AIR QUALITY PROGRAM
301 39th Street, Bldg. #7
Pittsburgh, PA 15201-1811

INSTALLATION PERMIT

Issued To: **United States Steel Corporation**
Mon Valley Works
Clairton Plant

ACHD Permit#: 0052-I021

Date of Issuance: ------

Expiration Date: (See Section III.12)

Facility: **Clairton Coke Works**
400 State Street
Clairton, PA 15025-1855

Issued By: _____
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Section Chief, Engineering

Prepared By: _____
Reihaneh Etemadi
Air Quality Engineer

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AMENDMENTS:

DATE SECTION(S)

I. CONTACT INFORMATION

Facility Location:
United States Steel Corporation
Mon Valley Works, Clairton Plant
400 State Street
Clairton, PA 15025-1855

Permittee/Owner:
United States Steel Corporation
Mon Valley Works, Clairton Plant
400 State Street
Clairton, PA 15025-1855

Permittee/Operator: (if not Owner)
Same as above

Responsible Official: Kurt Barshick
Title: General Manager – Mon Valley Works
Company: United States Steel Corporation
Mon Valley Works
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Clairton, PA 15025-1855
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Facility Contact: Mike Dzurinko
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Air Quality Program
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EPA Contact:
Enforcement Programs Section (3AP12)
USEPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

II. FACILITY DESCRIPTION

FACILITY DESCRIPTION

U.S. Steel Clairton Works is the largest by-products coke plant in North America. Clairton Works operates 10 coke batteries and produces approximately 13,000 tons of coke per day from the destructive distillation (carbonization) of more than 18,000 tons of coal. During the carbonization process, approximately 225 million cubic feet of coke oven gas are produced. The volatile products of coal contained in the coke oven gas are recovered in the by-products plant. In addition to the coke oven gas, daily production of these by-products include 145,000 gallons of crude coal tar, 55,000 gallons of light oil, 35 tons of elemental sulfur, and 50 tons of anhydrous ammonia.

Clairton Works is located approximately 20 miles south of Pittsburgh on 392 acres along 3.3 miles of the west bank of the Monongahela River. The plant was built by St Clair Steel Company in 1901 and bought by U.S. Steel in 1904. The first coke batteries were built in 1918. The coke produced is used in the blast furnace operations in the production of molten iron for steel making.

The Clairton Plant is an existing major source of nitrogen oxides (NO_X), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter (PM), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), hazardous air pollutants (HAPs), and volatile organic compounds (VOCs), as defined in §2101.20 of Article XXI.

INSTALLATION DESCRIPTION

This installation involves replacing the 2nd Unit PEC Baghouse System (comprised of Title V Permit Source IDs P052 and P053) which controls pushing emissions from existing Batteries 13, 14 and 15 and Batteries 19 and 20. The existing Batteries 13, 14, and 15 consist of 61 ovens per battery for a total of 183 ovens. Batteries 19 and 20 consist of 87 ovens per Battery for a total of 174 ovens. The current system installed in 1990, consists of ten modules, with five modules dedicated to Batteries 13-15; and five modules dedicated to Batteries 19-20. In addition to improved capture equipment, the new system will improve control, as it will consist of twelve modules that are interchangeable between the two sets of batteries. This installation will increase the operating volume of the PEC Baghouse system to 155,000 acfm for each battery group. The batteries will not be modified as part of this installation and there will be no operational change to these sources as a result of this project. In addition to installing the new baghouse system as noted above, U. S. Steel will modify the hood car and coke guide to increase both fume capture and reliability.

This installation will ultimately result in improved capture and control efficiency of fugitive pushing emissions and there will be a decrease in actual emissions of particulate matter (PM), particulate matter less than 10 microns (PM_{10}) and fine particulate matter ($PM_{2.5}$). The emission units regulated by this permit are summarized in Table II-1 below:

