodes.</p>	<p>Chapter 4 18.2.8(b)</p>
6	<p><u>Maintenance of Equipment: Reporting</u> Maintenance: Reporting. In the case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Director at least 24 hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:</p> <ul style="list-style-type: none"> A. Identification of the specific facility to be taken out of service as well as its location and permit number; B. The expected length of time that the air pollution control equipment will be out of service; C. The nature and quantity of emissions of air contaminants likely to occur during the shutdown period; D. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and E. The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period. 	<p>1.12.1 18.2.4 18.2.8(a)</p>
7	<p><u>Malfunction: Reporting</u> In the event that any emission source, air pollution control equipment, or related facility fails or breaks down in such a manner as to cause the emission of air contaminants in violation of these rules and regulations, the person responsible for such source, equipment, or facility shall notify the Health Officer within 24 hours of such failure or breakdown and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Health Officer shall be notified when the condition causing the failure or breakdown has been corrected and such source, equipment, or facility is again in operation.</p>	<p>1.12.2 18.2.4 18.2.8(a)</p>

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8	<u>Transfer</u> This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another or from one person to another except as provided in Subparagraph 18.13.1(a)(5) of the Rules and Regulations.	18.2.6 18.13.1(a)(5)
9	<u>Compliance Source Emissions Testing</u> The Department at any time may require a source emissions test. The methods for such testing shall be in accordance with procedures established by Part 51, Part 60, Part 61, and Part 63 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.	1.9 18.2.5 18.2.8 40 CFR 61 40 CFR 63
10	<u>Notice of Testing</u> The permittee shall notify this Department in writing at least 60 calendar days prior to the actual conduction of any source emissions test. This notice shall state the source to be tested, the proposed time of the test, the testing date(s), and the proposed testing methods and procedures.	19.1 18.2.5 40 CFR 63
11	<u>Provisions for Testing</u> The permittee shall provide each point of emission with sampling ports, ladders, stationary platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by 40 CFR 51, 40 CFR 60, 40 CFR 61, and 40 CFR 63.	1.10.3 18.2.5 18.2.8(c)
12	<u>Test Results</u> The permittee shall submit the results of all emissions tests in duplicate in bound copies to this Department within a time period specified by this Department; however, not to exceed 4 weeks from the test completion date.	18.2.8(c) 40 CFR 63
13	<u>Operation and Maintenance of Controls</u> A. The permittee shall equip each particulate matter control device with a pressure differential measuring device to measure the pressure drop across the filter media in the control device. This device shall be installed in a location that is easily accessible for inspection by personnel of this Department. B. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Written procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established and submitted to this Department for approval. C. The permittee shall conduct routine inspections on all control equipment. All inspections results and repair work performed on the pollution control device shall be recorded. These records shall be kept in a permanent form suitable for inspection in a format approved by this Department and shall be retained for 5 years after the date of the record.	18.2.8(a) 40 CFR 61 40 CFR 63
14	Highest measured ambient temperature remains less than 38 degrees Fahrenheit throughout that day (24-hour period). When the measured ambient temperature rises to 38 degrees Fahrenheit or more during the day, the permittee shall resume daily dust suppressant if necessary.	
15	<u>Monitoring Records</u> Records of all required monitoring shall be retained for a period of 5 years from the date of measurement including all calibration and maintenance records and all original strip-chart recordings and copies of all reports. Records of required monitoring information shall include, as a minimum, the following: A. The date, place as defined in the permit, and time of sampling or measurements; B. The date(s) analysis were performed; C. The company or entity that performed the analysis; D. The analytical techniques or methods used; E. The results of such analysis; and F. The operating conditions as existing at the time of sampling or measurement.	1.9 18.5.3(b)(1)(vii) 40 CFR 70.6(a)(3)(ii)(A)

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16	<p><u>Monitoring Reports</u></p> <p>Reports of required monitoring shall be submitted to the Department by January 31 and July 31 of each year unless notified otherwise. All instances of deviations from permit requirements must be clearly identified in such reports. A responsible official as defined in Paragraph 18.1.1(y) of the Rules and Regulations must sign all reports.</p>	<p>1.9</p> <p>18.1.1(y)</p> <p>18.5.3(c)(1)</p> <p>40 CFR 63</p>
17	<p><u>Deviations</u></p> <p>Deviations from permit requirements shall be reported within 2 working days of such deviations, including those attributable to upset conditions, the probable cause of said deviations, and any corrective actions or preventive measures that were taken.</p>	<p>18.5.3(c)(2)</p> <p>40 CFR 63</p>
18	<p><u>Severability</u></p> <p>In case of legal challenge to any portion or permit condition of this Operating Permit, the remainder of the permit conditions shall continue in force.</p>	18.5.5
19	<p><u>Compliance</u></p> <p>The major source (permittee) permitted herein must comply with all conditions of the Rules and Regulations. Noncompliance with a permit will constitute a violation of the Act and the Rules and Regulations and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.</p>	18.5.6
20	<p><u>Compliance Defense</u></p> <p>The permittee shall not use as a defense in an enforcement action, that maintaining compliance with permit conditions or the Rules and Regulations would have required halting or reducing the permitted activity.</p>	18.5.7
21	<p><u>Termination for Cause</u></p> <p>This Operating Permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation, and reissuance or termination, or of a notification of a planned change or anticipated noncompliance will not stay any permit condition.</p>	18.5.8
22	<p><u>Property Rights</u></p> <p>No property rights of any sort or any exclusive privilege are conveyed through the issuance of this Operating Permit.</p>	18.5.9
23	<p><u>Requests for Information</u></p> <p>The permittee shall furnish to the Department within 30 days, or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by the permit.</p>	18.5.10
24	<p><u>Payment of Fees</u></p> <p>The permittee must have paid all fees required by the Rules and Regulations or this Operating Permit is not valid. Payment of Operating Permit fees required under Part 16.4 of the Rules and Regulations shall be made on or before the date specified under Section 16.5.1 of the Rules and Regulations of each year. Failure to make payment of fees within 30 days of the specified date shall cause the assessment of a late fee of 3 percent (3% of the original fee) per month or fraction thereof.</p>	<p>16.4</p> <p>16.5</p> <p>18.5.11</p>
25	<p><u>Economic Incentives</u></p> <p>No permit revision shall be required under any approved economic incentives, marketable permit emissions trading and other similar programs or processes for changes that are provided for in the Operating Permit.</p>	18.5.12
26	<p><u>Alternative Operating Scenarios</u></p> <p>If the permittee has applied for alternate operating scenarios and the Department deems the alternative operating scenarios identified in the application for this Operating Permit acceptable, then the permittee shall:</p> <p>A. Record the change from one operating scenario to another in a log at the permitted facility. The recording of the change shall be made contemporaneously with the change, and the log shall contain the scenario under which the facility is currently operating.</p> <p>B. Ensure that terms and conditions of each alternative operating scenario meet all of the requirements of this Operating Permit, as well as, the Rules and Regulations.</p>	18.5.13

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27	<p><u>Trading of Emissions Increases and Decreases</u></p> <p>If specifically requested by the applicant (permittee), the Department may authorize the trading of emissions increases and decreases in the permitted facility solely for the purposes of complying with a federally enforceable emissions cap that is established in the permit independent of otherwise applicable requirements, to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval of each emissions trade. The terms and permit conditions in the Operating Permit shall comply with the requirements Section 18.5.14 of the Rules and Regulations.</p>	<p>18.5.14 Appendix F</p>
28	<p><u>Changes</u></p> <p>Certain changes (per Section 502 (B)(10) of the Act) can be made to this Operating Permit without a revision if no modification as defined in the Rules and Regulations would occur and the changes do not exceed the emissions allowed under this permit provided that a notice is sent to the Department 7 days in advance of the change.</p>	<p>18.13.2</p>
29	<p><u>Entry and Inspections</u></p> <p>The permittee shall allow the Department, ADEM, EPA, or authorized representative upon presentation of credentials and other documents that may be required by law to conduct the following:</p> <ul style="list-style-type: none"> A. Enter upon the permittee's premises where a source is located or emissions related activity is conducted or where records are kept pursuant to the permit conditions; B. Review and/or copy at reasonable times any records kept pursuant to the permit conditions; C. Inspect at reasonable times any facilities, equipment, practices or operations required by the permit; and D. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements. 	<p>18.2.9(d) 18.7.2</p>
30	<p><u>Compliance Certification</u></p> <p>A compliance certification shall be submitted annually within 30 days of the anniversary of the initial issue date (Nov. 21, 2002). The permittee shall provide a means for monitoring the compliance of its air pollution sources with the emissions limitation, standards and work practices listed for referenced within this permit.</p> <ul style="list-style-type: none"> A. The compliance certification shall include the following: <ul style="list-style-type: none"> 1. The identification of each term or condition of this permit that is the basis of the certification; 2. The compliance status; 3. Whether compliance has been continuous or intermittent; 4. The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with the Rules and Regulations; 5. Any application form, report, or compliance certification submitted pursuant to Chapter 18 shall contain certification by a responsible official of truth, accuracy, and completeness. 6. Such other facts as the Department may require to determine the compliance status of the Source. B. The compliance certification shall be submitted to the following agencies: <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p>Jefferson County Department of Health Air and Radiation Protection Division P.O. Box 2648 Birmingham, AL 35202-2648</p> </div> <div style="width: 45%;"> <p>EPA Region IV Air & EPCRA Enforcement Branch 61 Forsyth Street SW Atlanta, GA 30303-8909</p> </div> </div> 	<p>18.4.9 18.7.1 18.7.5(c) 18.7.5(d) 18.7.5(e)</p>
31	<p><u>Reopening for Cause</u></p> <p>Under any of the following circumstances, this Operating Permit will be reopened prior to the expiration of the permit:</p> <ul style="list-style-type: none"> A. Additional applicable requirements under the Clean Air Act become applicable to the permittee with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirements. No such reopening is required if the effective date of the requirement is later than the date on 	<p>18.13.5</p>

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31	<p>which this permit is due to expire.</p> <p>B. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.</p> <p>C. The Department, ADEM or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.</p> <p>D. The Administrator, ADEM or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</p>	
32	<p><u>Emergencies</u></p> <p>A. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emissions limitation under the Operating Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.</p> <p>B. Exceedances of emission limits during emergencies (as defined above) at a facility may be exempted from being violations provided that one or more of the following actions occur:</p> <ol style="list-style-type: none"> 1. The permittee can identify the cause(s) of the emergency; 2. At the time of the emergency, the permitted facility was being properly operated; 3. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Operating Permit; 4. The permittee submitted notice of the emergency to the Health Department within 2 working days of the time when the emission limitations were exceeded due to the emergency. Such notice shall include those deviations attributable to upset conditions as defined in the permit, the probable cause of said deviations, and any corrective actions or preventative measures that were taken. Within 5 working days of the emergency, a written documentation of what was reported in the notice of the emergency shall be submitted to the Department; and 5. The permittee immediately documented the emergency exceedance in an "Emergency Log," which shall be maintained for 5 years in a form suitable for inspection upon request by a representative of the Department. <p>C. This provision is in addition to any emergency or upset provision contained in any applicable requirement.</p> <p>D. An emergency constitutes an affirmative defense.</p>	18.11.2
33	<p>Nothing in this Operating Permit shall alter or affect the following:</p> <p>A. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that Section;</p> <p>B. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance pursuant to Section 114 of the Act.</p> <p>C. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act; or</p> <p>D. The ability of EPA to obtain information from a source pursuant to Section 114 of the Act.</p>	18.10.3
34	<p><u>Duration, Expiration and Renewal of Operating Permit</u></p> <p>A source's right to operate shall terminate upon the expiration of this Operating Permit unless a timely complete renewal application has been submitted at least 6 months, but not more than 18 months before the date of expiration or the Department has taken final action approving the source's application for renewal by the expiration date. The expiration date of this Operating Permit is printed on the first page of the permit. Major Source Operating Permits are issued for a fixed period of 5 years except as provided under Paragraph 18.5.2(b) of the Rules and Regulations.</p>	18.4.3 18.5.2 18.12.2

No.	Federally Enforceable General Permit Conditions	Regulations
35	<p><u>Display and Availability of Permit</u></p> <p>The permittee shall keep this Operating Permit under file or on display at all times at the site where the source is located and shall make the permit available for inspection by any and all persons who may request to see it.</p>	18.2.2
36	<p><u>Minor Permit Modifications</u></p> <p>Minor permit modifications procedures may be used only for those permit modifications that:</p> <ul style="list-style-type: none"> A. Do not violate any applicable requirement; B. Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit; C. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; D. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include: <ul style="list-style-type: none"> 1. A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of title I of the Act, and 2. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act. E. Are not modifications under any provision of title I of the Act; and F. Are not required by Part 18.12 of the Rules and Regulations to be processed as a significant modification. 	18.13.3
37	<p><u>Acceptance of Permit</u></p> <p>The permittee is required to bring the operation of a source within the standards of Paragraph 18.2.8(a) of the Rules and Regulations. Commencing construction or operation of the source shall be deemed acceptance of all conditions specified. An Operating Permit with revised conditions may be issued upon receipt of a new application if the permittee demonstrates that the source can operate within the standard of Paragraph 18.2.8(a) of the Rules and Regulations under the revised conditions.</p>	18.2.4 18.2.8(a)
38	<p><u>Construction Not In Accordance with Applications</u></p> <p>If the source permitted herein has been constructed not in accordance with the Operating Permit application and if the changes noted are of a substantial nature in that the amount of air contaminants emitted by the source may be increased or in that the effect is unknown, then the Operating Permit shall be revoked. No further application for an Operating Permit shall be accepted until the source has been reconstructed in accordance with the Operating Permit or until the permittee has proven to the Department that the change will not cause an increase in the emission of air contaminants.</p>	18.2.8(e)
39	<p><u>Revocation of Operating Permit</u></p> <p>This Operating Permit may be revoked for any of the following reasons:</p> <ul style="list-style-type: none"> A. Failure to comply with any condition of the Operating Permit; B. Failure to establish and maintain such records, make such reports, install, use and maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as may be prescribed in accordance with Section 1.9.2 of the Rules and Regulations; and Regulations. C. Failure to comply with any provisions of any Departmental Administrative Order issued concerning the permitted stationary source or facility; D. Failure to comply with the Rules and Regulations, or E. For any other cause, after a hearing which establishes, in the judgement of the Department, that continuance of the Operating Permit is not consistent with the purpose of the Act or the Rules and Regulations. 	1.9.2 18.2.9

No.	Federally Enforceable General Permit Conditions	Regulations
40	<u>Duty to Supplement or Correct an Application</u> The permittee shall submit any additional information to the Department to supplement or correct an application promptly after becoming aware of the need for additional or corrected information. The permittee must supply to the Department additional information concerning any new requirements, which have become applicable after a complete application has been filed but before a draft permit is released.	18.4.7
41	<u>Permit Shield</u> If the permittee has requested a permit shield in the permit application and the Department has granted the permit shield, the permit shield under Part 18.10 of the Rules and Regulations shall not extend to minor permit modifications.	18.10 18.13.3(f)
42	<u>Significant Modifications</u> Modifications that are significant modifications under the PSD (Part 2.4) or nonattainment (Part 2.5) regulations or are modifications under the NSPS (40 CFR 60) or NESHAPS (40 CFR 61 & 63) regulations must be incorporated in the Operating Permit using the requirements for sources initially applying for an Operating Permit, including those for applications, public participation, review by affected States, review by ADEM, and review by EPA, as described in Parts 18.4 and 18.15 of the Rules and Regulations.	18.4 18.13.4 18.15
43	<u>Schedule of Compliance</u> A. The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. B. The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this Operating Permit.	18.4.8(h) 18.7.3
44	<u>Progress Reports</u> If any air pollution source owned or operated by the permittee is not in compliance with the emissions limitations, standards and work practices listed or referenced within this permit, the permittee shall submit a progress report for that air pollution source. The first schedule of compliance shall be submitted within 3 months after the Operating Permit issuance date or within 3 months of the permittee or Department determining that the air pollution source is not in compliance. Subsequent reports shall be submitted every 6th month following the initial report. The progress reports shall contain the following: A. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and/or dates when such activities, milestones or compliance were achieved; and B. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.	18.4.8(h) 18.7.4
45	<u>Abatement of Obnoxious Odors</u> This Operating Permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Department inspectors, measures to abate the odorous emissions shall be taken upon a determination by this Department that these measures are technically and economically feasible.	6.2.3
46	<u>New Air Pollution Sources</u> A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants.	18.4.2 18.13.3 18.13.4 40 CFR 63
47	<u>Maximum Achievable Control Technology Standards (MACT)</u> The permittee shall be subject to and comply with any or all future Federal MACT Standards that may apply to this facility immediately from the effective date of the standards. The permittee shall notify the Department in writing within 2 working days of becoming subject to a federal MACT standard pursuant to Section 112 of the Act, as the same may be amended or revised. Where applicable, the Federal MACT Standards will supersede Department requirements upon promulgation.	14.5 18.4.8(h)(3) 18.7.6 40 CFR 63 Act 112(i)(3)

No.	Federally Enforceable General Permit Conditions	Regulations
48	<p><u>Prevention of Accidental Releases</u> If the permittee has any substance listed pursuant to Paragraph 3 of Section 112(r) stored within the facility permitted herein, the permittee shall comply with the requirements of Section 112(r) of the Act to prevent accidental releases of any substance listed pursuant to Paragraph 3 of Section 112(r), as the same may be amended or revised, or any other extremely hazardous substance.</p>	<p>112 (r) 40 <u>CFR</u> 68</p>
49	<p><u>Housekeeping Requirements</u> The permittee shall not cause or allow the disposal of waste VOC/HAP materials in sewers, open containers, or in any manner that would result in vaporization to the atmosphere.</p>	<p>18.5.3(c)(2)</p>
50	<p><u>Title VI Requirements (Refrigerants)</u> Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 <u>CFR</u> 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 <u>CFR</u> 82, Subpart F. A. No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 <u>CFR</u> 82, Subpart F. B. The responsible official shall comply with all reporting and recordkeeping requirements of 40 <u>CFR</u> 82.166. Reports shall be submitted to the EPA and the Department as required.</p>	<p>18.1.1(c)(10) 18.1.1(w)(4) 40 <u>CFR</u> 82</p>
51	<p><u>Asbestos Demolition and Renovation</u> Asbestos demolition and renovation activities are subject to the National Emission Standard for Asbestos in 40 <u>CFR</u> 61, Subpart M. To determine the applicable requirements of the standard, the permittee shall inspect the affected part of the facility permitted herein where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing materials, prior to commencement of the demolition or renovation operations. The permittee shall comply with all applicable sections of the standard, including notification requirements, emission control and waste disposal procedures. The permittee shall ensure that anyone performing asbestos related work at the facility permitted herein is trained and certified according to the ADEM's regulations for Asbestos Contractor Certification.</p>	<p>14.2.12 40 <u>CFR</u> 61</p>
52	<p><u>Notification of Violations</u> The permittee shall submit a report to the Department within 2 working days after determining any deviations, violations or malfunctions of emissions or production permit restrictions and any Rule or Regulation. The report shall include the probable cause of the deviation, violation or malfunction and the corrective actions or preventive measures taken.</p>	<p>18.5.3(c)(2)</p>
53	<p><u>Applicability of Subpart A of 40 CFR 60 (NSPS Requirement)</u> The general provisions in Subpart A of 40 <u>CFR</u> 60 are applicable to the facility permitted herein affected by the NSPS requirements in 40 <u>CFR</u> Parts 60.</p>	<p>40 <u>CFR</u> 60</p>
54	<p><u>Applicability of Subpart A of 40 CFR 61 and 63 (NESHAP Requirement)</u> The general provisions in Subpart A of 40 <u>CFR</u> 61 and 40 <u>CFR</u> 63 define requirements applicable to the facility permitted herein affected by the NESHAP requirements in 40 <u>CFR</u> Parts 61 and 63.</p>	<p>40 <u>CFR</u> 61 40 <u>CFR</u> 63</p>
55	<p><u>Work Practice Plan (NESHAP Requirement)</u> The permittee shall submit a written work practice plan to the Department for review and approval as part of the permit application for the Title V Major Source Operating Permit. Refer to Section 40 <u>CFR</u> 63.306 for the required contents of the plan.</p>	<p>40 <u>CFR</u> 63</p>
56	<p><u>Recordkeeping Requirements (NESHAP Requirement)</u> The permittee must comply with the following recordkeeping requirements as required by Section 63.10(b) of the general provisions in Subpart A of 40 <u>CFR</u> 63, including all notifications and reports.</p>	<p>40 <u>CFR</u> 63 63.10</p>