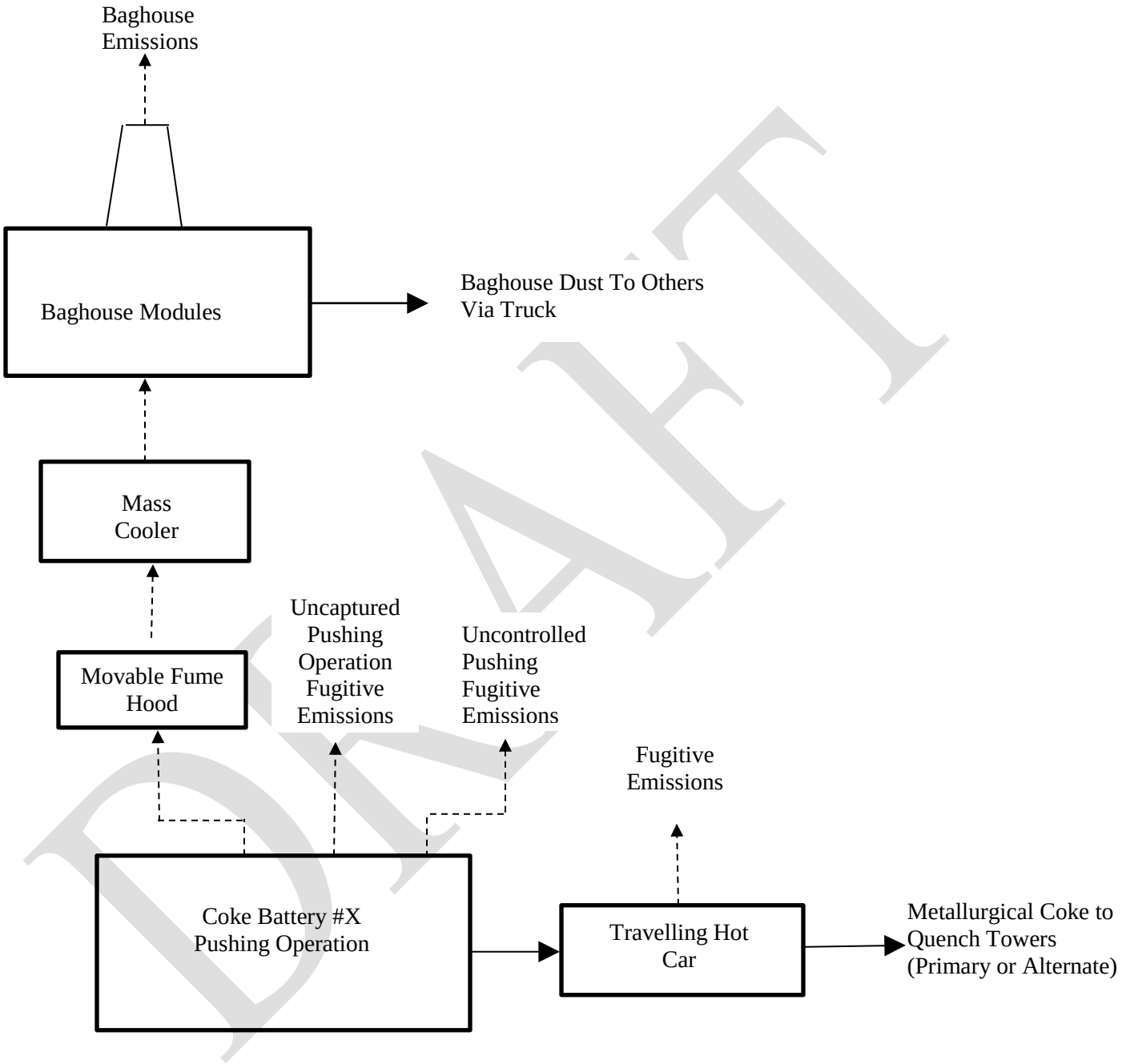
TABLE II-1: Emission Unit Identification

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P052	Battery No. 13, 14 and 15 Pushing Emission Control (PEC) System	Pulse-jet baghouse	155,000 acfm	n/a	New PEC baghouse Stack
P053	Battery No. 19 and 20 Pushing Emission Control (PEC) System	Pulse-jet baghouse	155,000 acfm	n/a	New PEC baghouse Stack

Process Flow Diagram

Coke Batteries

Pushing Emission Control System



Notes:

1. Each PEC System baghouse has five stacks.

2. There are 4 PEC System of this type.

One serves Batteries 1-3

One serves Batteries 13-15

One serves Batteries 19, 20

DECLARATION OF POLICY

Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.

The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of *Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control*. The subject equipment has been conditionally approved for operation. The equipment shall be operated in conformity with the plans, specifications, conditions, and instructions which are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable Federal, State and Local laws and regulations.

III. GENERAL CONDITIONS

1. Prohibition of Air Pollution (§2101.11)

It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:

a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
b. Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
c. May reasonably be anticipated to endanger the public health, safety, or welfare.

2. Nuisances (§2101.13)

Any violation of any requirement of this Permit shall constitute a nuisance.

3. Definitions (§2101.20)

a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.

b. Unless specified otherwise in this permit or in the applicable regulation, the term "*year*" shall mean any twelve (12) consecutive months.

4. Certification (§2102.01)

Any report or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or Article XXI, and all equivalent compliance techniques that have been approved by the Department, shall be properly installed, maintained, and operated consistent with good air pollution control practice.

6. Conditions (§2102.03.c)

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02, for any person to fail to comply with any terms or conditions set forth in this permit.

7. Transfers (§2102.03.e)

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b.

8. Effect (§2102.03.g)

Issuance of this permit shall not in any manner relieve any person of the duty to fully comply with the requirements of Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of Article XXI or this Permit, whether occurring before or after the issuance of such permit. Further, the issuance of this permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of Article XXI or this Permit.