No.	Federally Enforceable General Permit Conditions	Regulations
57	<p>Annual Recordkeeping and Reporting (ICDI Requirement)</p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein:</p> <ul style="list-style-type: none"> A. For each battery, the total quantity in tons per year of raw materials coke and/or breeze charged, and any other material; B. For each battery, the total quantity in tons of coke produced; Specify amounts in tons for both furnace and foundry. C. For each battery, the total quantity in tons of coke oven underfire gas combusted; D. Foundry and furnace coking times (in hours); E. Amount of coke oven gas flared; F. For each of the steam generating units Nos. 1, 3, and 4, where applicable, the amounts of coke oven gas and natural gas combusted; G. All battery components types (lids, offtakes, doors) the annual average leaking Percentages; H. Regarding coal handling, in addition to the number of executions performed for each of the indicated processes, the total amounts in tons processed: <ul style="list-style-type: none"> - loading/unloading; - conveyor transfer, and - crushing transfer; I. Regarding coke (furnace and foundry) handling, in addition to the number of executions performed for each of the indicated processes, the total amounts in tons processed: <ul style="list-style-type: none"> - loading/unloading; - screening; and - conveyor transfer; J. Regarding coal/coke storage piles, for each pile, the acres of storage and the number of active days. Indicate whether pile is coal or coke; K. For vehicular traffic, for each equipment type (e.g., light truck, forklift, dump truck, front end loader, six-wheel vehicle contract coal/coke trucks), list the following: <ul style="list-style-type: none"> <u>paved roads</u>: <ul style="list-style-type: none"> - average weight (tons) of the vehicles traveling the road; - number of wheels of each equipment types; - vehicle miles traveled one way; - particle size multiplier for particle size range and units of interest; - road surface silt loading (grams per square meter) (g/m²); - road silting (g/m²); - emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear; and - number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period; <u>unpaved roads</u>; <ul style="list-style-type: none"> - surface material silt content (%); - mean vehicle weight (tons); - surface material moisture content (%); - mean vehicle speed (mph); - number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period; and - emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear. L. For the each emissions unit type associated with the by-products recovery facility (light-oil storage tank, tar decanter, direct-water cooling tower, tar intercepting sump, tar dewatering sump, tar storage tank, light oil condenser vent, light oil sump, BTX storage, flushing liquor circulation tank, excess ammonia liquor tank, wash-oil circulation tank), list the number of emissions unit types; 	<p>1.9 40 CFR 63</p>

No.	Federally Enforceable General Permit Conditions	Regulations
57	<p>M. The quantity of all of the following fuels combusted and assign actual usage of fuels to the emissions unit where combusted:</p> <ul style="list-style-type: none"> i. Coke Oven Gas in million cubic feet; ii. Natural gas in million cubic feet; and iii. Landfill gas in million cubic feet; <p>N. For each battery, the total number of ovens not captured during pushing; and</p> <p>O. The actual and allowable emissions of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations including all individual HAP emissions; The emissions shall be assigned to the emissions unit where the emissions occurred. Fugitive emissions shall be included in the report. The fugitive emissions shall include paved and unpaved road dust emissions.</p>	
58	<p><u>Deviations-Demonstrating Continuous Compliance (NESIAP Requirements)</u></p> <p>The permittee shall report each instance in which the permittee's source did not meet each emission limitation in 63.7336 that applies. This includes periods of startup, shutdown, and malfunction. The permittee shall also report each instance in which the permittee's source did not meet each work practice standard or operation and maintenance requirement in 63.7336. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in 63.7336. These deviations must be reported according to the requirements in 63.7341.</p>	<p>40 <u>CFR</u> 63 Subpart CCCCC 63.7336 63.7341</p>
59	<p><u>Startup, Shutdowns, and Malfunctions-Demonstrating Continuous Compliance (NESIAP Requirements)</u></p> <p>A. Startup, shutdowns, and malfunctions shall be consistent with 63.6(e) (Operation and Maintenance Requirements), and 63.7(e)(1) (Conduct of Performance Test). Deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with 63.6(e)(1).</p> <p>B. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 63.6(e).</p>	<p>40 <u>CFR</u> 63 Subpart CCCCC 63.7336 63.6(e) 63.7(e)(1)</p>
60	<p><u>Mandatory Greenhouse Gas Reporting (for informational purposes only)</u></p> <p>The permittee shall be aware that the facility may be subject to Mandatory Greenhouse Gas Reporting. The applicability threshold for a Title V Major Source is 100,000 tons per year of CO₂e. Mandatory greenhouse gas reporting is made directly to EPA and is not an enforceable requirement of this Title V Major Source Operating Permit. It is the permittee's responsibility to determine which requirements of 40 CFR 98 apply and to calculate emissions of CO₂e accordingly. Reports must be submitted electronically by March 31 of each year, covering the previous calendar year. Each December, methane emissions should be estimated for the coming year in order to anticipate applicability of this reporting requirement. Monitoring equipment may be required.</p>	<p>40 <u>CFR</u> 98</p>

61	<p><u>Fugitive Dust</u></p> <p>The major source permitted herein is subject to and shall comply with the requirements under Part 6.2 of the Rules and Regulations. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, conveyed, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> A. Use of vacuum truck/ street sweeper/ water truck on paved surfaces; B. Use of wet suppression system on unpaved surfaces and piles when conditions are dry and fugitive dust could become airborne and leave property lines; C. Application of surfactants in conjunction with the wet suppression system where feasible; D. Maintain existing roof/cover over coal conveyors; E. Use of water truck as needed on surfaces; F. Use of water sprays on a point upstream of the coke loading belt; G. Use of water sprays (water) on rotary dump; H. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; I. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which create airborne dust problems; and J. Installation and use of hoods, fans, and fabric filters (or other suitable control devices) to enclose and vent the handling of dust materials. Adequate containment methods shall be employed during sandblasting or other similar operations. <p>The permittee shall not cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate.</p> <p>When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Health Officer may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.</p>	<p>6.2 18.2.8(a)</p>
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Emissions Unit Operating Permit Summary

Emissions Unit Number: 001

Emissions Unit Description: Coke By-Products

Operating Permit Number: 4-07-0355-03

Facility Name: ERP Compliant Coke Plant/Utilities/Wastewater

Permitted Operating Schedule: 8,760 hours per year

Type and Quantity of Fuel Used: N/A

Pollutants Emitted:

Pollutants	Regulatory Emission Limits	Applicable Standards
Visible Emissions (VE)	20 % Opacity	Part 6.1
Fugitive Emissions	Restrict Beyond Property Lines	Part 6.2
Volatile Organic Compounds (VOC)- Benzene (HAP)	No detectable emissions from final-cooler cooling towers, and final coolers	40 <u>CFR</u> 61, Subpart I.
Benzene (HAP)	Less than 10 Mg/Yr	40 <u>CFR</u> 61, Subpart FF
Benzene (VHAP)	Leak Detection & Repair	40 <u>CFR</u> 61, Subpart V

Pollution Control Equipment: Enclosed Positive Pressure Gas Blanketing System

Continuous Monitor: None

Periodic Monitoring: Sections 61.242, 61.244, 61.135, Part 8.26
Sections 61.242-3 and 61.242-9 are excluded

Continuous Compliance Determiner: None

EPA Reference Test Methods: Methods 2, 2A, 2C, 2D 21, 22, 40 CFR 60, Appendix A

Reporting Requirements: See Section 5

Applicable Regulations: Part 1.3, Section 1.5.15, Chapter 4, Part 6.1,
Section 8.26.3, Section 8.26.4, Section 8.26.5, Section
8.26.6, Section 8.26.7, Section 8.26.8, Section 8.26.9,
Section 8.26.10, Section 8.26.11, Section 8.26.12, Section
8.27.2, Section 8.27.3, Section 8.27.4, Section 8.27.5,
Chapter 16, Chapter 18, Section 18.2.4, Section 18.2.8, 40
CFR 60, 40 CFR 61

Permit Number 4-07-0355-03

No.	Federally Enforceable Permit Conditions of Emissions Unit No. 001	Regulations
	Section 1 – Applicability	
1	The Emissions Unit No. 001, Coke By-Products Recovery Plant, is subject to the visible emissions restrictions of Part 6.1, the fugitive emissions restrictions of Part 6.2, the equipment leak detection and repair requirements of Part 8.26, the permitting requirements of Chapter 18 of the Rules and Regulations, and the control and equipment leak detection and repair requirements of Subpart L and V of 40 CFR 61.	6.1 6.2 8.26 Chapter 18 40 CFR 61
2	Subpart FF The Emissions Unit 001 permitted herein is subject to the requirements as listed in Subpart FF (National Emission Standard for Benzene Waste Operations) of Part 61 of Title 40 of the Code of Federal Regulations.	Chapter 18 40 CFR 61
	Section 2 – Emissions, Equipment or Production Requirements and Limitations	
3	Visible Emissions Restriction The Emissions Unit No. 001 permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, as the same may be amended or revised.	6.1 18.5 40 CFR 60
4	Fugitive Emissions Restriction The Emissions Unit No. 001 permitted herein is subject to and shall comply with the requirements under Part 6.2 of the Rules and Regulations. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following: A. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which create airborne dust problems; C. Installation and use of hoods, fans, and fabric filters (or other suitable control devices) to enclose and vent the handling of dust materials. Adequate containment methods shall be employed during sandblasting or other similar operations. The permittee shall not cause or permit the discharge of visible emissions beyond the lot line of the property on which the emissions originate. When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Health Officer may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.	6.2 18.5

5	<p><u>Standards for Process Vessels, Storage Tanks, Tar-Intercepting Sumps, Process Vessels, Tar Storage Tanks, Light Oil Sumps, Naphthalene Processing, Final Coolers, Final-Cooler Cooling Towers, and Equipment Leaks</u></p> <p>The equipment types indicated associated with Emissions Unit No. 001 permitted herein are subject to the applicable standards as listed in 61.132 through 61.135 of Subpart L of 40 CFR 61 and 61.242-1 through 61.243-2 of Subpart V of 40 CFR 61. All equipment associated with the control system as required by 40 CFR 61.132 will be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background properly using the specified method.</p>	40 CFR 61
6	<p><u>Benzene Waste Restriction</u></p> <p>Pursuant to the requirements of Subpart FF, the total annual benzene quantity from facility waste shall be less than 10 Megagrams per year (Mg/yr). Each owner or operator of a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 Mg/yr shall manage and treat the facilities waste stream in accordance with 61.342(c) through (h) of the subpart.</p>	40 CFR 61, 61.342(a), 61.342(c) through (h)
7	<p><u>Limitation for Naphthalene Processing, Final Coolers, and Final-Cooler Cooling Tower</u></p> <p>No ("zero") emissions shall be allowed from final coolers and final cooler-cooling towers. Zero emissions shall be determined by monitoring all connections, seals, lines at associated with the indicated equipment utilizing Method 21 (40 CFR 60, Appendix 40) and procedures specified in 61.245(c) of 40 CFR 61, and the indicated equipment (including sealing materials) shall be visually inspected for evidence of visible defects such as gaps or tears. This monitoring shall be conducted on a monthly basis.</p>	40 CFR 60 40 CFR 61
8	<p><u>Standards for All Equipment in VOC Service at Coke By-Product Recovery Plants</u></p> <p>The equipment types indicated associated with Emissions Unit No. 001 permitted herein are subject to the standards as listed in Sections 8.26.3, 8.26.4, 8.26.5, 8.26.6, 8.26.7, 8.26.8, 8.26.9, 8.27.2, 8.27.3, 8.27.4, and 8.27.5 of the Rules and Regulations. Additionally, all pressure relief devices operated in VOC gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background except during pressure releases as per 40 CFR 61.242-4.</p>	8.26 8.27
Section 3 – Compliance and Performance Test Methods and Procedures		
9	<p><u>Leak Detection and Repair Program (LDAR) Program Monitoring Requirements</u></p> <p>A LDAR program shall be implemented to include the equipment types associated with Emissions Unit No. 001 permitted per the applicable standards as listed in Sections 61.132 through 61.135 of Subpart L of 40 CFR 61; 61.242-1 through 61.243-10 (excluding 61.242-3 & 61.242-9) of Subpart V of 40 CFR 61; and Sections 8.26.3, 8.26.4, 8.26.5, 8.26.6, 8.26.7, 8.26.8, 8.26.9, 8.27.2, 8.27.3, 8.27.4, and 8.27.5 of the Rules and Regulations. For all paragraphs and items contained within this permit for Emission Unit No. 001, if a piece of equipment is subject to both the federal and JCDH regulations, and there are any discrepancies between the federal and JCDH regulations, the more stringent aspect of each regulation applies to that piece of equipment.</p>	40 CFR 61 8.26 8.27

10	<p>Performance Testing The Department may request that the permittee demonstrate compliance with the emission rate restrictions of this Major Source Operating Permit and the Regulations by using the following EPA-approved methods and procedures:</p> <p>A. Reference Method 2, 40 <u>CFR</u> 60, Appendix A Determination of Stack Gas Velocity and Volumetric Flow Rate</p> <p>B. Reference Method 2A, 40 <u>CFR</u> 60, Appendix A Direct measurement of Gas Volume through Pipes and Small Ducts</p> <p>C. Reference Method 2B, 40 <u>CFR</u> 60, Appendix A Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks</p> <p>D. Reference Method 2C, 40 <u>CFR</u> 60, Appendix A Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)</p> <p>E. Reference Method 2D, 40 <u>CFR</u> 60, Appendix A Measurement of Gas Volume Flow Rates in Small Pipes and Ducts</p> <p>F. Reference Method 21, 40 <u>CFR</u> 60, Appendix A Determination of Volatile Organic Compound Leaks</p> <p>G. Reference Method 22, 40 <u>CFR</u> 60, Appendix A Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares</p>	<p>18.2.5 18.7 40 <u>CFR</u> 60</p>
11	<p>Subpart FF Monitoring The permittee shall determine the total annual benzene quantity from facility waste as specified by in 61.355 of 40 <u>CFR</u> 61. The permittee shall repeat the determination of the total annual benzene quantity at least once per year and whenever there is a change in the process that could cause the total annual benzene quantity from waste to 10 Mg/yr or more. If the total annual benzene quantity is less than 1 Mg/yr, then the owner or operator shall comply with the recording and recordkeeping requirements of 61.356 and 61.357 of 40 <u>CFR</u> 61.</p>	<p>40 <u>CFR</u> 61, 61.355, 61.356, and 61.357</p>
	Section 4 – Continuous Emission Monitoring - No applicable requirements.	
	Section 5 – Recordkeeping and Reporting Requirements	
12	<p>For the unit permitted herein, where applicable, records shall be kept and reports shall be submitted in accordance with 61.138 of Subpart L of 40 <u>CFR</u> 61, 61.246 and 61.247 of Subpart V of 40 <u>CFR</u> 61, 61.356 and 61.357 of Subpart FF, and Sections 8.26.10 and 8.26.11 of the Rules and Regulations</p>	<p>8.26 40 <u>CFR</u> 61</p>

13	<p><u>Annual Report Requirement</u></p> <p>The permittee shall submit to the Department by February 10th of each calendar year an annual summary report for the previous calendar year in a format approved by the Department the following production and emissions information:</p> <p>A. For the each emissions unit type associated with the by-products recovery facility (light-oil storage tank, tar decanter, direct-water cooling tower, tar intercepting sump, tar dewatering sump, tar storage tank, light oil condenser vent, light oil sump, BTX storage, flushing liquor circulation tank, excess ammonia liquor tank, wash-oil circulation tank), list the number of emissions unit types.</p> <p>B. The actual emissions of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations, including all individual HAP emissions; Fugitive emissions shall be included in the report</p> <p>C. For storage tanks, the chemical or trade name of the stored VOC in the tank;</p> <p>D. The average storage temperature of the stored VOC in degrees Fahrenheit;</p> <p>E. The average true vapor pressure in psia of the stored VOC at storage temperature;</p> <p>F. The quantity in gallons of any VOC/HAP materials lost (evaporated to the atmosphere) due to a spillage, leak, or any other mishap;</p> <p>G. The annual throughput in gallons per year; and</p> <p>H. In regards to Subpart FF: (At the point of waste generation) the annual waste quantity, range of benzene concentrations (monthly values), the annual average flow-weighted benzene concentrations, and the annual benzene quantity.</p>	18.5 18.7
14	<p><u>NIOSHAP Notification, Reporting, and Recordkeeping Requirements</u></p> <p>Where applicable, the permittee shall comply with the notification, reporting, and recordkeeping requirements of Subparts A and FF of 40 CFR 61.</p>	40 CFR 61

Emissions Unit Operating Permit Summary

Emissions Unit No.: 009

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: Coke Oven Battery No. 5
 Charging, Coking, Soaking, Oven Doors, Lids, Offtake Systems, Collecting Mains,
 Bleeder Flares, and Emergency Bleeder Flares

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: COG/N.G.

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VE)	20% Opacity - Charging	Section 6.9.3
Coke Battery Emissions Hazardous Air Pollutants (HAP)	3.3% leaking coke oven doors for each short by-product coke oven battery 0.4% leaking topside port lids 2.5% leaking offtake systems 12 seconds of visible emissions per charge	40 <u>CFR</u> 63
Particulate Emissions	15% leaking coke oven doors 5% leaking topside port lids 10% leaking offtake systems	Part 6.9
Visible Emissions (VE) Hazardous Air Pollutants (HAP)	No visible emissions from emergency bypass/bleeder stack flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours	40 <u>CFR</u> 63
Volatile Organic Compounds (VOC)	95% removal of VOC from coke oven gas bleeder (venting surplus COG) control system prior to discharge to the atmosphere	Part 8.27
Hazardous Air Pollutants (HAP)	Charging, soaking, oven doors, lids, offtake systems, collecting mains, emergency bleeder flares	40 <u>CFR</u> 63 LAER Extension Track

Pollution Control Device: Flares

Continuous Emission Monitors: None

EPA Reference Test Methods: Method 9, Method 22, Method 303, Appendix A (40 CFR 60)

Reporting Requirements: See Section 5, herein

Applicable Regulations: Section 1.5.15, Part 6.1, Section 6.9.3, Section 6.9.5, Section 6.9.6, Part
 6.9, Part 8.27, Section 18.5.3, Part 18.5, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 009	Regulation
	Section 1 – Applicability	
1	<u>Applicability</u> <u>Visible Emissions Restriction</u> The Emissions Unit No. 009 permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, as the same may be amended or revised.	6.1 18.5 40 <u>CFR</u> 60
2	<u>Subpart L of 40 CFR 63</u> The Emissions Unit No. 009 herein is subject to the requirements as listed in Subpart L. (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the <u>Code of Federal Regulations</u> .	40 <u>CFR</u> 63, 63.300
	Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards	
3	<u>Control of Particulate Matter</u> Emissions Unit 009 permitted herein is subject to and shall comply with the requirements under Part 6.9, "Control of Particulate Emissions - Coke Ovens," of the Rules and Regulations.	6.9
4	<u>Coke Oven Gas Bleeder (Venting Surplus COG)</u> Each coke oven gas bleeder shall be equipped with a closed vent system capable of capturing and transporting excess gas to a control device. All coke oven gas from the closed vent system shall be passed through the said control device which removes at least 95% percent of the VOC from such gas before it is discharged to the atmosphere. Owner or operators of control devices used to comply with this requirement shall monitor/test such control devices to ensure that they are operated and maintained in conformance with their design specifications. Closed vent systems shall be monitored to determine compliance with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, and, by visual inspections, quarterly, and at other times requested by the Health Officer.	8.27
5	<u>Percent Leaking Door Restriction</u> The number of doors leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 3.3% on a 30-day rolling average basis. In addition, at any given time, the number of doors leaking shall not exceed 15% of the total doors ovens in operation.	6.9.6 40 <u>CFR</u> 60 40 <u>CFR</u> 63, 63.302
6	<u>Percent Leaking Lids Restriction</u> The number of topside lids leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 0.4% on a 30-day rolling average basis. In addition, at any given time, the number of topside lids leaking shall not exceed 5% of the total lids on ovens in operation.	6.9.5 40 <u>CFR</u> 60 40 <u>CFR</u> 63, 63.302
7	<u>Percent Leaking Offtake System Restriction</u> The number of offtake system leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 2.5% on a 30-day rolling average basis. In addition, at any given time, the number of offtake systems leaking shall not exceed 10% of the total offtake systems on ovens in operation.	6.9.5 40 <u>CFR</u> 60 40 <u>CFR</u> 63, 63.302

8	<u>Charging Visible Emissions Time Restriction</u> There shall be no more than 12 seconds of visible emissions per charge as determined pursuant to Method 303 on a 30-day rolling average basis.	40 CFR 63, 63.302
9	<u>Charging Visible Emissions Opacity Restriction</u> At any time, there shall be no visible emissions during the charging cycle from charging holes or the larry car of any battery with an opacity which is greater than 20% except for an average period or periods not to exceed 3-minutes of any consecutive 60-minute on batteries with less than 70 ovens nor more than 4-minutes of any consecutive 60-minutes on batteries with 70 ovens or more. Visible emissions observations shall be conducted pursuant to Method 9 of 40 CFR 60. The procedures of Subpart L, including data collected by Method 303 are consistent with the State Implementation Plan (SIP) for visible emissions opacity observations and can be used to enforce the SIP. Therefore, the inspection conducted using Method 303 will be used by this Department for compliance assurance with Section 6.9.3 of the Rules and Regulations.	6.9.3
10	<u>Emergency Bypass/Bleeder Flares Emissions Limitation</u> There shall be no emissions from any emergency bypass/bleeder flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Compliance with this requirement shall be determined by using Method 22 in Appendix A of 40 CFR 60 with an observation period of 2 hours.	40 CFR 60 40 CFR 63, 63.307
11	<u>Subpart L - Standards for Collecting Mains</u> A. The owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303. B. The owner or operator shall document any leak observed, and implement a collecting main repair within the time period allowed by the subpart.	40 CFR 63, 63.308
12	<u>Subpart L - Work Practice Standards</u> The work plan required to be submitted in accordance with 63.300 of Subpart L of 40 CFR 63 shall be implemented and adhered to on a continuous basis. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations.	40 CFR 63, 63.306(a), 63.307, 63.309(h)
13	<u>Subpart L - Implementation of Work Practice Plans</u> The owner or operator of a coke oven battery subject to visible emissions limitations shall implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emissions limitation for the emission point in any consecutive 6-month period. For the purpose of this condition unit, the second exceedance is "independent" if either of the following criteria is met: A. The second exceedance occurs 30 days or more after the first exceedance; and B. In the case of coke oven doors, topside port lids, and offtake systems, the 29-run average, calculated by excluding the highest value in the 30-day period, exceeds the value of the applicable emission limitation; or C. In the case of charging emissions, the 29-day logarithmic average, calculated in accordance with Method 303 in Appendix A to this part by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.	40 CFR 63, 63.306(c)(1)(i)

14	<p><u>Subpart I. - Start-Up, Shutdown, and Malfunctions (SSM)</u> Each owner or operator of a coke oven battery shall develop, according to 63.310(b) of 40 CFR 63, a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctions process and air pollution control equipment.</p> <p>If the owner or operator demonstrates to the satisfaction of the Administrator that a startup, shutdown or malfunction has occurred, then an observation occurring during such startup, shutdown or malfunction shall not:</p> <p>A. Constitute a violation of relevant requirements of this subpart; and B. Be used for in any compliance determination under 63.309 of 40 CFR 63.</p>	40 CFR 63, 63.309, 63.310(b), 63.310(i)
15	<p><u>Subpart I. Notification of Start-Up, Shutdown, and Malfunction (SSM)</u> If the permittee can demonstrate to the satisfaction of the Department that a startup, shutdown, or malfunction has occurred during a visible emissions observation that would normally constitute a violation of a relevant standard of this subpart, the permittee shall make the following notifications and reporting:</p> <p>In order for provisions of 63.310(i) of 40 CFR 63, to apply with respect to an observation above a visible emissions limitation, for a particular day or days, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator:</p> <p>A. If practical to the certified observer, if present during the occurrence; or to the enforcement agency, in writing within 24 hours of the occurrence; and B. Within 14 days from the notification as contained within item A hereinabove, describing in detail the startup, shutdown or malfunction that caused the excess visible emissions.</p>	40 CFR 63, 63.310(d)
16	<p><u>Oven Maintenance</u> A. All ovens shall be maintained in good condition to promote complete coking of coal; B. All coke oven cracks are to be sealed as soon as practicable after they are detected; and C. As directed by the Health Officer, reasonable records of the maintenance of oven doors, oven burners, and oven interiors are to be made and retained for a reasonable time.</p>	6.9.7
17	<p><u>Coke Oven Standards</u> For the emission unit permitted herein, the permittee shall comply with the coke oven requirements of Section 6.9.2, Paragraph 6.9.5(a), Section 6.9.6, and Section 6.9.7 of the Rules and Regulations.</p>	6.9
	Section 3 – Compliance and Performance Test Methods and Procedures	
18	<p><u>Subpart I. – Performance Tests and Procedures</u> Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in this subpart to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in this subpart.</p>	40 CFR 63, Section 63.309

19	<p><u>Test Methods and Procedures</u></p> <p>The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 <u>CFR</u> 60, Appendix A, as the same may be amended or revised:</p> <p>Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources</p> <p>Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares</p> <p>Method 303: Determination of Visible Emissions from By-Product Coke Oven Batteries</p>	<p>40 <u>CFR</u> 60 Appendix A 40 <u>CFR</u> 63</p>
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 – Recordkeeping and Reporting Requirements	
20	<p><u>Subpart L – Semiannual Compliance Certification</u></p> <p>The owner or operator of a coke oven battery shall produce the reporting requirement as contained in 63.311 of the subpart.</p>	<p>40 <u>CFR</u> 63 63.311</p>
21	<p><u>Subpart L – Recordkeeping</u></p> <p>The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the administrator. Copies of the work practice plan developed under 63.306 of 40 <u>CFR</u> 63, and the startup, shutdown, and malfunction plan developed under 63.310 of 40 <u>CFR</u> 63, shall be kept onsite at all times.</p>	<p>40 <u>CFR</u> 63, 63.306 63.310 63.311</p>
22	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The actual hours of operation;</p> <p>B. The quantity of coke oven gas and natural gas burned in million cubic feet;</p> <p>C. The average monthly total sulfur content and heat content of coke oven gas; and</p> <p>D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations.</p>	<p>1.5.15 18.5.3</p>

Emissions Unit Operating Permit Summary

Emissions Unit No.: 012

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: Coke Oven Battery No. 4
Charging, Coking, Soaking, Oven Doors, Lids, Offtake Systems, Collecting Mains,
Bleeder Flares, and Emergency Bleeder Flares

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: COG/N.G.

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VE)	20% Opacity - Charging	Section 6.9.3
Coke Battery Emissions Hazardous Air Pollutants (HAP)	3.3% leaking coke oven doors for each short by-product coke oven battery 0.4% leaking topside port lids 2.5% leaking offtake systems 12 seconds of visible emissions per charge	40 <u>CFR</u> 63
Particulate Emissions	15% leaking coke oven doors 5% leaking topside port lids 10% leaking offtake systems	Part 6.9
Visible Emissions (VE) Hazardous Air Pollutants (HAP)	No visible emissions from emergency bypass/bleeder stack flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours	40 <u>CFR</u> 63
Volatile Organic Compounds (VOC)	95% removal of VOC from coke oven gas bleeder (venting surplus COG) control system prior to discharge to the atmosphere	Part 8.27
Hazardous Air Pollutants (HAP)	Charging, soaking, oven doors, lids, offtake systems, collecting mains, emergency bleeder flares	40 <u>CFR</u> 63 LAER Extension Track

Pollution Control Device: Flares

Continuous Emission Monitors: None

EPA Reference Test Methods: Method 9, Method 22, Method 303, Appendix A (40 CFR 60)

Reporting Requirements: See Section 5, herein

Applicable Regulations: Section 1.5.15, Part 6.1, Section 6.9.3, Section 6.9.5, Section 6.9.6, Part
6.9, Part 8.27, Section 18.5.3, Part 18.5, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 012	Regulation
	Section 1 – Applicability	
1	<u>Applicability</u> <u>Visible Emissions Restriction</u> The Emissions Unit No. 012 permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, as the same may be amended or revised.	6.1 18.5 40 CFR 60
2	<u>Subpart L</u> The Emissions Unit No. 012 herein is subject to the requirements as listed in Subpart L (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.	40 CFR 63, 63.300
	Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards	
3	Emissions Unit 012 permitted herein is subject to and shall comply with the requirements under Part 6.9, "Control of Particulate Emissions – Coke Ovens," of the Rules and Regulations.	6.9
4	<u>Coke Oven Gas Bleeder (Venting Surplus COG)</u> Each coke oven gas bleeder shall be equipped with a closed vent system capable of capturing and transporting excess gas to a control device. All coke oven gas from the closed vent system shall be passed through the said control device which removes at least 95% percent of the VOC from such gas before it is discharged to the atmosphere. Owner or operators of control devices used to comply with this requirement shall monitor/test such control devices to ensure that they are operated and maintained in conformance with their design specifications. Closed vent systems shall be monitored to determine compliance with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, and, by visual inspections, quarterly, and at other times requested by the Health Officer.	8.27
5	<u>Percent Leaking Door Restriction</u> The number of doors leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 3.3% on a 30-day rolling average basis. In addition, at any given time, the number of doors leaking shall not exceed 15% of the total doors ovens in operation.	6.9.6 40 CFR 60 40 CFR 63, 63.302
6	<u>Percent Leaking Lids Restriction</u> The number of topside lids leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 0.4% on a 30-day rolling average basis. In addition, at any given time, the number of topside lids leaking shall not exceed 5% of the total lids on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63, 63.302
7	<u>Percent Leaking Offtake System Restriction</u> The number of offtake system leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 2.5% on a 30-day rolling average basis. In addition, at any given time, the number of offtake systems leaking shall not exceed 10% of the total offtake systems on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63, 63.302
8	<u>Charging Visible Emissions Time Restriction</u> There shall be no more than 12 seconds of visible emissions per charge as determined pursuant to Method 303 on a 30-day rolling average basis.	40 CFR 63, 63.302

9	<p><u>Charging Visible Emissions Opacity Restriction</u></p> <p>At any time, there shall be no visible emissions during the charging cycle from charging holes or the larry car of any battery with an opacity which is greater than 20% except for an average period or periods not to exceed 3-minutes of any consecutive 60-minute on batteries with less than 70 ovens nor more than 4-minutes of any consecutive 60-minutes on batteries with 70 ovens or more. Visible emissions observations shall be conducted pursuant to Method 9 of 40 CFR 60. The procedures of Subpart L, including data collected by Method 303 are consistent with the State Implementation Plan (SIP) for visible emissions opacity observations and can be used to enforce the SIP. Therefore, the inspection conducted using Method 303 will be used by this Department for compliance assurance with Section 6.9.3 of the Rules and Regulations.</p>	6.9.3
10	<p><u>Emergency Bypass/Bleeder Flares Emissions Limitation</u></p> <p>There shall be no emissions from any emergency bypass/bleeder flares, except for periods not to exceed a total of 5-minutes during any 2 consecutive hours. Compliance with this requirement shall be determined by using Method 22 in Appendix A of 40 CFR 60 with an observation period of 2 hours.</p>	40 CFR 60 40 CFR 63, 63.307
11	<p><u>Subpart L – Standards for Collecting Mains</u></p> <p>A. The owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303.</p> <p>B. The owner or operator shall document any leak observed, and implement a collecting main repair within the time period allowed by the subpart.</p>	40 CFR 63, 63.308
12	<p><u>Subpart L - Work Practice Standards</u></p> <p>The work plan required to be submitted in accordance with 63.300 of Subpart L of 40 CFR 63 shall be implemented and adhered to on a continuous basis. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations.</p>	40 CFR 63, 63.306(a), 63.307, 63.309(h)
13	<p><u>Subpart L – Implementation of Work Practice Plans</u></p> <p>The owner or operator of a coke oven battery subject to visible emissions limitations shall implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emissions limitation for the emission point in any consecutive 6-month period. For the purpose of this condition unit, the second exceedance is "independent" if either of the following criteria is met:</p> <p>A. The second exceedance occurs 30 days or more after the first exceedance; and</p> <p>B. In the case of coke oven doors, topside port lids, and offtake systems, the 29-run average, calculated by excluding the highest value in the 30-day period, exceeds the value of the applicable emission limitation; or</p> <p>C. In the case of charging emissions, the 29-day logarithmic average, calculated in accordance with Method 303 in Appendix A to this part by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.</p>	40 CFR 63, 63.306(c)(1)(i)

14	<p><u>Subpart L - Start-Up, Shutdown, and Malfunctions (SSM)</u> Each owner or operator of a coke oven battery shall develop, according to 63.310(c) of 40 CFR 63a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctions process and air pollution control equipment.</p> <p>If the owner or operator demonstrates to the satisfaction of the Administrator that a startup, shutdown or malfunction has occurred, then an observation occurring during such startup, shutdown or malfunction shall not:</p> <p>A. Constitute a violation of relevant requirements of this subpart ; and B. Be used for in any compliance determination under 63.309 of 40 CFR 63.</p>	40 CFR 63, 63.310(i)
15	<p><u>Subpart L - Notification of Start-Up, Shutdown, and Malfunction (SSM)</u> If the permittee can demonstrate to the satisfaction of the Department that a startup, shutdown, or malfunction has occurred during a visible emissions observation that would normally constitute a violation of a relevant standard of this subpart; the permittee shall make the following notifications and reporting:</p> <p>In order for provisions of 63.310(i) of 40 CFR 63, to apply with respect to an observation above a visible emissions limitation, for a particular day or days, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator:</p> <p>A. If practical to the certified observer, if present during the occurrence; or to the enforcement agency, in writing within 24 hours of the occurrence; and B. Within 14 days from the notification as contained within item A hereinabove, describing in detail the startup, shutdown or malfunction that caused the excess visible emissions.</p>	40 CFR 63, 63.310
16	<p><u>Oven Maintenance</u> A. All ovens shall be maintained in good condition to promote complete coking of coal. B. All coke oven cracks are to be sealed as soon as practicable after they are detected. C. As directed by the Health Officer, reasonable records of the maintenance of oven doors, oven burners, and oven interiors are to be made and retained for a reasonable time.</p>	6.9.7
17	<p><u>Coke Oven Standards</u> For the emission unit permitted herein, the permittee shall comply with the coke oven requirements of Sections 6.9.2, Paragraph 6.9.5(a), Section 6.9.6, and Section 6.9.7 of the Rules and Regulations.</p>	6.9
Section 3 – Compliance and Performance Test Methods and Procedures		
18	<p><u>Subpart L - Performance Tests and Procedures</u> Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in this subpart to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in this subpart.</p>	40 CFR 63, Section 63.309
19	<p><u>Test Methods and Procedures</u> The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares Method 303: Determination of Visible Emissions from By-Product Coke Oven Batteries</p>	40 CFR 60 Appendix A 40 CFR 63

	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 – Recordkeeping and Reporting Requirements	
20	<u>Subpart L. Semiannual Compliance Certification</u> The owner or operator of a coke oven battery shall adhere to the reporting requirement as contained in 63.311 of the subpart.	40 <u>CFR</u> 63 63.311
21	<u>Subpart L – Recordkeeping</u> The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the administrator. Copies of the work practice plan developed under 63.306 of 40 <u>CFR</u> 63 and the startup, shutdown, and malfunction plan developed under 63.310 of 40 <u>CFR</u> 63 shall be kept onsite at all times.	40 <u>CFR</u> 63, 63.311
22	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation; B. The quantity of coke oven gas and natural gas burned in million cubic feet; C. The average monthly total sulfur content and heat content of coke oven gas; and D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations.	1.5.15 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 015

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: Coke Oven Battery No. 3
Charging, Coking, Soaking, Oven Doors, Lids, Offtake Systems, Collecting Mains,
Bleeder Flares, and Emergency Bleeder Flares

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: COG/N.G.

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VI)	20% Opacity - Charging	Section 6.9.3
Coke Battery Emissions Hazardous Air Pollutants (HAP)	3.3% leaking coke oven doors for each short by-product coke oven battery 0.4% leaking topside port lids 2.5% leaking offtake systems 12 seconds of visible emissions per charge	40 <u>CFR</u> 63
Particulate Emissions	15% leaking coke oven doors 5% leaking topside port lids 10% leaking offtake systems	Part 6.9
Visible Emissions (VE) Hazardous Air Pollutants (HAP)	No visible emissions from emergency bypass/bleeder stack flares, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours	40 <u>CFR</u> 63
Volatile Organic Compounds (VOC)	95% removal of VOC from coke oven gas bleeder (venting surplus COG) control system prior to discharge to the atmosphere	Part 8.27
Hazardous Air Pollutants (HAP)	Charging, soaking, oven doors, lids, offtake systems, collecting mains, emergency bleeder flares	40 <u>CFR</u> 63 IAER Extension Track

Pollution Control Device: Flares

Continuous Emission Monitors: None

EPA Reference Test Methods: Method 9, Method 22, Method 303, Appendix A (40 CFR 60)

Reporting Requirements: See Section 5, herein

Applicable Regulations: Section 1.5.15, Part 6.1, Part 6.2, Part 6.4, Section 6.9.3, Section 6.9.5,
Section 6.9.6, Section 6.9.7, Part 8.27, Section 18.5.3, Part 18.5, 40 CFR
60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 015	Regulation
	Section 1 – Applicability	
1	<u>Applicability</u> <u>Visible Emissions Restriction</u> The Emissions Unit No. 015 permitted herein is subject to and shall comply with the requirements under Section 6.1.1, “Visible Emissions Restrictions for Stationary Sources,” of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, as the same may be amended or revised.	6.1 18.5 40 CFR 60
2	<u>Subpart L of 40 CFR 63</u> The Emissions Unit No. 015 herein is subject to the requirements as listed in Subpart L (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.	40 CFR 63, 63.300
	Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards	
3	<u>Control of Particulate Matter</u> Emissions Unit 015 permitted herein is subject to and shall comply with the requirements under Part 6.9, “Control of Particulate Emissions - Coke Ovens,” of the Rules and Regulations.	6.9
4	<u>Coke Oven Gas Bleeder (Venting Surplus COG)</u> Each coke oven gas bleeder shall be equipped with a closed vent system capable of capturing and transporting excess gas to a control device. All coke oven gas from the closed vent system shall be passed through the said control device which removes at least 95% percent of the VOC from such gas before it is discharged to the atmosphere. Owner or operators of control devices used to comply with this requirement shall monitor/test such control devices to ensure that they are operated and maintained in conformance with their design specifications. Closed vent systems shall be monitored to determine compliance with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, and, by visual inspections, quarterly, and at other times requested by the Health Officer.	8.27
5	<u>Percent Leaking Door Restriction</u> The number of doors leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 3.3% on a 30-day rolling average. In addition, at any given time, the number of doors leaking shall not exceed 15% of the total doors ovens in operation.	6.9.6 40 CFR 60 40 CFR 63, 63.302
6	<u>Percent Leaking Lids Restriction</u> The number of topside lids leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 0.4% on a 30-day rolling average basis. In addition, at any given time, the number of topside lids leaking shall not exceed 5% of the total lids on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63, 63.302
7	<u>Percent Leaking Offtake System Restriction</u> The number of offtake system leaking as determined pursuant to Method 303 (standards for compliance date extension) shall not exceed 2.5% on a 30-day rolling average basis. In addition, at any given time, the number of offtake systems leaking shall not exceed 10% of the total offtake systems on ovens in operation.	6.9.5 40 CFR 60 40 CFR 63, 63.302

8	<u>Charging Visible Emissions Time Restriction</u> There shall be no more than 12 seconds of visible emissions per charge as determined pursuant to Method 303 on a 30-day rolling average basis.	40 CFR 63, 63.302
9	<u>Charging Visible Emissions Opacity Restriction</u> At any time, there shall be no visible emissions during the charging cycle from charging holes or the larry car of any battery with an opacity which is greater than 20% except for an average period or periods not to exceed 3-minutes of any consecutive 60-minute on batteries with less than 70 ovens nor more than 4-minutes of any consecutive 60-minutes on batteries with 70 ovens or more. Visible emissions observations shall be conducted pursuant to Method 9 of 40 CFR 60. The procedures of Subpart L, including data collected by Method 303 are consistent with the State Implementation Plan (SIP) for visible emissions opacity observations and can be used to enforce the SIP. Therefore, the inspection conducted using Method 303 will be used by this Department for compliance assurance with Section 6.9.3 of the Rules and Regulations.	6.9.3
10	<u>Emergency Bypass/Bleeder Flares Emissions Limitation</u> There shall be no emissions from any emergency bypass/bleeder flares, except for periods not to exceed a total of 5-minutes during any 2 consecutive hours. Compliance with this requirement shall be determined by using Method 22 in Appendix A of 40 CFR 60 with an observation period of 2 hours.	40 CFR 60 40 CFR 63, 63.307
11	<u>Subpart L – Standards for Collecting Mains</u> A. The owner or operator of a by-product coke oven battery shall inspect the collecting main for leaks at least once daily according to the procedures in Method 303. B. The owner or operator shall document any leak observed, and implement a collecting main repair within the time period allowed by the subpart.	40 CFR 63, 63.308
12	<u>Subpart L - Work Practice Standards</u> The work plan required to be submitted in accordance with 63.300 of Subpart L of 40 CFR 63 shall be implemented and adhered to on a continuous basis. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations.	40 CFR 63, 63.306(a), 63.307, 63.309(h)
13	<u>Subpart L – Implementation of Work Practice Plans</u> The owner or operator of a coke oven battery subject to visible emissions limitations shall implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emissions limitation for the emission point in any consecutive 6-month period. For the purpose of this condition unit, the second exceedance is "independent" if either of the following criteria is met: A. The second exceedance occurs 30 days or more after the first exceedance; and B. In the case of coke oven doors, topside port lids, and offtake systems, the 29-run average, calculated by excluding the highest value in the 30-day period, exceeds the value of the applicable emission limitation; or C. In the case of charging emissions, the 29-day logarithmic average, calculated in accordance with Method 303 in Appendix A to this part by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.	40 CFR 63, 63.306(c)(1)(i)

14	<p><u>Subpart I. - Start-Up, Shutdown, and Malfunctions (SSM)</u> Each owner or operator of a coke oven battery shall develop, according to paragraph 63.310(c) a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctions process and air pollution control equipment.</p> <p>If the owner or operator demonstrates to the satisfaction of the Administrator that a startup, shutdown or malfunction has occurred, then an observation occurring during such startup, shutdown or malfunction shall not:</p> <p>A. Constitute a violation of relevant requirements of this subpart; and B. Be used for in any compliance determination under 63.309 of 40 CFR 63.</p>	40 CFR 63, 63.310(i)
15	<p><u>Subpart I. - Notification of Start-Up, Shutdown, and Malfunction (SSM)</u> If the permittee can demonstrate to the satisfaction of the Department that a startup, shutdown, or malfunction has occurred during a visible emissions observation that would normally constitute a violation of a relevant standard of this subpart; the permittee shall make the following notifications and reporting:</p> <p>In order for provisions of 63.310(i) of 40 CFR 63, to apply with respect to an observation above a visible emissions limitation, for a particular day or days, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator:</p> <p>A. If practical to the certified observer, if present during the occurrence; or to the enforcement agency, in writing within 24 hours of the occurrence; and B. Within 14 days from the notification as contained within item A hereinabove, describing in detail the startup, shutdown or malfunction that caused the excess visible emissions.</p>	40 CFR 63, 63.310
16	<p><u>Oven Maintenance</u> A. All ovens shall be maintained in good condition to promote complete coking of coal. B. All coke oven cracks are to be sealed as soon as practicable after they are detected. C. As directed by the Health Officer, reasonable records of the maintenance of oven doors, oven burners, and oven interlocks are to be made and retained for a reasonable time.</p>	6.9.7
17	<p><u>Coke Oven Standards</u> For the emission unit permitted herein, the permittee shall comply with the coke oven requirements of Sections 6.9.2, Paragraph 6.9.5(a), Section 6.9.6, and Section 6.9.7 of the Rules and Regulations.</p>	6.9
Section 3 -- Compliance and Performance Test Methods and Procedures		
18	<p><u>Subpart I. - Performance Tests and Procedures</u> Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in this subpart to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in this subpart.</p>	40 CFR 63, 63.309

19	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 <u>CFR</u> 60, Appendix A, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares Method 303: Determination of Visible Emissions from By-Product Coke Oven Batteries	40 <u>CFR</u> 60 Appendix A 40 <u>CFR</u> 63
	<u>Section 4 – Continuous Emission Monitoring – Not Applicable</u>	
	<u>Section 5 -- Recordkeeping and Reporting Requirements</u>	
20	<u>Subpart L -- Semiannual Compliance Certification</u> The owner or operator of a coke oven battery shall adhere to the reporting requirements as contained in Section 63.311 of 40 <u>CFR</u> 63.	40 <u>CFR</u> 63 63.311
21	<u>Subpart L -- Recordkeeping</u> The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the administrator. Copies of the work practice plan developed under Section 63.306 of 40 <u>CFR</u> 63 and the startup, shutdown, and malfunction plan developed under Section 63.310 of 40 <u>CFR</u> 63 shall be kept onsite at all times.	40 <u>CFR</u> 63, Section 63.311
22	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation; B. The quantity of coke oven gas and natural gas burned in million cubic feet; C. The average monthly total sulfur content and heat content of coke oven gas; and D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations.	1.5.15 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 016
Company: ERP Compliant Coke Plant/Utilities/Wastewater
Source Description: Underfire Stack Coke Oven Batteries Nos. 3 and 4
Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:
Primary: Coke Oven Gas -3,253 million cubic feet
Secondary: Natural Gas

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20% Opacity/3-Minute Average per 60-Minute Period	Section 6.9.8
Visible Emissions (VE)	20% Opacity during batterywide extended coking cycle; 15% Opacity during normal coking cycle	40 <u>CFR</u> 63 (Subpart CCCCC)
Particulate Matter (PM)	0.176 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Particulate Matter (PM10)	N/A	N/A
Sulfur Dioxide (SO2)	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NOx)	N/A	N/A
Carbon Monoxide (CO)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A

Pollution Control Device: None

Continuous Emission Monitors: COMS

Continuous Compliance Determiner:
Daily Recordkeeping of Fuels Coke Oven Gas & N.G. Combusted
Maximum Heat Input Restricted to 182 MMBTU/hour
Monthly Testing of COG Sulfur Content
Restricted to Coke Oven Gas Combustion
Operation of COMs-24 hour (daily average) of data
Work Practice Standards
Operation and Maintenance Requirements
Start-up, Shutdown, and Maintenance Plan

Title V Monitoring:
Twice Weekly Visible Emissions Observation of Combustion Stack;
Installation of COMS
Monthly Sampling & Testing of COG Sulfur Content
Monthly Sampling & Testing of COG Heat Content

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: See Section 6

Applicable Regulations: Section 1.5.15, Part 6.1, Part 6.3, Section 6.9.8, Part 7.1, Section 7.1.1, Part 18.5, Section 18.5.3, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 016	Regulation
	Section 1 – Applicability	
1	<p><u>Applicability</u></p> <p>The Emissions Unit 016, Underfire Stack of Batteries Nos. 3 & 4, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, fuel-feeding equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Regulations. The emissions unit is subject to the visible emissions restrictions under Section 6.9.8, entitled "Combustion Stacks," of the Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Regulations. The emissions unit is subject to the major source emissions fees of Chapter 16 of the Regulations. The emissions unit is subject to Title V permitting requirements of Chapter 18 of the Regulations.</p>	<p>6.3 6.9.8 7.1 Chapter 16 Chapter 18</p>
2	<p><u>General Compliance Requirements</u></p> <p>The permittee shall be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in 63.2 of 40 CFR 63.</p>	<p>40 CFR 63 63.2 Chapter 18</p>
3	<p><u>Continuous Monitoring-Continuous Compliance</u></p> <p>Startup, Shutdown, and Malfunction Plan:</p> <p>The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions of Paragraph 63.6(e)(3) of 40 CFR 63.</p> <p>COMS:</p> <p>Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously (or collect data at all times the affected source is operating).</p> <p>The permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing compliance. For COMS, a monitoring malfunction is any sudden, infrequent, not reasonably preventive failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.</p>	<p>40 CFR 63 63.7332 63.6(e)(3) Chapter 18</p>
4	<p><u>Subpart CCCCC</u></p> <p>The Emissions Unit No. 016 herein is subject to the requirements as listed in Subpart CCCCC (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.</p>	<p>40 CFR 63 Chapter 18</p>
	Section 2 – Emission, Equipment or Production Requirements and Limitations	
5	<p><u>Visible Emissions Restriction</u></p> <p>The Emissions Unit No. 016 shall comply with the visible emissions requirements under Section 6.9.8 of the Rules and Regulations. There shall be no visible emissions, other than water mist or vapor, with an opacity greater than 20% from the combustion stack except for a period or periods aggregating not more than 3 minutes in any consecutive 60 minutes. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. The permittee shall perform a visual observation of the emission unit's combustion stack and make a record of the visual observation at least twice per week for a period of 15 minutes or more. If any visible emissions (greater than 15% opacity) are observed, the permittee shall expeditiously correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. If the visible emissions cannot be corrected, the permittee shall have a certified Reference Method 9 observer determine the combustion stack's opacity within 24 hours.</p>	<p>6.9.8 18.5.3(a)(2)</p>

6	<u>Subpart CCCCC-Demonstrating Continuous Compliance</u> The permittee's operating unit shall demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in 63.7296(a) of the subpart by meeting the requirement in Condition No.7 of this emissions unit.	40 CFR 63 63.7296(a) 63.7333(c)
7	<u>Subpart CCCCC - Emissions Limitation</u> The permittee shall not discharge to the atmosphere any emissions from any battery stack at a existing by-product coke oven battery that exhibit an opacity greater than the applicable limits shown below: A. Daily average of 15% opacity for a battery on a normal coking cycle; or B. Daily average of 20% opacity for a battery on a battery-wide extended coking	40 CFR 63, 63.7296 Chapter 18
8	<u>Particulate Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.176 pounds per million BTU of heat input (at 182 MMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, as the same may be amended or revised. To comply with Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only clean coke oven gas is combusted in the emissions unit. This written certification shall be submitted biennially.	6.3 18.5 18.5.3(a)(2)
9	<u>Sulfur Oxides Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, as the same may be amended or revised. To comply with Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze them for sulfur content (hydrogen sulfide) by weight. The permittee shall also determine the heat content of each fuel sample. The emissions unit is restricted to combusting coke oven gas with natural gas used as standby.	7.1.1 18.5 18.5.3(a)(2)
10	<u>Combustion Fuel Restriction</u> The Emissions Unit permitted herein is restricted to combusting coke oven gas and natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (within $\pm 1\%$ accuracy) of COG combusted each calendar day.	18.5
11	<u>Heat Input Restriction</u> The Emissions Unit permitted herein shall not exceed 182,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amount of each fuel combusted each calendar day. The instrumentation for recording fuel usage shall be within $\pm 1\%$ accuracy.	18.5
Section 3 -- Compliance and Performance Test Methods and Procedures		
12	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7: Determination of Nitrogen Oxide Emissions	40 CFR 60 Appendix A

	Method 9: Visual Determination of the Opacity of Emissions Turwiler Method: Sulfur Content (H ₂ S) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	
13	<p><u>Subpart CCCCC--Performance Testing</u></p> <p>The permittee shall conduct an initial and subsequent (continuous) performance test in accordance with the following:</p> <p>To determine compliance with the daily average opacity limit for stacks of 15% for a by-product coke oven battery on a normal coking cycle or 20% for a by-product coke oven battery on battery-wide extended coking, follow the test methods and procedures in items 1 through 3 below:</p> <ol style="list-style-type: none"> 1. Using the continuous opacity monitoring system (COMS) required in 63.7330(e) of 40 CFR 63, 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) of 40 CFR 63; and 3. Compute and record the 24-hour (daily) average of the COMS data. <p>For each by-product coke oven battery stack subject to an opacity limit in 63.7296(a) of 40 CFR 63, the permittee shall submit an initial notification of compliance status containing the COMS performance test.</p>	<p>40 CFR 63, 63.8(g)(2) 63.7296(a) 63.7324 63.7326(d) 63.7330(e) Chapter 18</p>
	<u>Section 4--Operation and Maintenance Requirements</u>	
14	<p><u>Good Engineering Practices & Minimize Emissions to the Level of Subpart CCCCC</u></p> <p>A. A required by 63.6(e)(1)(i) of 40 CFR 63, the permittee shall operate and maintain the affected source (batteries), including the air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.</p> <ol style="list-style-type: none"> 1. The permittee must prepare and operate at all times according to a written operating and maintenance plan for the general operation and maintenance of the existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed as follows: <ol style="list-style-type: none"> a. Frequency and method of recording underfire gas parameters; b. Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures; c. Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged; d. Frequency and procedures for inspecting flues, burners, and nozzles; and e. The operating and maintenance plan must include requirements to repair any defects or deficiencies brought on through inspections as describe in permit condition 15 of this emissions unit. Repairs are to be made before the next scheduled inspection. 	<p>40 CFR 63 63.6(e)(i) 63.7300 Chapter 18</p>
15	<p><u>Subpart CCCCC--COMS -- Operation, and Maintenance Requirements For Monitors</u></p> <p>For each by-product coke oven battery, the permittee shall install, operate, and maintain a COMS to measure and record the opacity of emissions exiting each stack according to the following requirements:</p> <ol style="list-style-type: none"> A. Install, operate, and maintain each COMS according to the requirements in Paragraph 63.8(e) of 40 CFR 63 and Performance Specification 1 in 40 CFR 60, Appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit. B. The permittee shall conduct a performance evaluation of each COMS according 	<p>40 CFR 63 63.8(e) 63.8(d) 63.8(g)(2) 63.7324(b) 63.7331 Chapter 18</p>

	<p>to the requirements in 63.8 of 40 CFR 63 and Performance Specification 1 in Appendix B to 40 CFR 60.</p> <p>C. The permittee shall develop and implement a quality control program for operating and maintaining each COMS according to the requirements in 63.8(d) of 40 CFR 63. At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and a annual zero alignment audit of each COMS.</p> <p>D. Each COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. The permittee shall reduce the COMS data as specified in 63.8(g)(2) of 40 CFR 63.</p> <p>E. The permittee shall determine and record the hourly and daily (24-hour) average opacity according to the procedures in 63.7324(b) of 40 CFR 63, using all the 6-minute averagers collected for periods during which the COMS is not out-of-control.</p> <p>F. The Department shall be notified in writing 2 weeks prior to the COMS annual audit so the Department may witness the audit.</p>	
	Section 5 – Continuous Emission Monitoring	
16	<p>Subpart CCCCC—Monitoring</p> <p>A. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously at all times the affected source is operating.</p> <p>B. The permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.</p>	<p>40 CFR 63 63.7332 Chapter 18</p>
	Section 6 – Recordkeeping and Reporting Requirements	
17	<p>Subpart CCCCC—Reporting Requirements</p> <p>Unless the Administrator has approved a different schedule, the permittee shall submit quarterly compliance reports for battery stacks.</p> <p>A. The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in 63.7283 of 40 CFR 63, and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter.</p> <p>B. A quarterly compliance report for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period.</p> <p>C. The content of each quarterly report must provide information on compliance with the emission limitations for battery stacks in 63.7296 of 40 CFR 63. The reports must meet the requirements in 63.7341(b) of the subpart.</p>	<p>40 CFR 63 63.7283 63.7296 63.7341(b) Chapter 18</p>

18	<p>Subpart CCCCC Recordkeeping</p> <p>A. The permittee shall keep the following records:</p> <ol style="list-style-type: none"> 1. A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that the permittee submitted, according to requirements in 63.10(b)(2)(xiv) of 40 CFR 63; 2. The records in 63.6(e)(3)(iii) through (v) of 40 CFR 63, related to startup, shutdown, and malfunction; and 3. Records of performance tests, performance evaluations, and opacity observations as required by 63.10(b)(2)(viii) of 40 CFR 63. <p>B. For each COMS, the permittee must keep the records below:</p> <ol style="list-style-type: none"> 1. Records described in 63.10(b)(2)(vi) through (xi) of 40 CFR 63; 2. Monitoring data for COMS during a performance evaluation as required in 63.6(h)(7)(i) and (ii) of 40 CFR 63; 3. Previous versions of the performance evaluation plan as required in 63.8(d)(3) of 40 CFR 63; and 4. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. <p>C. The permittee shall keep the records required in §§63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement.</p>	<p>40 CFR 63 63.6(e)(3)(iii) 63.6(h)(7)(i)&(ii) 63.8(d)(3) 63.10(b)(2)(vi) 63.10(b)(2)(viii) 63.10(b)(2)(xiv) 63.7333 63.7335 63.7342 Chapter 18</p>
19	<p>Subpart CCCCC—Record Retention</p> <p>The permittee shall keep records in a form suitable and readily available for expeditious review, according to 63.10(b)(1) of 40 CFR 63.</p> <p>As specified in 63.10(b)(1) of 40 CFR 63, the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record.</p> <p>The permittee shall keep each record onsite for a least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record in accordance with 63.10(b)(1) of 40 CFR 63. The permittee can keep the records offsite for the remaining 3 years.</p>	<p>40 CFR 63 63.10(b)(1) 63.7343 Chapter 18</p>
20	<p>Department Required Annual Report Requirement</p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <ol style="list-style-type: none"> A. The actual hours of operation; B. The quantity of coke oven gas and natural gas burned in million cubic feet; C. The average monthly total sulfur content and heat content of coke oven gas; D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Regulations; and E. The quantity of natural gas burned in million cubic feet. 	<p>1.5.15 18.5.3</p>

Emissions Unit Operating Permit Summary

Emissions Unit No.: 017
Company: ERP Compliant Coke Plant/Utilities/Wastewater
Source Description: Underfire Stack Coke Oven Battery No. 5
Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:

Primary: Coke Oven Gas 3,253 million cubic feet
Secondary: Natural Gas

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20% Opacity/3-Minute Average per 60-Minute Period	Section 6.9.8
Visible Emissions (VE)	20% Opacity during batterywide extended coking cycle; 15% Opacity during normal coking cycle	40 <u>CFR</u> 63 (Subpart CCCCC)
Particulate Matter (PM)	0.176 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Particulate Matter (PM) ₁₀	N/A	N/A
Sulfur Dioxide (SO ₂)	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NO _x)	N/A	N/A
Carbon Monoxide (CO)	N/A	N/A
Volatile Organic Compounds (VOC)	N/A	N/A

Pollution Control Device: None

Continuous Emission Monitors: COMS

Continuous Compliance Determiner:
Daily Recordkeeping of Fuels Coke Oven Gas & N.G. Combusted
Maximum Heat Input Restricted to 182 MMBTU/hour
Monthly Testing of COG Sulfur Content
Restricted to Coke Oven Gas Combustion
Operation of COMs-24 hour (daily average) of data
Work Practice Standards
Operation and Maintenance Requirements
Start-up, Shutdown, and Maintenance Plan

Title V Monitoring:
Twice Weekly Visible Emissions Observation of Combustion Stack;
Installation of COMS
Monthly Sampling & Testing of COG Sulfur Content
Monthly Sampling & Testing of COG Heat Content

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: See Section 6

Applicable Regulations: Section 1.5.15, Part 6.1, Part 6.3, Section 6.9.8, Part 7.1, Section 7.1.1, Part 18.5, Section 18.5.3, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 017	Regulation
	Section 1 – Applicability	
1	<p><u>Applicability</u></p> <p>The Emissions Unit 017, Underfire Stack of Battery No. 5, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, fuel-feeding equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Regulations. The emissions unit is subject to the visible emissions restrictions under Section 6.9.8, entitled "Combustion Stacks," of the Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Regulations. The emissions unit is subject to the major source emissions fees of Chapter 16 of the Regulations. The emissions unit is subject to Title V permitting requirements of Chapter 18 of the Regulations.</p>	<p>6.3 6.9.8 7.1 Chapter 16 Chapter 18</p>
2	<p><u>General Compliance Requirements</u></p> <p>The permittee shall be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in 63.2 of 40 CFR 63.</p>	<p>40 CFR 63, 63.2 Chapter 18</p>
3	<p><u>Continuous Monitoring-Continuous Compliance</u></p> <p><u>Startup, Shutdown, and Malfunction Plan:</u></p> <p>The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions of Paragraph 63.6(e)(3) of 40 CFR 63.</p> <p><u>COMS:</u></p> <p>Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously (or collect data at all times the affected source is operating).</p> <p>The permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing compliance. For COMS, a monitoring malfunction is any sudden, infrequent, not reasonably preventive failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.</p>	<p>40 CFR 63, 63.6(e)(3), 63.7332 Chapter 18</p>
4	<p><u>Subpart CCCCC</u></p> <p>The Emissions Unit No. 017 herein is subject to the requirements as listed in Subpart CCCCC (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.</p>	<p>40 CFR 63 Chapter 18</p>
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
5	<p><u>Visible Emissions Restriction</u></p> <p>The Emissions Unit No. 017 shall comply with the visible emissions requirements under Section 6.9.8 of the Rules and Regulations. There shall be no visible emissions, other than water mist or vapor, with an opacity greater than 20% from the combustion stack except for a period or periods aggregating not more than 3 minutes in any consecutive 60 minutes. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. The permittee shall perform a visual observation of the emission unit's combustion stack and make a record of the visual observation at least twice per week for a period of 15 minutes or more. If any visible emissions (greater than 15% opacity) are observed, the permittee shall expeditiously correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. If the visible emissions cannot be corrected, the permittee shall have a certified Reference Method 9 observer determine the combustion stack's opacity within 24 hours.</p>	<p>6.9.8 18.5.3(a)(2)</p>

6	<u>Subpart CCCCC-Demonstrating Continuous Compliance</u> The permittee's operating unit shall demonstrate continuous compliance for each by-product coke oven battery subject to the opacity limit for stacks in 63.7296(a) of the subpart by meeting the requirement in Condition No.7 of this emissions unit.	40 <u>CFR</u> 63 63.7296(a) 63.7333(c)
7	<u>Subpart CCCCC - Emissions Limitation</u> The permittee shall not discharge to the atmosphere any emissions from any battery stack at a existing by-product coke oven battery that exhibit an opacity greater than the applicable limits shown below: A. Daily average of 15% opacity for a battery on a normal coking cycle; or B. Daily average of 20% opacity for a battery on a battery-wide extended coking	40 <u>CFR</u> 63, 63.7296 Chapter 18
8	<u>Particulate Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.176 pounds per million BTU of heat input (at 182 MMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 <u>CFR</u> 60, as the same may be amended or revised. To comply with Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only clean coke oven gas is combusted in the emissions unit. This written certification shall be submitted biennially.	6.3 18.5 18.5.3(a)(2)
9	<u>Sulfur Oxides Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 <u>CFR</u> 60, as the same may be amended or revised. To comply with Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze them for sulfur content (hydrogen sulfide) by weight. The permittee shall also determine the heat content of each fuel sample. The emissions unit is restricted to combusting coke oven gas with natural gas used as standby.	7.1.1 18.5 18.5.3(a)(2)
10	<u>Combustion Fuel Restriction</u> The Emissions Unit permitted herein is restricted to combusting coke oven gas and natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (within $\pm 1\%$ accuracy) of COG combusted each calendar day.	18.5
11	<u>Heat Input Restriction</u> The Emissions Unit permitted herein shall not exceed 182,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amount of each fuel combusted each calendar day. The instrumentation for recording fuel usage shall be within $\pm 1\%$ accuracy.	18.5
Section 3 -- Compliance and Performance Test Methods and Procedures		
12	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 <u>CFR</u> 60, Appendix A, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7: Determination of Nitrogen Oxide Emissions	40 <u>CFR</u> 60 Appendix A

	<p>Method 9: Visual Determination of the Opacity of Emissions Turwiler Method: Sulfur Content (H₂S) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot</p>	
13	<p>Subpart CCCCC—Performance Testing The permittee shall conduct an initial and subsequent (continuous) performance test in accordance with the following:</p> <p>To determine compliance with the daily average opacity limit for stacks of 15% for a by-product coke oven battery on a normal coking cycle or 20% for a by-product coke oven battery on battery-wide extended coking, follow the test methods and procedures in items 1 through 3 below:</p> <ol style="list-style-type: none"> 1. Using the continuous opacity monitoring system (COMS) required in Paragraph 63.7330(e) of 40 CFR 63, 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) of 40 CFR 63; and 3. Compute and record the 24-hour (daily) average of the COMS data. <p>For each by-product coke oven battery stack subject to an opacity limit in 63.7296(a) of 40 CFR 63, the permittee shall submit an initial notification of compliance status containing the COMS performance test.</p>	<p>40 CFR 63, 63.8(g)(2), 63.7296(a), 63.7324, 63.7326(d), 63.7330(e) Chapter 18</p>
	<p>Section 4—Operation and Maintenance Requirements</p>	
14	<p>Good Engineering Practices & Minimize Emissions to the Level of Subpart CCCCC A. As required by Paragraph 63.6(e)(1)(i) of 40 CFR 63, the permittee shall operate and maintain the affected source (batteries), including the air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.</p> <ol style="list-style-type: none"> 1. The permittee must prepare and operate at all times according to a written operating and maintenance plan for the general operation and maintenance of the existing by-product coke oven batteries. Each plan must address, at a minimum, the elements listed as follows: <ol style="list-style-type: none"> a. Frequency and method of recording underfire gas parameters; b. Frequency and method of recording battery operating, temperature, including measurement of individual flue and cross-wall temperatures; c. Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged; d. Frequency and procedures for inspecting flues, burners, and nozzles; and e. The operating and maintenance plan must include requirements to repair any defects or deficiencies brought on through inspections as describe in permit condition 15 of this emissions unit. Repairs are to be made before the next scheduled inspection. 	<p>40 CFR 63, 63.6(e)(i), 63.7300 Chapter 18</p>

15	<p><u>Subpart CCCCC—COMS—Operation, and Maintenance Requirements For Monitors</u> For each by-product coke oven battery, the permittee shall install, operate, and maintain a COMS to measure and record the opacity of emissions existing each stack according to the following requirements:</p> <p>A. Install, operate, and maintain each COMS according to the requirements in Paragraph 63.8(e) of 40 <u>CFR</u> 63 and Performance Specification 1 in 40 <u>CFR</u> 60, Appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.</p> <p>B. The permittee shall conduct a performance evaluation of each COMS according to the requirements in 63.8 of 40 <u>CFR</u> 63 and Performance Specification 1 in Appendix B to 40 <u>CFR</u> 60.</p> <p>C. The permittee shall develop and implement a quality control program for operating and maintaining each COMS according to the requirements in 63.8(d) of 40 <u>CFR</u> 63. At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and a annual zero alignment audit of each COMS.</p> <p>D. Each COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. The permittee shall reduce the COMS data as specified in 63.8(g)(2) of 40 <u>CFR</u> 63.</p> <p>E. The permittee shall determine and record the hourly and daily (24-hour) average opacity according to the procedures in 63.7324(b) of 40 <u>CFR</u> 63, using all the 6-minute averages collected for periods during which the COMS is not out-of-control.</p> <p>F. The Department shall be notified in writing 2 weeks prior to the COMS annual audit so the Department may witness the audit.</p>	40 <u>CFR</u> 63, 63.8(e), 63.8(d), 63.8(g)(2), 63.7324(b), 63.7331 Chapter 18
	Section 5 – Continuous Emission Monitoring	
16	<p><u>Subpart CCCCC—Monitoring</u></p> <p>A. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously at all times the affected source is operating.</p> <p>B. The permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.</p>	40 <u>CFR</u> 63, 63.7332 Chapter 18
	Section 6 -- Recordkeeping and Reporting Requirements	
17	<p><u>Subpart CCCCC - Reporting Requirements</u> Unless the Administrator has approved a different schedule, the permittee shall submit quarterly compliance reports for battery stacks.</p> <p>A. The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified for your affected source in 63.7283 of 40 <u>CFR</u> 63, and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter.</p> <p>B. A quarterly compliance report for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting</p>	40 <u>CFR</u> 63, 63.7283, 63.7296, 63.7341(b) Chapter 18

	period.	
	C. The content of each quarterly report must provide information on compliance with the emission limitations for battery stacks in 63.7296 of 40 <u>CFR</u> 63. The reports must meet the requirements in 63.7341(b) of the subpart.	
18	<p><u>Subpart CCCCC—Recordkeeping</u></p> <p>A. The permittee shall keep the following records:</p> <ol style="list-style-type: none"> 1. A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that the permittee submitted, according to requirements in 63.10(b)(2)(xiv) of 40 <u>CFR</u> 63; 2. The records in 63.6(e)(3)(iii) through (v) of 40 <u>CFR</u> 63, related to startup, shutdown, and malfunction; and 3. Records of performance tests, performance evaluations, and opacity observations as required by 63.10(b)(2)(viii) of 40 <u>CFR</u> 63. <p>B. For each COMS, the permittee must keep the records below:</p> <ol style="list-style-type: none"> 1. Records described in 63.10(b)(2)(vi) through (xi) of 40 <u>CFR</u> 63; 2. Monitoring data for COMS during a performance evaluation as required in 63.6(h)(7)(i) and (ii) of 40 <u>CFR</u> 63; 3. Previous versions of the performance evaluation plan as required in 63.8(d)(3) of 40 <u>CFR</u> 63; and 4. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. <p>C. The permittee shall keep the records required in §§63.7333 through 63.7335 to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies to you.</p>	<p>40 <u>CFR</u> 63, 63.6(e)(3)(iii), 63.6(h)(7)(i)&(ii), 63.8(d)(3), 63.10(b)(2)(vi), 63.10(b)(2)(viii), 63.10(b)(2)(xiv), 63.7333, 63.7335, 63.7342 Chapter 18</p>
19	<p><u>Subpart CCCCC—Record Retention</u></p> <p>The permittee shall keep records in a form suitable and readily available for expeditious review, according to 63.10(b)(1) of 40 <u>CFR</u> 63.</p> <p>As specified in 63.10(b)(1) of 40 <u>CFR</u> 63, the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record.</p> <p>The permittee shall keep each record onsite for a least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record in accordance with 63.10(b)(1) of 40 <u>CFR</u> 63. The permittee can keep the records offsite for the remaining 3 years.</p>	<p>40 <u>CFR</u> 63, 63.10(b)(1), 63.7343 Chapter 18</p>
20	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <ol style="list-style-type: none"> A. The actual hours of operation; B. The quantity of coke oven gas and natural gas burned in million cubic feet; C. The average monthly total sulfur content and heat content of coke oven gas; D. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Regulations; and E. The quantity of natural gas burned in million cubic feet 	<p>1.5.15 18.5.3</p>

Emissions Unit Operating Permit Summary

Emissions Unit No.: 018
Company: ERP Compliant Coke Plant/Utilities/Wastewater
Source Description: South Coke Quenching Tower
Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year
Type and quantity of fuel used: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter	30.42 pounds per hour	Part 6.4
Total Dissolved Solids (TDS) or the Sum of the Concentration of benzene, benzo(a)pyrene, and naphthalene	TDS shall not exceed 1,100 milligrams per liter (mg/l) in water; or not to exceed the applicable site-specific limit approved by the permitting authority for benzene, benzo(a) pyrene, and naphthalene	Subpart CCCCC

Pollution Control Device: Baffles
Continuous Emission Monitors: None
Continuous Compliance Determiner: Equipment and Work Practice Standards
Title V Monitoring: Weekly Testing of Quench Tower Water if TDS Content is Selected, or Monthly if Maintaining the Sum of the Concentrations of Benzene, Benzo(a)pyrene, and the Naphthalene Used to Quench Hot Coke
EPA Reference Test Methods: 9 of 40 CFR 60, Part 1.10, Method 160.1 of 40 CFR 136.3
Reporting Requirements: Semi-Annual and Annual Inspection Results; See Condition Nos. 8 & 9
Applicable Regulations: Section 1.5.15, Section 1.9.1, Part 1.10, Part 6.1, Part 6.2, Part 6.4, Section 6.9.9, Part 18.5, Part 18.7, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 018	Regulation
	Section 1 -- Applicability	
1	<p><u>Applicability</u></p> <p>The Emissions Unit, South Coke Quenching Tower, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including quenching towers and quench water. The emissions unit is subject to Section 6.9.9, entitled "Quenching," of the Rules and Regulations:</p> <p>A. No person shall operate a coke oven plant without baffles installed and properly operating in the quench towers; and</p> <p>B. Water introduced to the quenching station must be of a quality approved by the Health Officer.</p> <p>The emissions unit is subject to Chapter 18 of the Rules and Regulations.</p>	6.1 6.9.9 Chapter 18
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	<p><u>Visible Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 1 calendar month of the observation.</p>	6.1.1 18.5
3	<p><u>Subpart CCCCCC -- Required Limitations</u></p> <p>For quenching of hot coke, the permittee shall meet the requirements in item A or B in this permit condition for quench water limitations:</p> <p>A. For the quenching of hot coke the concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/l); or</p> <p>B. The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority if this monitoring requirement is the compliance method selected by the permittee in lieu of item A hereinabove of this emissions unit.</p> <p>For quenching, the permittee shall use acceptable makeup water, as defined in Section 63.7352.</p>	40 CFR 63, 63.7295 63.7352
	Section 3 -- Compliance and Performance Test Methods and Procedures	Regulation
4	<p><u>Test Methods and Procedures</u></p> <p>Every month, the permittee shall perform an analysis for TDS of the water to the quench tower. The samples shall be taken after the makeup water has been mixed with the water recycled from the sump and the analysis shall be done in accordance with the <u>Standard Methods for the Examination of Water and Wastewater</u>.</p>	1.9.1 1.10

5	<p><u>Subpart CCCCC—Test Methods</u></p> <p>TDS Water Analysis:</p> <p>If the permittee elects the TDS limit for quench water, 63.7295(a)(1)(i) of 40 <u>CFR</u> 63, the permittee shall conduct each performance test that applies to the affected source according to the conditions as follows:</p> <p>A. Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke. The samples shall be taken after the makeup water has been mixed with the water recycled from the sump and the analysis shall be done in accordance with the <u>Standard Methods for the Examination of Water and Wastewater</u>. The permittee shall use acceptable makeup water, as defined in Section 63.7352 of the subpart.</p> <p>B. Determine the TDS concentration of the sample using Method 160.1 in 40 <u>CFR</u> Part 136.3. In lieu of drying the total filterable residue as prescribe in Method 160.1 at 180 degrees Centigrade, dry the total filterable residue between 103 to 105 degrees Centigrade.</p> <p>Benzene, Benzo(a)pyrene, and Naphthalene Water Analysis:</p> <p>C. If at any time the permittee elects to meet the alternate requirements, for quench water in 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, the permittee must establish a site-specific constituent limit according to the procedures in 63.7325 (b)(1) through (4). of 40 <u>CFR</u> 63. The permittee shall use acceptable makeup water, as defined in Section 63.7352 of the subpart.</p> <p>1. If at any time the permittee elects to meet the benzene, benzo(a)pyrene, and naphthalene water analysis in item C of this condition unit, the permittee shall establish a site-specific constituent limit according to the following procedures:</p> <p>a. Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoir). Conduct sampling under normal and representative operating conditions.</p> <p>b. For each sample, determine the TDS (Total Dissolved Solids) concentration according to the requirements in item B of this condition unit, and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 <u>CFR</u> 136 or an approved alternative method.</p> <p>c. Determine and record the highest sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 milligrams per liter (mg/l). This concentration is the site-specific constituent limit.</p> <p>d. Submit the site-specific limit, sampling results, and all supporting data and calculations to your permitting authority for review or and approval.</p>	<p>40 <u>CFR</u> 63, 63.7295, 63.7325, 63.7352</p>
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	Section 4 – Emissions Monitoring	
6	<p><u>Subpart CCCCC—Monitoring</u> Beginning on the first day that compliance is required under 63.7283 of 40 <u>CFR</u> 63, and subsequent, the permittee shall demonstrate continuous compliance with the TDS limit for quenching in 63.7295(a)(1)(i) or 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, by meeting the following requirements:</p> <p>A. Maintaining the TDS content of the water used to quench the hot coke at 1,100 mg/l or less; and</p> <p>Determining the TDS content of the quench water at least weekly according to the requirements in 63.7325(a) of 40 <u>CFR</u> 63, and recording the sample results; or</p> <p>B. Demonstrate continuous compliance with the constituent limit for quenching in 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, by the following requirement:</p> <p>Maintaining the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and determining the sum of the constituent concentrations at least monthly according to the requirements in 63.7325(c) of 40 <u>CFR</u> 63, and recording the sample results.</p>	40 <u>CFR</u> 63, 63.7283, 63.7295, 63.7325, 63.7333
	Section 5—Work Practice Standards	
7	<p><u>Subpart CCCCC—Work Practice Standards</u> For each quench tower the permittee shall meet the following requirements:</p> <p>A. The permittee must equip each quench tower with baffles such that no more than 5% of the cross sectional area of the tower may be uncovered or open to the sky;</p> <p>B. The baffles in each quench tower shall be washed once per day that the tower is used to quench coke, except as follows:</p> <ol style="list-style-type: none"> 1. The baffles are not required to be washed in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day; 2. Continuously record the ambient temperature on days that the baffles were not washed; 3. The quench towers shall be inspected monthly for damaged or missing baffles and blockage; 4. The permittee shall initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable; and 5. The permittee, as provided in 63.6(g) of 40 <u>CFR</u> 63, may request an alternate work practice standard. 	40 <u>CFR</u> 63, 63.6(g), 63.7295
	Section 6 -- Recordkeeping and Reporting Requirements	
8	<p><u>Subpart CCCCC--Reporting Dissolved Solids or HAP Constituents</u></p> <p>Records:</p> <p>A. The permittee shall maintain records of baffle inspections as required in Paragraph 63.7295(b)(1) of 40 <u>CFR</u> 63;</p> <p>B. Maintain records that document conformance with the washing, inspection, and repair requirements in 63.7295(b)(2) OF 40 cfr 63, including records of the ambient temperature on any day that the baffles were not washed;</p> <p>C. Maintain records of the source of makeup water to document conformance with the requirements for acceptable makeup water in 63.7295(a)(2) of 40 <u>CFR</u> 63;</p> <p>D. Maintain records of the weekly analysis for TDS, if selected, in accordance with</p>	1.5.15 18.5.3 40 <u>CFR</u> 63, 63.7295, 63.7333, 63.7341

	<p>63.7333(f) of 40 <u>CFR</u> 63; and</p> <p>12. Maintain record of the monthly analysis for HAPs, if selected, in accordance with 63.7333(g) of 40 <u>CFR</u> 63.</p> <p>Reporting: The permittee shall submit semiannual reports as required under this subpart each year unless notified otherwise by this Department. The contents of the semiannual compliance report shall contain the contents in 63.7341 of 40 <u>CFR</u> 63.</p>	
9	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The quantity in tons of coal charged to the batteries associated with this emissions unit; B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and C. The 12-month analysis for dissolved solids of the quench tower water.</p>	<p>18.5</p> <p>18.7</p>

Emissions Unit Operating Permit Summary

Emissions Unit No.: 019
Company: ERP Compliant Coke Plant/Utilities/Wastewater
Source Description: North Coke Quenching Tower
Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year
Type and quantity of fuel used: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter	30.42 pounds per hour	Part 6.4
Total Dissolved Solids (TDS) or the Sum of the Concentration of benzene, benzo(a)pyrene, and naphthalene	TDS shall not exceed 1,100 milligrams per liter (mg/l) in water; or not to exceed the applicable site-specific limit approved by the permitting authority for benzene, benzo(a) pyrene, and naphthalene	Subpart CCCCC

Pollution Control Device: Baffles
Continuous Emission Monitors: None
Continuous Compliance Determiner: Equipment and Work Practice Standards
Title V Monitoring: Weekly Testing of Quench Tower Water if TDS Content is Selected, or Monthly if Maintaining the Sum of the Concentrations of Benzene, Benzo(a)pyrene, and the Napthalene Used to Quench Hot Coke
EPA Reference Test Methods: 9 of 40 CFR 60, Part 1.10, Method 160.1 of 40 CFR 136.3
Reporting Requirements: Semi-Annual and Annual Inspection Results; See Condition Nos. 8 & 9
Applicable Regulations: Section 1.5.15, Section 1.9.1, Part 1.10, Part 6.1, Part 6.2, Part 6.4, Section 6.9.9, Part 18.5, Part 18.7, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 019	Regulation
	Section 1 – Applicability	
1	<p><u>Applicability</u> The Emissions Unit, North Coke Quenching Tower, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including quenching towers and quench water. The emissions unit is subject to Section 6.9.9, entitled “Quenching,” of the Rules and Regulations:</p> <p>A. No person shall operate a coke oven plant without baffles installed and properly operating in the quench towers; and</p> <p>B. Water introduced to the quenching station must be of a quality approved by the Health Officer.</p> <p>The emissions unit is subject to Chapter 18 of the Rules and Regulations.</p>	6.1 6.9.9 Chapter 18
	Section 2 – Emission, Equipment or Production Requirements and Limitations	
2	<p><u>Visible Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, “Visible Emissions Restrictions for Stationary Sources,” of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit’s exhaust system and make a record of the visual observation at least once per month. If any visible emissions are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 1 calendar month of the observation.</p>	6.1.1 18.5
3	<p><u>Subpart CCCCCC-- Required Limitations</u> For quenching of hot coke, the permittee shall meet the requirements in item A or B in this permit condition for quench water limitations:</p> <p>A. For the quenching of hot coke the concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/l); or</p> <p>B. The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority if this monitoring requirement is the compliance method selected by the permittee in lieu of item A hereinabove of this emissions unit.</p> <p>For quenching, the permittee shall use acceptable makeup water, as defined in Section 63.7352.</p>	40 CFR 63, 63.7295 63.7352
	Section 3 -- Compliance and Performance Test Methods and Procedures	Regulation
4	<p><u>Test Methods and Procedures</u> Every month, the permittee shall perform an analysis for TDS of the water to the quench tower. The samples shall be taken after the makeup water has been mixed with the water recycled from the sump and the analysis shall be done in accordance with the <u>Standard Methods for the Examination of Water and Wastewater</u>.</p>	1.9.1 1.10

5	<p><u>Subpart CCCCC---Test Methods</u></p> <p>TDS Water Analysis:</p> <p>If the permittee elects the TDS limit for quench water, 63.7295(a)(1)(i) of 40 <u>CFR</u> 63, the permittee shall conduct each performance test that applies to the affected source according to the conditions as follows:</p> <p>A. Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke. The samples shall be taken after the makeup water has been mixed with the water recycled from the sump and the analysis shall be done in accordance with the <u>Standard Methods for the Examination of Water and Wastewater</u>. The permittee shall use acceptable makeup water, as defined in Section 63.7352 of the subpart.</p> <p>B. Determine the TDS concentration of the sample using Method 160.1 in 40 <u>CFR</u> Part 136.3. In lieu of drying the total filterable residue as prescribed in Method 160.1 at 180 degrees Centigrade, dry the total filterable residue between 103 to 105 degrees Centigrade.</p> <p>Benzene, Benzo(a)pyrene, and Naphthalene Water Analysis:</p> <p>C. If at any time the permittee elects to meet the alternate requirements, for quench water in 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, the permittee must establish a site-specific constituent limit according to the procedures in 63.7325 (b)(1) through (4), of 40 <u>CFR</u> 63. The permittee shall use acceptable makeup water, as defined in Section 63.7352 of the subpart.</p> <p>D. If at any time the permittee elects to meet the benzene, benzo(a)pyrene, and naphthalene water analysis in item C of this condition unit, the permittee shall establish a site-specific constituent limit according to the following procedures:</p> <ol style="list-style-type: none"> Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoir). Conduct sampling under normal and representative operating conditions. For each sample, determine the TDS (Total Dissolved Solids) concentration according to the requirements in item B of this condition unit, and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 <u>CFR</u> 136 or an approved alternative method. Determine and record the highest sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 milligrams per liter (mg/l). This concentration is the site-specific constituent limit. Submit the site-specific limit, sampling results, and all supporting data and calculations to your permitting authority for review or and approval. 	<p>40 <u>CFR</u> 63, 63.7295, 63.7325, 63.7352</p>
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	Section 4 – Emissions Monitoring	
6	<p><u>Subpart CCCCC Monitoring</u> Beginning on the first day that compliance is required under 63.7283 of 40 <u>CFR</u> 63, and subsequent, the permittee shall demonstrate continuous compliance with the TDS limit for quenching in 63.7295(a)(1)(i) or 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, by meeting the following requirements:</p> <p>A. Maintaining the TDS content of the water used to quench the hot coke at 1,100 mg/l or less; and</p> <p>Determining the TDS content of the quench water at least weekly according to the requirements in 63.7325(a) of 40 <u>CFR</u> 63, and recording the sample results; or</p> <p>B. Demonstrate continuous compliance with the constituent limit for quenching in 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, by the following requirement:</p> <p>Maintaining the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and determining the sum of the constituent concentrations at least monthly according to the requirements in 63.7325(c) of 40 <u>CFR</u> 63, and recording the sample results.</p>	<p>40 <u>CFR</u> 63 63.7283 63.7295 63.7325 63.7333</p>
	Section 5—Work Practice Standards	
7	<p><u>Subpart CCCCC Work Practice Standards</u> For each quench tower the permittee shall meet the following requirements:</p> <p>A. The permittee must equip each quench tower with baffles such that no more than 5% of the cross sectional area of the tower may be uncovered or open to the sky;</p> <p>B. The baffles in each quench tower shall be washed once per day that the tower is used to quench coke, except as follows:</p> <ol style="list-style-type: none"> The baffles are not required to be washed in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day; Continuously record the ambient temperature on days that the baffles were not washed; The quench towers shall be inspected monthly for damaged or missing baffles and blockage; The permittee shall initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable; and The permittee, as provided in 63.6(g) of 40 <u>CFR</u> 63, may request an alternate work practice standard. 	<p>40 <u>CFR</u> 63 63.6(g) 63.7295</p>
	Section 6 -- Recordkeeping and Reporting Requirements	
8	<p><u>Subpart CCCCC--Reporting Dissolved Solids or HAP Constituents</u></p> <p>Records:</p> <p>A. The permittee shall maintain records of baffle inspections as required in Paragraph 63.7295(b)(1) of 40 <u>CFR</u> 63;</p> <p>B. Maintain records that document conformance with the washing, inspection, and repair requirements in 63.7295(b)(2) OF 40 cfr 63, including records of the ambient temperature on any day that the baffles were not washed;</p> <p>C. Maintain records of the source of makeup water to document conformance with the requirements for acceptable makeup water in 63.7295(a)(2) of 40 <u>CFR</u> 63;</p> <p>D. Maintain records of the weekly analysis for TDS, if selected, in accordance with</p>	<p>1.5.15 18.5.3 40 <u>CFR</u> 63 63.7295 63.7333 63.7341</p>

	<p>63.7333(f) of 40 <u>CFR</u> 63; and</p> <p>E. Maintain record of the monthly analysis for HAP's, if selected, in accordance with 63.7333(g) of 40 <u>CFR</u> 63.</p> <p>Reporting: The permittee shall submit semiannual reports as required under this subpart each year unless notified otherwise by this Department. The contents of the semiannual compliance report shall contain the contents in 63.7341 of 40 <u>CFR</u> 63.</p>	
9	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The quantity in tons of coal charged to the batteries associated with this emissions unit;</p> <p>B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and</p> <p>C. The 12-month analysis for dissolved solids of the quench tower water.</p>	<p>18.5</p> <p>18.7</p> <p>40 <u>CFR</u> 63</p>

Emissions Unit Operating Permit Summary

Emissions Unit No.: 021

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: Coke Pushing Operations of Coke Battery Nos. 3, 4, and 5

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used: N/A

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VE)	40% Opacity	Section 6.9.4
Particulate Matter (PM)	0.02 pounds per ton of coke (lb/ton)	Subpart CCCCC

Pollution Control Device: Baghouse

Continuous Emission Monitors: None

EPA Reference Test Methods: Method 1, 2, 2F, 2G, 3, 3A, 3B, 4, 5, 5D, 9 of Appendix A (40 CFR 60)

Reporting Requirements: See Section 6, & Permit Condition 9

Applicable Regulations: Section 1.5.15, Part 6.1, Part 6.2, Part 6.4, Part 6.9, Part 18.5, Section 18.5.3, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 021	Regulation
	Section 1 – Applicability	
1	<p><u>Applicability</u> <u>Visible Emissions Restriction</u> The Emissions Unit No. 021 including the push control system (hooding, ductwork, and hotcar) with baghouse permitted herein is subject to and shall comply with the requirements under Section 6.9.4, "Pushing" of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere visible emissions during the pushing cycle, other than water mist or vapor, to exceed 40% for more than 1 push per hour per battery or for more than 2 consecutive pushes from the same oven. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, as the same may be amended or revised. Individual readings, however, will be instantaneous as opposed to 6-min averages per Method 9. To comply with Title V monitoring requirements, the permittee shall perform a visual observation of the emission units (Batteries No's. 3, 4, & 5) once per month. If any visible emissions (greater than 40% opacity) are observed, the permittee shall immediately correct the problem causing the emission unit to emit visible emissions and make a record of the event and correct actions. Within 24 hours of the completion of corrective actions, the permittee shall again observe the emission unit. If visible emissions are present, a certified observer shall complete an EPA Method 9 Visible Emissions Evaluation within 3 business days to establish compliance with the above opacity limitation. The date, time, and type of corrective action initiated to eliminate the visible emissions and the date and time the corrective actions were completed shall be provided in the same record that contained the initial observation.</p>	<p>6.9.4 18.5 40 CFR 60 Appendix A</p>
2	<p><u>General Compliance Requirements</u> The permittee shall be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in 63.2 of 40 CFR 63.</p>	<p>40 CFR 63, 63.2 Chapter 18</p>
3	<p><u>Startup, Shutdown, and Malfunction Plan</u> The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions of 63.6(e)(3) of 40 CFR 63.</p>	<p>40 CFR 63, 63.6(e)(3) Chapter 18</p>
4	<p><u>Subpart CCCCC</u> The Emissions Unit No. 021 herein is subject to the requirements as listed in Subpart CCCCC (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the Code of Federal Regulations.</p>	<p>40 CFR 63 Chapter 18</p>
	Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards	
5	<p><u>Subpart CCCCC - Emissions Limitation – PM</u> The permittee shall not discharge to the atmosphere particulate matter from a control device applied to pushing emissions that exceed 0.02 pounds per ton (lb/ton) of coke if a movable hood vented to a stationary control device is used to capture emissions.</p>	<p>40 CFR 63, 63.7290 Chapter 18</p>
6	<p><u>Subpart CCCCC – Operating Limit</u> For each capture system applied to pushing emissions:</p> <p>A. Maintain the daily average volumetric flow rate at the inlet of the control device at or above the minimum level during the initial performance test, or</p> <p>B. For each capture system that uses an electric motor to drive the fan, the permittee must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test.</p>	<p>40 CFR 63, 63.7290 Chapter 18</p>

7	<p><u>Subpart CCCCC – Work Practice Standards</u> The following requirements are to be met for coke oven batteries with vertical flues:</p> <p>A. Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, the permittee must observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in 63.7334(a) of 40 <u>CFR</u> 63, and it must document why the oven was not observed within the 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in 63.7334(a) of 40 <u>CFR</u> 63.</p> <p>B. For Batteries 3 & 4: If 2 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.</p> <p>C. The permittee shall observe and record the opacity of fugitive pushing emissions for at least 4 consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of 4 pushes. The permittee may observe fewer than 4 consecutive pushes, if the observance was reasonably unavoidable; however, the permittee must observe and record as many consecutive pushes as possible and document why 4 consecutive pushes could not be observed. The permittee may observe and record 1 or more non-consecutive pushes in addition to any consecutive pushes observed in a day.</p> <p>D. The permittee shall not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Records are to be maintained indicating legitimate operational reason(s) for any change in the pushing schedule which results in a change in the sequence of consecutive pushes observed in a day.</p>	40 <u>CFR</u> 63, 63.7291, 63.7334(a) Chapter 18
8	<p><u>Subpart CCCCC – Fugitive Pushing Emissions; Corrective Action/Increase Coking Time</u></p> <p>A. In doing pushing observances, if the average opacity for any individual push exceeds 30% opacity for any short battery (less than 5 meters in height) or 35% opacity for any tall battery, the permittee shall take corrective action and/or increase the coking time for that oven.</p> <p>B. If corrective action or an increase in coking time is required, completing this action or the increase in coking time must occur within 10 calendar days or the number of days determined using Equation 1 under 63.7291, of 40 <u>CFR</u> 63 whichever is greater:</p> $X = 0.55 * Y \quad (\text{Eq. 1})$ <p>Where:</p> <p>X - Number of calendar days allowed to complete corrective action or increase coking time; and</p> <p>Y - Current coking time for the oven, hours.</p> <p>For the purpose of determining the number of calendar days allowed under Equation 1 of this section, day one is the first day following the day you observed an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery. Any fraction produced by Equation 1 of this section must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action.</p> <p>C. Procedures for time periods, days that oven(s) are removed from service, and</p>	40 <u>CFR</u> 63, 63.7291 Chapter 18

	<p>demonstration that the corrective action and/or increased coking time was successful or unsuccessful are contained in 63.7291(a)(5) of 40 CFR 63, and 63.7291(6)(i) of 40 CFR 63. If the corrective action/or increased coking was successful, the permittee may return the oven to the 90-day reading rotation described in 63.7291(a)(1) of 40 CFR 63.</p> <p>D. If the initial corrective action/or increased coking time under 63.7291(6)(i) of 40 CFR 63, were unsuccessful, the permittee must complete additional corrective action and/or increased coking time for that oven within the number of days allowed in 63.7291(a)(5) of 40 CFR 63.</p> <p>E. After implementing any additional corrective action/or increased coking time required under 63.7291(a)(6)(i) or (a)(7)(ii) of 40 CFR 63, the permittee shall demonstrate that corrective action/or increased coking time was successful. If the corrective action and/or increased coking time was successful, the permittee may return the oven to the 90-day reading rotation describe in 63.7291(a)(1) of 40 CFR 63.</p> <p>F. If the corrective action and/or increased coking time was unsuccessful, the permittee must repeat the procedures in 63.7291(a)(6)(i) of 40 CFR 63, until the corrective action and/or increased coking time is successful.</p> <p>G. If at any time the permittee places an oven on an increased coking time as a result of fugitive emissions exceeding 30% for a short battery or 35% for a tall battery, the permittee shall keep the oven on the increased coking time until the oven qualifies for decreased coking time using the procedures in paragraph 63.7291(a)(7)(ii) or (a)(7)(iii) of 40 CFR 63.</p>	
9	<p><u>Subpart CCCCC – Fugitive Pushing Emissions; Deviations -- Reporting Requirements</u></p> <p>A. When the permittee's oven(s) fails to meet the standard (extended coking time) average opacity for any individual push that exceeds 30% opacity for any short battery or 35% opacity for any tall battery, the permittee shall report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under 63.7921(a)(6)(ii) of 40 CFR 63.</p> <p>B. When the permittee's oven(s) fails to meet the standard (decreased coking time) average opacity for any individual push that exceeds 30% opacity for any short battery or 35% opacity for any tall battery, the permittee shall report to the permitting authority as a deviation (63.7921(a)(7)(iv) of 40 CFR 63), the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in paragraph 63.7921(a)(7)(iii).</p>	<p>40 CFR 63, 63.7291(a)(6)(iii), 63.7921(a)(7)(i) and (a)(7)(ii) Chapter 18</p>
10	<p><u>Subpart CCCCC – Work Practice Standards – Soaking</u></p> <p>A. Each coke by-product battery is subject to a work practice standard(s) for soaking in accordance with 63.7294 of 40 CFR 63, and each plan must include measures and procedures to:</p> <ol style="list-style-type: none"> 1. Train topside workers to identify soaking emissions that require corrective action; 2. Damper the oven off the collecting main prior to opening the standpipe cap; 3. Determine the cause of soaking emissions that do not ignite automatically, including emissions from raw COG leaking from the collecting main through the damper, and emissions from incomplete coking; 4. If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Suggested methods for corrective actions are contained in 63.7294(a)(4) of 40 CFR 63; and 	<p>40 CFR 63, 63.7294 63.6(g)</p>

	<p>5. If soaking emissions are not caused by leaks from the collecting main, notify the designated responsible party. If incomplete coking is the cause of the emissions, the permittee must put the oven back on the collecting main until it is completely coked or the permittee must ignite the emissions.</p> <p>6. As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.</p>	
	Section 3 -- Compliance and Performance Test Methods and Procedures	
11	<p><u>Stack Testing</u></p> <p>For each control device subject to an emissions limit for particulate matter in Paragraph 63.7290(a) of 40 <u>CFR</u> 63, the permittee shall conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of the Title V operation permit.</p>	40 <u>CFR</u> 63, 63.7322 Chapter 18
12	<p><u>Stack Test Procedures—Subpart CCCCC</u></p> <p>The test methods and other procedures for each performance test shall be conducted in accordance with Section 63.7322.</p>	40 <u>CFR</u> 63 40 <u>CFR</u> 60, Appendix A
	Section 4—Operation and Maintenance Requirements	
13	<p><u>Good Engineering Practices & Minimize Emissions to the Level of Subpart CCCCC</u></p> <p>A. As required by 63.6(c)(1)(i) of 40 <u>CFR</u> 63, the permittee shall operate and maintain the affected source (batteries), including the air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.</p> <p>1. The permittee must prepare and operate at all times according to a written operating and maintenance plan for the general operation and maintenance of the existing by-product coke oven batteries. Each plan associated with pushing must address the following as a minimum:</p> <ul style="list-style-type: none"> a. Frequency and method of recording underfire gas parameters; b. Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures; c. Procedures to prevent pushing an oven before it is fully coked; d. Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged; e. Frequency and procedures for inspecting flues, burners, and nozzles; f. The operating and maintenance plan must include requirements to repair any defects or deficiencies brought on through inspections as describe in permit condition 15 of this emissions unit. Repairs are to be made before the next schedule inspection, and g. For each baghouse applied to pushing emissions, the permittee shall install, operate, and maintain each bag leak detection system according to 63.7331 of 40 <u>CFR</u> 63. 	40 <u>CFR</u> 63, 63.7300, 63.7331 Chapter 18

14	<p><u>Subpart CCCCC-Continuous Compliance with the Operation and Maintenance Requirements</u></p> <p>A. For each by-product coke oven battery, the permittee shall demonstrate continuous compliance with the operation and maintenance requirements in 63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.</p> <p>B. For each coke oven battery with a capture system or control device applied to pushing emissions, the permittee shall demonstrate continuous compliance with the operation and maintenance requirements in 63.7300(c) by meeting the following three (3) requirements:</p> <ol style="list-style-type: none"> 1. Making monthly inspections of capture systems according to 63.7300(c)(1) and recording all information needed to document conformance with these requirements; 2. Performing preventative maintenance for each control device according to 63.7300(c)(2) and recording all information needed to document conformance with these requirements; and 3. Initiating and completing corrective action for a bag leak detection system alarm according to 63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed. <p>C. To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in 63.7331(a), the permittee shall inspect and maintain each baghouse according to the requirements in 63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If the permittee increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in 63.7331(a)(6), the permittee shall include a copy of the required written certification by a responsible official in the next semiannual compliance report.</p> <p>D. The permittee shall maintain a current copy of the operation and maintenance plans required in 63.7300(b) and (c) onsite and available for inspection upon request. The permittee shall keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.</p>	<p>40 CFR 63, 63.7300, 63.7331, 63.7335</p>
	<p>Section 5 – Continuous Emission Monitoring</p>	
15	<p><u>Continuous Compliance Requirements—Monitoring</u></p> <p>For each baghouse applied to pushing emissions from a coke oven battery, the permittee shall continuously monitor the relative change in particulate matter loading using a bag leak detection system according to requirements in 63.7331(a) of 40 CFR 63, and conduct inspections at their specified frequency according to the requirements as follows:</p> <ol style="list-style-type: none"> 1. Monitor the pressure drop across each baghouse cell each day to ensure the pressure drop is within the normal operating range; 2. Confirm that dust is being removed from the hoppers through weekly visual inspections or equivalent methods of assurance; 3. Check the compressed air supply for pulse-jet baghouses each day; 4. Monitor cleaning cycles; 5. Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means; 	<p>40 CFR 63, 63.7330, 63.7331 Chapter 18</p>

	<p>6. Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks;</p> <p>7. Inspect fans for wear;</p> <p>8. If the permittee elects the operating limit in 63.7290(b)(3)(i) of 40 CFR 63, for a capture system applied to pushing emissions, the permittee shall install, operate, and maintain a device to measure fan motor amperage. Refer to 63.7331(h) of 40 CFR 63, for this requirement; and</p> <p>9. If the permittee elects the operating limit in 63.7290(b)(3)(ii) of 40 CFR 63, for a capture system applied to pushing emissions, the permittee shall install, operate, and maintain a device to measure the daily average static pressure.</p> <p>10. For each baghouse applied to pushing emissions, the permittee shall install, operate, and maintain each bag leak detection system according to 63.7331 of 40 CFR 63.</p>	
16	<p><u>Push Control System, Inspections and Preventive Maintenance</u></p> <p>A. The permittee shall prepare and operate at all times according to a written operating and maintenance plan for each capture system and control device applied to pushing emissions. Each plan must address at a minimum the following elements:</p> <ol style="list-style-type: none"> 1. Monthly inspections of the equipment that are important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). These inspections must include observations of the physical appearance of the equipment (e.g., holes in ductwork or hoods, flow restrictions such as dents and soot bridging, and fan erosion); 2. Preventive maintenance for each control device, including a preventive maintenance schedule; and 3. Corrective action for all baghouses applied to pushing emissions, in the event a bag leak detection system alarm is triggered, the permittee must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. 	40 CFR 63, 63.7300 Chapter 18
	Section 6 – Recordkeeping and Reporting Requirements	
17	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <ol style="list-style-type: none"> A. The actual hours of operation; B. For each battery, the total quantity in tons of coal charged, coke produced. Specify amounts in tons for both furnace and foundry; and C. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations. 	1.5.15 18.5.3
18	<p><u>Subpart CCCCCC-- Reporting Requirements</u></p> <p>The permittee shall submit semiannual compliance reports each year unless notified otherwise.</p> <p>Each compliance report must provide information on compliance with the emissions limitations, work practice standards, and operation and maintenance requirements for all affected sources. Reporting shall be in accordance with 63.7341 of 40 CFR 63.</p>	40 CFR 63 Chapter 18

19	<p><u>Subpart CCCCC—Recordkeeping</u></p> <p>The permittee shall keep records in accordance with the following:</p> <ul style="list-style-type: none">A. A copy of each notification and report that the permittee submitted to comply with the subpart, including all documentation supporting any initial notification of compliance status that was submitted by the permittee, and according to the requirements in 63.10(b)(2)(xiv) of 40 <u>CFR</u> 63;B. The records in 63.6(c)(3)(iii) through (v) of 40 <u>CFR</u> 63, related to startup, shutdown, and malfunction;C. Records of performance tests, performance evaluations, and opacity observations as required in 63.10(b)(2)(viii) of 40 <u>CFR</u> 63;D. The permittee shall keep records in 63.6(b)(6) of 40 <u>CFR</u> 63, for visual observations; andE. The permittee shall keep records required in 63.7333 through 63.7335 of 40 <u>CFR</u> 63, to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies.	40 <u>CFR</u> 63, 63.7342 Chapter 18
20	<p><u>Subpart CCCCC: --Record Retention</u></p> <p>The permittee shall keep records in a form suitable and readily available for expeditious review, according to 63.10(b)(1) of 40 <u>CFR</u> 63.</p> <p>As specified in 63.10(b)(1) of 40 <u>CFR</u> 63, the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record.</p> <p>The permittee shall keep each record onsite for a least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record in accordance with 63.10(b)(1) of 40 <u>CFR</u> 63. The permittee can keep the records offsite for the remaining 3 years.</p>	40 <u>CFR</u> 63, 63.7343 Chapter 18

Emissions Unit Operating Permit Summary

Emissions Unit No.: 029

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: 238 MMBTU per Hour of Heat Input Capacity Steam Boiler, Babcock-Wilcox Model
F11-29-21'0"/17 LH-54 Designated Steam Generator No. 1

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:

Primary: Coke Oven Gas - 5,808.47 million cubic feet restricted
Secondary: Natural Gas

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	0.124 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Sulfur Dioxide (SO ₂)	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NO _x)	NA	NA
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner: Daily Recordkeeping of Fuel Combusted
Maximum Heat Input Restricted to 238 MMBTU/hour
Coke Oven Gas Restricted to 5,808.47 MMCF/year for Boilers 1, 3, & 4
Online
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring: Monthly Visible Emissions Observation of Boiler Stack
Daily Fuel Combustion Metering ($\pm 1\%$ accuracy)
Monthly Sampling & Testing of Fuel Sulfur Content (COG)
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: Permit Condition Nos. 3 & 9

Applicable Regulations: Sections 6.1.1 and 7.1.1
Parts 6.3 and 18.5
Chapters 2, 6, 7, 16 and 18

No.	Permit Conditions for Emissions Unit No. 029	Regulation
	Section 1 -- Applicability	
1	<p><u>Applicability</u> The Emissions Unit, 238 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Rules and Regulations. The emissions unit is subject to Chapter 18 of the Rules and Regulations.</p>	<p>6.1 6.3 7.1 Chapter 18</p>
	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
2	<p><u>Visible Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions (greater than 20% opacity) are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 48 hours of the observation. If this boiler is on reserve standby during the month that a visible emissions observation is required, the permittee shall document in its monthly records that a visible emissions observation was not performed and why it was not performed.</p>	<p>6.1.1 18.5</p>
3	<p><u>Particulate Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.124 pounds per million BTU of heat input (at 238 MMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.</p>	<p>6.3 18.5</p>
4	<p><u>Sulfur Oxides Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze the coke oven gas for sulfur content by weight. The permittee shall also determine the heat content of the coke oven gas sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.</p>	<p>7.1.1 18.5</p>

5	Combustion Fuel Restriction The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount ($\pm 1\%$ accuracy) of each fuel combusted each calendar day.	18.5
6	Heat Input Restriction The Emissions Unit permitted herein shall not exceed 238,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts, within the fuel limits as shown in permit condition 5, of this emissions unit for fuel combusted and time operated each calendar day.	18.5
7	New Source Review Combustion Fuel Restriction The permittee shall not cause or allow the Emissions Unit No. 029 (Steam Generator No. 1) permitted herein in operation with Emissions Units 31 & 32 to exceed 5808.47 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations.	18.5
	Section 3 – Compliance and Performance Test Methods and Procedures	Regulation
8	Test Methods and Procedures The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7C: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H ₂ S, hydrogen sulfide) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	40 CFR 60
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 – Recordkeeping and Reporting Requirements	
9	Department Required Annual Report Requirement The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation. The record of operational hours shall differentiate combusting coke oven gas and natural gas. B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations. C. The quantity of coke oven gas and natural gas burned in million cubic feet, and D. The average monthly total sulfur content and heat content of the coke oven gas.	1.5.15 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 031

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: 238 MMBTU per Hour of Heat Input Capacity Steam Boiler, Babcock-Wilcox Model
FH-29-2110"/17 LH-54 Designated Steam Generator No. 3

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:

Primary: Coke Oven Gas – 5,808.47 million cubic feet restricted

Secondary: Natural Gas

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	0.124 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Sulfur Dioxide (SO ₂)	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NO _x)	NA	NA
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner: Daily Recordkeeping of Fuel Combusted
Maximum Heat Input Restricted to 238 MMBTU/hour
Coke Oven Gas Restricted to 5,808.47 MMCF/year for Boilers 1, 3, & 4
Online
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring: Monthly Visible Emissions Observation of Boiler Stack
Daily Fuel Combustion Metering (+ 1 % accuracy)
Monthly Sampling & Testing of Fuel Sulfur Content (COG)
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: Permit Condition Nos. 3 & 9

Applicable Regulations: Sections 6.1.1 and 7.1.1
Parts 6.3 and 18.5
Chapters 2, 6, 7, 16 and 18

No.	Permit Conditions for Emissions Unit No. 031	Regulation
	Section 1 – Applicability	
1	<p><u>Applicability</u></p> <p>The Emissions Unit, 238 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Rules and Regulations. The emissions unit is subject to Chapter 18 of the Rules and Regulations.</p>	<p>6.1 6.3 7.1 Chapter 18</p>
	Section 2 – Emission, Equipment or Production Requirements and Limitations	
2	<p><u>Visible Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions (greater than 20% opacity) are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 48 hours of the observation. If this boiler is on reserve standby during the month that a visible emissions observation is required, the permittee shall document in its monthly records that a visible emissions observation was not performed and why it was not performed.</p>	<p>6.1.1 18.5</p>
3	<p><u>Particulate Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.124 pounds per million BTU of heat input (at 238 MMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.</p>	<p>6.3 18.5</p>
4	<p><u>Sulfur Oxides Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze the coke oven gas for sulfur content by weight. The permittee shall also determine the heat content of the coke oven gas sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.</p>	<p>7.1.1 18.5</p>

5	<u>Combustion Fuel Restriction</u> The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount (+ 1 % accuracy) of each fuel combusted each calendar day.	18.5
6	<u>Heat Input Restriction</u> The Emissions Unit permitted herein shall not exceed 238,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts, within the fuel limits as shown in permit condition 5, of this emissions unit for fuel combusted and time operated each calendar day.	18.5
7	<u>New Source Review Combustion Fuel Restriction</u> The permittee shall not cause or allow the Emissions Unit No. 031 (Steam Generator No. 1) permitted herein in operation with Emissions Units 29 & 32 to exceed 5808.47 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations.	18.5
Section 3 – Compliance and Performance Test Methods and Procedures		
8	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7C: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H ₂ S, hydrogen sulfide) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	40 CFR 60
Section 4 – Continuous Emission Monitoring – Not Applicable		
Section 5 -- Recordkeeping and Reporting Requirements		
9	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation; The record of operational hours shall differentiate combusting coke oven gas and natural gas. B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; C. The quantity of coke oven gas and natural gas burned in million cubic feet; and D. The average monthly total sulfur content and heat content of the coke oven gas.	1.5.15 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.: 032

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: 200 MMBTU per Hour of Heat Input Capacity Steam Boiler, Babcock-Wilcox Model FH-29-21'0"/17 LH-54. Subject to NSPS Requirements under Subpart Db of 40 CFR 60.40b Designated Steam Generator No. 4

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:

Primary: Coke Oven Gas – 5,808.47 million cubic feet Restricted

Secondary: Natural Gas

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Opacity	20 % Opacity	NSPS – Subpart Db
Particulate Matter (PM)	25.2 lbs/hour	Section 6.3.1
Sulfur Dioxide (SO ₂)	1.2 lbs/MMBTU of Heat Input	NSPS – Subpart Db
Nitrogen Oxides (NO _x)	0.5 lbs/MMBTU of Heat Input	NSPS – Subpart Db
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: CEMS

Continuous Compliance Determiner:
Daily Recordkeeping of Fuels Combusted
Maximum Heat Input Restricted to 200 MMBTU/hour
Coke Oven Gas Restricted to 5,808.47 MMCF/year
Coke Oven Gas Restricted to 5,808.47 MMCF/year for Boilers 1, 3, & 4
Online
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring:
Monthly Visible Emissions Observation of Boiler Stack
Daily Fuel Combustion Metering (± 1 % accuracy)
Monthly Sampling & Testing of Fuel Sulfur Content (COG)
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: See Section 5, and permit condition 3

Applicable Regulations:
Sections 6.1.1 and 7.1.1
Parts 6.3 and 18.5
Chapters 2, 6, 7, 13, 16 and 18
40 CFR 60.40b

No	Permit Conditions for Emissions Unit No. 032	Regulation
	Section 1 – Applicability	
1	<p><u>Applicability</u></p> <p>The Emissions Unit, 200 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to a particulate emission rate under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Rules and Regulations. The emissions unit is subject to Subpart Db of 40 CFR 60.40b. The emissions unit is subject to Chapter 2 new source review restrictions that restrict the amount of COG burned to avoid PSD applicability due to SOx emissions. If this Major Source Operating Permit expires (revoked or rescinded), the new source review permit limitations shall remain in effect at all times.</p>	<p>6.1 6.3 7.1 40 CFR 60.40b</p>
	Section 2 – Emission, Equipment or Production Requirements and Limitations	
2	<p><u>Visible Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions (greater than 20% opacity) are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 48 hours of the observation. If this boiler is on reserve standby during the month that a visible emissions observation is required, the permittee shall document in its monthly records that a visible emissions observation was not performed and why it was not performed.</p>	<p>6.1.1 18.5</p>
3	<p><u>New Source Review Particulate Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to a particulate emission rate under Part 6.3 of the Rules and Regulations. The source permitted herein shall not exceed the mass particulate emissions rate of 25.2 pounds per hour. The permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.</p>	<p>6.3 18.5</p>
4	<p><u>Sulfur Oxides Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.2 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze them for sulfur content by weight. The permittee shall also determine the heat content of each fuel sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.</p>	<p>7.1 18.5</p>

	Section 2 -- Emission, Equipment or Production Requirements and Limitations	
5	<u>NSPS Requirements</u> The Emissions Unit permitted herein is subject the New Source Performance Standards under 40 CFR 60.40b, Subpart Db.	13.2.2(b) 18.5 40 CFR 60.40b
6	<u>Subpart Db. Standard for Sulfur Dioxide (SO₂) – Emission Limit</u> The permittee shall not discharge into the atmosphere any gases that contain SO ₂ in excess of 1.2 lb/MMBtu heat input.	60.42b(d)(4)
7	<u>Subpart Db – SO₂ -Startup/Shutdown/Malfunction</u> The SO ₂ emissions standard in 60.42b shall apply at all times, including periods of startup, shutdown or malfunction. The subpart allows for 30 operating days per calendar year for SO ₂ control system maintenance. Steam Generator No. 4 does not have a sulfur dioxide control system. Therefore, this exemption or exception is not allowed.	60.45b(a)
8	<u>Subpart Db-NO_x - Emission Limit</u> The permittee shall not discharge into the atmosphere any gases that contain NO _x in excess of 0.50 lbs NO _x /MMBtu heat input.	60.44b(a)(3)(vi)
9	<u>Subpart Db-NO_x - Startup, Shutdown, Malfunction</u> The permittee's NO _x emissions standard applies at all time including periods of startup, shutdown, and malfunctions.	60.44b(h)
10	<u>Subpart Db-Opacity Limit</u> No owner or operator that combust coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20% opacity(6-minute average), except for one 6-minute period per hour of not more than 27% opacity.	60.43b(f)
11	<u>Subpart Db-Opacity, -Startup, Shutdown, Malfunction</u> The opacity limits apply at all times except during periods of startup, shutdown or malfunction.	60.43b(g)
12	<u>New Source Review Heat Input Restriction</u> The Emissions Unit permitted herein shall not exceed 200,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts, within the fuel limit as shown in permit condition 13, of this emissions unit for fuel combusted and time operated each calendar day.	2.1.3 18.5 40 CFR 60.40b
13	<u>New Source Review Combustion Fuel Restriction</u> The permittee shall not cause or allow the Emissions Unit No. 032 (Steam Generator No. 4) permitted herein in operation with any of the 2 remaining boilers to exceed 5,808.47 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations.	2.1.3 18.5 40 CFR 60.40b
14	<u>New Source Review Combustion Fuel Restriction</u> The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount of each fuel combusted each calendar day. The instrumentation for recording fuel usage shall be within ± 1% accuracy.	2.1.3 18.5 40 CFR 60.40b
	Section 3 -- Compliance and Performance Test Methods and Procedures	Regulation
15	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7C: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions	2.1.3 40 CFR 60

	Tutwiler Method: Sulfur Content (H₂S) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	
16	Subpart Db-SO₂, Initial Performance Testing The initial performance test under the subpart shall be conducted over 30 consecutive operating days of the steam generating unit. The first operating day included in the performance test shall be scheduled within 30 days after achieving the maximum production rate. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.	60.45b(c)(1) 60.45b(f)
17	Subpart Db-SO₂, Testing Methods & Formulas The SO ₂ fuel based limit under 60.42b shall be verified by procedures in Method 19 of Appendix A-7 of 40 CFR 60, and under 60.45b. The hourly SO ₂ emission rate and the 30-day average emission rate are obtained from the continuous emission monitoring system (CEMS) under 60.47b.	60.45b(c)(3), (4), & (5)
18	Subpart Db-SO₂, Daily Performance Testing A separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate is calculated as describe in 60.45b(g).	60.45b(g)
19	Subpart Db-SO₂, Daily Performance Testing All valid emissions data shall be included, including data collected during periods of startup, shutdown, and malfunctions.	60.45b(h)
20	Subpart Db-NO_x, Initial Performance Testing For the initial performance test, NO _x from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO _x emission standards under 60.44b.	60.46b(c)(1)
21	Subpart Db-NO_x, Testing Methods To determine compliance with the emissions limits for NO _x , the permittee shall conduct the performance test as required under 60.8 using the continuous system for monitoring NO _x under 60.48b.	60.46b(c)
22	Subpart Db-NO_x, Daily Performance Testing To determine compliance with the NO _x emissions standard, the permittee shall conduct a separate performance test at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate is calculated as the average of all hourly NO _x emissions data for the proceeding 30 steam generating unit operating days.	60.46b(e)(2)
23	Subpart Db-Opacity, -Testing Methods and Formulas To determine compliance with the opacity limits, the permittee shall conduct an initial performance test and subsequent performance tests as requested by the Administrator using procedures and reference methods under 60.46b	60.46b
Section 4 – Continuous Emission Monitoring		
24	Subpart Db-SO₂, CEMS Requirements The permittee shall install, calibrate, maintain, and operate a CEMS for SO ₂ , and either O ₂ or CO ₂ and record the hourly/daily output.	60.47b(a)
25	Subpart Db-SO₂, Installation, Evaluation, and Operation of CEMS The 1-hour average SO ₂ emission rates as measured by the CEMS required by 60.47b and 60.13(h) shall be expressed in lb/MMBtu heat input and is used to calculate the average emission rate under 60.42(b). The hourly average shall be calculated according to 60.13(h)(2). The procedures under 60.13 shall be followed for the installation, evaluation, and operation of the CEMS.	60.47b(a) & (d)

26	<p><u>Subpart Db-SO₂, Minimum CEMS Data Requirement</u></p> <p>The permittee shall obtain emission data for at least 75% of the operating hours in at least 22 out of 30 successive boiler operating days; if a single monitoring system is inadequate, the permittee must use additional methods as describe in 60.47b(c).</p> <p>Each 1-hour average SO₂ emission rate must be calculated according to 60.13(b)(2) and shall be based on 30 or more minutes of steam generating unit operation (hourly emission rate is not calculated if less than 30 minutes of generation takes place in 1 hour).</p>	60.47b(c) 60.47b(d)
27	<p><u>Subpart Db-SO₂, CEMS Data Accuracy Assessment Procedures</u></p> <p>Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure I of appendix F of Part 60.</p>	60.47b
28	<p><u>Subpart Db-SO₂, Alternate to CEMS Requirement</u></p> <p>A. The permittee shall collect coke oven gas samples in as-fired condition at the inlet to the steam generating unit and analyze for sulfur and heat content according to Method 19 of Appendix A-7 of 40 CFR 60.</p> <p>B. Site specific fuel analysis plan is required to be approved by the Administrator; minimum initial testing frequency is weekly but monthly or quarterly may be approved on petition; analysis must include the ratio of different fuels used in the mixture, potential sulfur emission rate (based on heat input), method used to determine sulfur content for each constituent (natural gas may use information on receipt).</p>	60.47b(b) 60.49b(r)(2)
29	<p><u>Subpart Db-NO_x, CEMS Requirement</u></p> <p>The permittee shall install, calibrate, maintain and operate CEMS for NO_x and either O₂ or CO₂; record the output of the system. If the permittee has installed a NO_x emission rate CEMS to meet part 75, the permittee shall follow the alternate procedures under part 75.</p>	60.48b(b)
30	<p><u>Subpart Db-NO_x, Installation, Evaluation, and Operation of CEMS</u></p> <p>The permittee's steam generating unit shall follow the monitoring procedures under 60.13 regarding the installation, evaluation, and operations of the continuous monitoring system.</p>	60.48b(e)
31	<p><u>Subpart Db-NO_x, Minimum CEMS Data Requirements</u></p> <p>A. The CEMS required under 60.48b shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.</p> <p>B. Each 1-hour average NO_x emission rate must be calculated according to 60.13(b)(2) and expressed as lbs/MMBtu.</p> <p>C. Obtain emission data for at least 75% of the operating hours in at least 22 out of 30 successive boiler operating days; if a single CEMS is inadequate or in case of breakdown, additional methods must be used.</p>	60.48b(c) 60.48b(d) 60.48b(f)
32	<p><u>Subpart Db-NO_x, Alternate to CEMS Requirement</u></p> <p>The permittee's steam generating unit does not have a capacity factor restriction. The permittee must declares it intent to be restricted to a particular capacity factor for the consideration of an applied capacity factor. The permittee has not requested one. When a facility does not have a declared or applied capacity factor; then for any fuel the capacity factor is unrestricted (i.e. 100%). Therefore, if the boiler maintains a capacity factor greater than 10% for that fuel, then the subpart allows for and alternate method through parametric monitoring or predictive monitoring. In order to demonstrate compliance with parametric monitoring, boiler No. 4 which is subject to the NO_x standard under 60.44b, will be required to submit a request to the Administrator for approval of a plan that identifies the operating conditions to be monitored under 60.48b(g)(2), and the records to be maintained under 60.49b(j). Otherwise a CEMS for NO_x is required.</p>	60.48b(g)

33	<p><u>Subpart Db-Opacity, CEMS Requirement</u></p> <p>The permittee shall install, calibrate, maintain, and operate a CEMS for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.</p>	60.48b(a)
34	<p><u>Subpart Db-Opacity, CEMS Exemption</u></p> <p>The owner or operator meeting the following condition of 60.48b is not required to install or operate a CEMS for opacity if:</p> <p>The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operated according to a written site-specific monitoring plan approved by the appropriate delegated permitted authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.</p>	60.48b(j)(6)
Section 5 – Recordkeeping and Reporting Requirements		
35	<p><u>Subpart Db-SO₂, Reports/Records</u></p> <p>A. The permittee of each affected facility subject to SO₂ emission limits under 60.42b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specification in appendix B.</p> <p>B. The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by 60.7. This notification shall include:</p> <ol style="list-style-type: none"> 1. The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility; 2. If applicable, a copy of any federally enforceable requirements that limits the annual capacity factor for any fuel mixture; and 3. The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired. <p>C. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor, if applicable.</p> <p>D. The owner or operator of any affected facility subject to the SO₂ standards under 60.42b shall submit reports to the Administrator of compliance and performance test as follows:</p> <ol style="list-style-type: none"> 1. Calendar dates covered in the reporting period; 2. Each 30-day average SO₂ emission rate (lb/MMBtu) measured during the reporting period, ending with the last 30-day period; reason for noncompliance with the emission standards; and a description of corrective actions taken; 3. Identification of the steam generating unit operating days that coal or oil was combusted and for which SO₂ diluent (O₂ or CO₂) data have not been obtained by an approved method for at least 75% of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken; 4. Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal was not combusted in the steam generating unit; 5. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted; 6. Identification of times when hourly averages have been obtained based on manual sampling methods; 7. Identification of the times when the pollutant concentration exceeded full span of the CEMS; 8. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; 	60.49b

	<p>and</p> <p>9. Results of daily CEMS drift tests and quarterly accuracy assessments as required by appendix F, Procedure 1 of this part.</p>	
36	<p><u>Subpart Db-NOx, Reports/Records</u></p> <p>The permittee subject to the NOx standard under 60.44b shall maintain records of the following information for each steam generating unit operating day:</p> <ul style="list-style-type: none"> A. Calendar date; B. The average hourly NOx emission rates (expressed as NO₂, lb/MMBtu heat input) measured or predicted; C. The 30-day average NOx emission rates (expressed as NO₂, lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days; D. Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rate are in excess of the NOx emissions standards under 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken; E. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; F. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reason for excluding data; G. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted; H. Identification of the times when the pollutant concentration exceeded full span of the CEMS; I. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with performance Specification 2 or 3; and J. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of this part. <p>The permittee is required to submit excess emission reports for any excess emissions that occurred during the reporting period. For the purposes of 60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NOx emission rate, as determined under 60.46b(c), that exceeds the applicable emission limits in 60.44b. Reports of NOx emissions are to be submitted to the Administrator.</p>	60.49b
37	<p><u>Subpart Db-Opacity, Reporting and Recordkeeping</u></p> <p>The permittee's steam generating unit is subject to the opacity standard under 60.43b. Accordingly the owner or operator shall maintain records of opacity.</p>	60.49b(f)
38	<p><u>Subpart Db-Opacity, Excess Emissions Report</u></p> <p>Any affected facility subject to the opacity standards under 60.43b(f) or to the operating parameter monitoring requirements under 60.13(i)(1) is required to submit excess emission reports for any excess emissions that occurred during the reporting period.</p>	60.43b(f) 60.13(i)(1)
39	<p><u>Subpart Db-Opacity, Quarterly Reporting</u></p> <p>The owner or operator of an affected facility may submit electronic quarterly reports in lieu of submitting the written reports required under paragraph (h), (i), (j), (k) or (l) under 60.49b.</p>	60.49b

40	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The actual hours of operation. The record of operational hours shall differentiate combusting coke oven gas and natural gas;</p> <p>B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations;</p> <p>C. The quantity of coke oven gas and natural gas burned in million cubic feet; and</p> <p>D. The average monthly total sulfur content by weight and heat content of the coke oven gas.</p>	1.5.15 18.5.3
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Emissions Unit Operating Permit Summary

Emissions Unit No.: 034

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: 2 Primary Crushers With Wet Suppression

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:

Primary: N/A

Secondary: N/A

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	36.00 lb/hr	Section 6.4.1

Pollution Control Device: Wet Suppression

Continuous Emission Monitors: None

Continuous Compliance Determiner: Work Practice Plan

Title V Monitoring: Monthly

EPA Reference Test Methods: 9 of 40 CFR 60, Appendix A

Reporting Requirements: Annual

Applicable Regulations: Section 1.5.15; Part 6.1; Section 6.1.1; Part 6.2; Part 18.5
Section 18.5.3; Chapter 18. 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 034	Regulation
	Section 1 – Applicability	
1	The emissions unit is subject to Part 6.1, entitled “Visible Emissions,” of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.2, entitled “Fugitive Dust” of the Rules and Regulations.	6.1 6.2 Chapter 18
	Section 2 – Emission, Equipment or Production Requirements and Limitations	
2	<u>Visible Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, “Visible Emissions Restrictions for Stationary Sources,” of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 <u>CFR</u> 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 1 calendar month of the observation.	6.1.1 18.5
	Section 3 – Compliance and Performance Test Methods and Procedures	
3	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 <u>CFR</u> 60, Appendix A, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares	40 <u>CFR</u> 60
	Section 4 – Continuous Emission Monitoring – Not Applicable	
	Section 5 – Recordkeeping and Reporting Requirements	
4	<u>Fugitive Emissions Restriction</u> The Emissions Unit No. 034 permitted herein is subject to and shall comply with the requirements under Part 6.2 of the Rules and Regulations. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following: A. Use of a wet suppression system for Emission Unit No. 034. The operation of controls with water is not required below 38 degrees Fahrenheit. A log book of inactive days due to weather shall be maintained by the permittee and made available for review by the Department. When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Health Officer may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open	6.2 18.5
5	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an	1.5.15 18.5.3

	<p>annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The actual hours of operation of the primary crusher;</p> <p>B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and</p> <p>C. The quantity of material processed through the crushers annually.</p>	
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Emissions Unit Operating Permit Summary

Emissions Unit No.: 035

Company: ERP Compliant Coke Plant/Utilities/Wastewater

Source Description: Primary Wheel Wash With A Secondary Wheel Wash As Backup

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:

Primary: N/A

Secondary: N/A

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	None	N/A

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner: None

Title V Monitoring: None

EPA Reference Test Methods: Methods 9 and 22 of 40 CFR 60, Appendix A

Reporting Requirements: Annual

Applicable Regulations: Section 1.5.15; Part 6.1;Section 6.1.1; Part 6.2; Part 18.5
Section 18.5.3; Chapter 18, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 035	Regulation
	Section 1 – Applicability	
1	The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.2, entitled "Fugitive Dust" of the Rules and Regulations. The Emissions Unit No. 035 permitted herein is subject to and shall comply with the requirements under Part 6.2 of the Rules and Regulations. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.	6.1 6.2 Chapter 18
	Section 2 – Emission, Equipment or Production Requirements and Limitations	
2	<u>Visible Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60.	6.1.1 18.5
3	<u>Maintenance and Malfunctioning of Equipment: Reporting</u> In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shutdown, unless such shutdown shall be reported to the Department at least 24 hours prior to the planned shutdown. The following shall be reported only if both wheel washers are to be placed out of service: 1. Identification of the specific facility taken out of service as well as its location and permit number; 2. The expected length of time that the air pollution control equipment will be out of service; and 3. The nature and quantity of emissions of air contaminants likely to occur during the shutdown period.	1.12 Chapter 18
4	<u>Malfunction: Reporting</u> In the event that any emission source, air pollution control equipment or related facility fails or break down in such a manner as to cause the emission of air contaminants in violation of the Rules and Regulations, the person responsible for such source, equipment or facility shall notify the Department within 24 hours of such failure or breakdown and provide a statement giving all pertinent facts, including the estimate duration of the breakdown. The Department shall be notified when the condition causing the failure or breakdown has been corrected and such source, equipment or facility is again in operation.	1.12 Chapter 18
5	<u>Acceptable Times That The Wheel Wash is Out of Service</u> The permittee is not required to operate either wheel wash if the highest measured ambient temperature remains less than 38 degrees Fahrenheit throughout that day (24-hour period). When the measured ambient temperature rises to 38 degrees Fahrenheit or more during the day, the permittee shall resume daily wheel washing. The following records are to be maintained at the permittee's facility. Records are only required to be kept during the calendar year when the wheel wash is down. 1. The permittee shall continuously record the ambient temperature on days that the wheel wash is out of service due to ambient conditions; and 2. A log book of acceptable out of service times is to be maintained and available	Chapter 18

	for review by the Department.	
	Section 3 -- Compliance and Performance Test Methods and Procedures	
6	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares	2.1.3 40 CFR 60
	Section 4 -- Continuous Emission Monitoring -- Not Applicable	
	Section 5 -- Recordkeeping and Reporting Requirements	
7	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation of the wheel wash; B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and C. The number of days the wheel wash was not available due to ambient conditions.	1.5.15 18.5.3

Emissions Unit Operating Permit Summary

Emissions Unit No.:	036
Company:	ERP Compliant Coke Plant/Utilities/Wastewater
Source Description:	5 Emergency Generators (2 Diesel and 3 Natural Gas)
Operating Schedule:	Emergency use
Pollution Control Device:	None
Continuous Emission Monitors:	None
Continuous Compliance Determiner:	Hours Operated per year
Reporting Requirements:	Permit Condition Nos. 3, 4, 12, and 13
Applicable Regulations:	Sections 1.5.15 and 18.5.3, 40 <u>CFR</u> 60 and 40 <u>CFR</u> 63

No.	Permit Conditions for Emission Unit 036 Emergency Generators	Regulations																														
1	<p><u>Applicability</u> Emission unit 036 shall include the stationary internal combustion engines (generators) listed in the table below. These 5 generators are subject to the NESIAP 40 <u>CFR</u> 63, Subpart 7.777, and to the General Provisions of 40 <u>CFR</u> 63, Subpart A as provided by Table 8 of Subpart 7.777. The Holder/Stack generator is also subject to the NSPS 40 <u>CFR</u> 60, Subpart JJJ and to the General Provisions of 40 <u>CFR</u> 60, Subpart A as provided by Table 3 of Subpart JJJ.</p> <table><tr><th>Location</th><th>Capacity (hp)</th><th>Fuel</th><th>Year of Construction or Initial Installation / Model Year</th><th>Applicable Regulations (compliance date)</th></tr><tr><td>Ovens</td><td>2,172</td><td>Diesel</td><td>- / 2001</td><td>40 <u>CFR</u> 63, Subpart 7.777 (6/15/2007)</td></tr><tr><td>Boiler House</td><td>1,616</td><td>Diesel</td><td>1999 / 1999</td><td>40 <u>CFR</u> 63, Subpart 7.777 (6/15/2007)</td></tr><tr><td>By-Products</td><td>27</td><td>Natural Gas</td><td>1991 / -</td><td>40 <u>CFR</u> 63, Subpart 7.777 (10/19/2013)</td></tr><tr><td>By-Products (white)</td><td>9</td><td>Natural Gas</td><td>1992 / -</td><td>40 <u>CFR</u> 63, Subpart 7.777 (10/19/2013)</td></tr><tr><td>Holder/Stack</td><td>13</td><td>Natural Gas</td><td>2013 / 2013</td><td>40 <u>CFR</u> 60, Subpart JJJ & 40 <u>CFR</u> 63, Subpart 7.777 (startup)</td></tr></table>	Location	Capacity (hp)	Fuel	Year of Construction or Initial Installation / Model Year	Applicable Regulations (compliance date)	Ovens	2,172	Diesel	- / 2001	40 <u>CFR</u> 63, Subpart 7.777 (6/15/2007)	Boiler House	1,616	Diesel	1999 / 1999	40 <u>CFR</u> 63, Subpart 7.777 (6/15/2007)	By-Products	27	Natural Gas	1991 / -	40 <u>CFR</u> 63, Subpart 7.777 (10/19/2013)	By-Products (white)	9	Natural Gas	1992 / -	40 <u>CFR</u> 63, Subpart 7.777 (10/19/2013)	Holder/Stack	13	Natural Gas	2013 / 2013	40 <u>CFR</u> 60, Subpart JJJ & 40 <u>CFR</u> 63, Subpart 7.777 (startup)	40 <u>CFR</u> 63, Subpart 7.777, 63.6590(a)(1) 63.6590(b)(3)(iv) 63.6595(a)(1)
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2	<p><u>Restrictions on Non-Emergency Use</u> The permittee shall operate each emergency engine according to the following limits:</p> <p>A. There is no time limit on the use of emergency stationary RICE in emergency situations.</p> <p>B. Up to 100 hours per calendar year is allowed for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine and during periods where there is a deviation of voltage or frequency of 5% or greater below standard voltage or frequency.</p> <p>C. Up to 50 hours per calendar year is allowed in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.</p> <p>If this condition is violated, the engine will no longer be an emergency engine and will be required to meet the applicable requirements for non-emergency engines.</p>	63.6640(f) 60.4243(d)																														
3	<p><u>Reporting of Certain Non-Emergency Use</u> If the permittee enrolls any emergency engine in a demand response program with an availability obligation of more than 15 hours per year or operates the engine more than 15 hours per year during periods where there is a deviation of voltage or frequency of 5% or greater below standard voltage or frequency, the permittee shall keep records of the hours operated for these purposes beginning in calendar year 2015 and submit an annual report according to the following requirements by March 15 of the following calendar year:</p> <table><tr><th>Requirements</th><th>For Engines Subject to</th></tr><tr><td>40 <u>CFR</u> 63.6650(h) and Table 7</td><td>40 <u>CFR</u> 63, Subpart 7.777</td></tr><tr><td>40 <u>CFR</u> 60.4245(e)</td><td>40 <u>CFR</u> 60, Subpart JJJ</td></tr></table>	Requirements	For Engines Subject to	40 <u>CFR</u> 63.6650(h) and Table 7	40 <u>CFR</u> 63, Subpart 7.777	40 <u>CFR</u> 60.4245(e)	40 <u>CFR</u> 60, Subpart JJJ	63.6650(h)(2) 60.4245(e)																								
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4	<p>Department Required Annual Report Requirement The permittee shall submit by February 15th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The actual hours of operation of the emergency generator; and B. The actual emissions of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations</p>	<p>1.5.15 18.5.3</p>
Requirements for the Ovens-Emergency Generator		
5	<p>Subpart ZZZZ The permittee does not have to meet the requirements of 40 CFR 63, Subparts ZZZZ or A, except as set forth in Condition 3 above.</p>	<p>63.6590(b)(3)(iii) 63.6600(c) 63.6640(e) 63.6645(a)(5) 63.6665</p>
Requirements for the Boiler House Emergency Generator		
6	<p>Subpart ZZZZ The permittee does not have to meet the requirements of 40 CFR 63, Subparts ZZZZ or A, except as set forth in Condition 3 above.</p>	<p>63.6590(b)(3)(iii) 63.6600(c) 63.6640(e) 63.6645(a)(5) 63.6665</p>
Requirements for By-Products Emergency Generators		
7	<p>Operation and Maintenance At all times the permittee shall 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. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup will apply.</p>	<p>63.6605(b) 63.6625(h) Table 2c</p>
8	<p>Work and Management Practices – Compliance Demonstration and Recordkeeping The permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate compliance with these work and management practices.</p>	<p>63.6625(e)(1) 63.6640(a) Subpart ZZZZ Table 6 63.6655(e)(1)</p>
9	<p>Non-Resettable Hour Meter and Recordkeeping for Operation The permittee shall install and maintain a non-resettable hour meter. The permittee shall keep records of the hours of operation as measured by the non-resettable hour meter. The permittee shall document how many hours were spent for emergency use, including what classified the operation as emergency, and how many hours are spent for non-emergency operation.</p>	<p>63.6625(f) 63.6655(f)(1)</p>
10	<p>Required Maintenance Intervals The permittee shall perform preventive maintenance on each emergency generator as follows: A. Change oil and filter every 500 hours of operation or annually, whichever comes first; B. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and C. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</p>	<p>63.6602 Subpart ZZZZ, Table 2c</p>

11	<u>Oil Analysis Program</u> The permittee may utilize an oil analysis program as described in 40 <u>CFR</u> 63.6625(j) to extend the time between oil changes if the oil analysis program is conducted at the same interval as required oil changes and is included in the maintenance plan for the engine. This option does not affect requirements to inspect and replace other equipment.	Subpart ZZZZ, Table 2c 63.6625(j)
12	<u>Recordkeeping and Reporting</u> For each generator, keep the following records: A. The hours of operation for each engine; B. Maintenance conducted on the engine and after-treatment control device (if any); C. The occurrence and duration of each malfunction of operation, including the actions taken to minimize emissions in accordance with 40 <u>CFR</u> 63.6605(b) and the corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; and D. If the permittee enrolls either of both of these engines in a demand response program with an availability obligation of more than 15 hours per year or operates the engines more than 15 hours per year during periods where there is a deviation of voltage or frequency of 5% or greater below standard voltage or frequency, the permittee shall keep records of the hours operated for these purposes beginning in calendar year 2015 and submit an annual report as required by 40 <u>CFR</u> 63.6650(h) and Table 7 by March 15 of the following calendar year.	18.5.3(b) 63.6655(e) 63.6655(a) 63.6655(h)
13	<u>Reporting of Deviations</u> Deviations from the requirements of Subpart ZZZZ and from the applicable general NESHAP requirements as set out in Table 8 of Subpart ZZZZ shall be reported in the Title V semi-annual monitoring report, including the information listed in 40 <u>CFR</u> 63.6650(d).	63.6640 63.6650(f)
Requirements for Holder/Stack Generator		
14	<u>Subpart ZZZZ</u> The permittee shall meet the requirements of Subpart ZZZZ by meeting the requirements for the NSPS 40 <u>CFR</u> 60, Subpart JJJ.	63.6590(c)(2)
15	<u>Subpart JJJJ Manufacturer's Certification</u> The permittee shall purchase an engine certified to meet the emission standards and other requirements for new nonroad SI engines at 40 <u>CFR</u> 1054. Documentation from the manufacturer that the engine is certified to meet the emission standards and information required in 40 <u>CFR</u> 1054 and 1060 shall be obtained and kept as a record.	60.4243(a) 60.4233(a) 60.4231(a) 60.4245(a)(3)
16	<u>Compliance and Recordkeeping Requirements</u> The permittee shall comply with Subpart JJJJ using one of the following alternatives: A. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, and: 1. Keep records of conducted maintenance; 2. Meet the applicable requirements of 40 <u>CFR</u> 1068, Subparts A through D; and 3. Adjust engine settings only according to and consistent with the manufacturer's instructions; or B. If the engine and control device are not operated and maintained according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and compliance shall be demonstrated as follows: 1. Keep a maintenance plan and records of conducted maintenance; 2. Documentation that the engine meets the emission standards; and 3. To the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. No performance testing is required.	60.4243(a) 60.4245(a)(4) 60.4245(a)(2)