9. General Requirements (§2102.04.a)

It shall be a violation of this Permit giving rise to the remedies set forth in Article XXI §2109 for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment to which this Permit applies unless either:

a. The Department has first issued an Installation Permit for such source or equipment; or

b. Such action is solely a reactivation of a source with a current Operating Permit, which is approved under §2103.13 of Article XXI.

10. Conditions (§2102.04.e)

Further, the initiation of installation, modification, replacement, reconstruction, or reactivation under this Installation Permit and any reactivation plan shall be deemed acceptance by the source of all terms and conditions specified by the Department in this permit and plan.

11. Revocation (§2102.04.f)

a. The Department may, at any time, revoke this Installation Permit if it finds that:
   1) Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
   2) The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
   3) Air contaminants will not be controlled to the degree indicated by this permit;
   4) Any term or condition of this permit has not been complied with;
   5) The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit; or

b. Prior to the date on which construction of the proposed source has commenced the Department may, revoke this Installation Permit if a significantly better air pollution control technology has become available for such source, a more stringent regulation applicable to such source has been adopted, or any other change has occurred which requires a more stringent degree of control of air contaminants.

12. Term (§2102.04.g)

This Installation Permit shall expire in 18 months if construction has not commenced within such period or shall expire 18 months after such construction has been suspended, if construction is not resumed within such period. In any event, this Installation Permit shall expire upon completion of construction, except that this Installation Permit shall authorize temporary operation to facilitate shakedown of sources and air cleaning devices, to permit operations pending issuance of a related subsequent Operating Permit, or to permit the evaluation of the air contamination aspects of the source. Such temporary operation period shall be valid for a limited time, not to exceed 180 days, but may be extended for additional limited periods, each not to exceed 120 days, except that no temporary operation shall be authorized or extended which may circumvent the requirements of this Permit.

13. Annual Installation Permit Administrative Fee (§2102.10.c & e)

No later than 30 days after the date of issuance of this Installation Permit and on or before the last day of the month in which this permit was issued in each year thereafter, during the term of this permit until a subsequent corresponding Operating Permit or amended Operating Permit is properly applied for, the owner or operator of such source shall pay to the Department, in addition to all other applicable emission and administration fees, an Annual Installation Permit Administration Fee in an amount of $750.

14. Severability Requirement (§2103.12.l)

The provisions of this permit are severable, and if any provision of this permit is determined to by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

15. Reporting Requirements (§2103.12.k)

a. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.

b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

c. All reports submitted to the Department shall comply with the certification requirements of General Condition III.4 above.

d. Semiannual reports required by this permit shall be submitted to the Department as follows:
   1) One semiannual report is due by July 31 of each year for the time period beginning January 1 and ending June 30.
   2) One semiannual report is due by January 31 of each year for the time period beginning July 1 and ending December 31.
   3) The first semiannual report shall be due July 31, 2021 for the time period beginning on the issuance date of this permit through June 30, 2021.

e. Quarterly reports required by this permit shall be submitted to the Department on the last day of the month following each calendar quarter.

f. Reports may be emailed to the Department at aqreports@alleghenycounty.us in lieu of mailing a hard copy.

16. Minor Installation Permit Modifications (§2102.10.d)

Modifications to this Installation Permit may be applied for but only upon submission of an application with a fee in the amount of $300 and where:

a. No reassessment of any control technology determination is required; and
b. No reassessment of any ambient air quality impact is required.

17. Violations (§2104.06)

The violation of any emission standard established by this Permit shall be a violation of this Permit giving rise to the remedies provided by Article §2109.02.

18. Other Requirements Not Affected (§2105.02)

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable federal, state, or county statute, rule, regulation, or the like, including, but not limited to, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology standards now or hereafter established by the EPA, and any applicable requirement of BACT or LAER as provided by Article XXI, any condition contained in this Installation Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Part I of Article XXI.

19. Other Rights and Remedies Preserved (§2109.02.b)

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit

20. Penalties, Fines, and Interest (§2109.07.a)

A source that fails to pay any fee required under this Permit or article XXI when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with of Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have its permit revoked.

21. Appeals (§2109.10)

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

IV. SITE LEVEL TERMS AND CONDITIONS

1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
b. Equal or exceed an opacity of 60% at any time.

3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line.

4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

7. Shutdown of Control Equipment (§2108.01.b)

a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment

is shut down.

b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.

c. The prior report required by Site Level Condition IV.7.a above shall include:

1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
2) The reasons for the shutdown;
3) The expected length of time that the equipment will be out of service;
4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
7) Such other information as may be required by the Department.

d. Shutdown reports may be emailed to the Department at aqreports@alleghenycounty.us in lieu of mailing a hard copy.

8. Breakdowns (§2108.01.c)

a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.

b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:

1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
2) The nature and probable cause of the breakdown.
3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
5) The estimated quantity of each material being or likely to be emitted.

6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.

c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.

d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.

e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.

f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

g. Breakdown reports may be emailed to the Department at aqreports@alleghenycounty.us in lieu of mailing a hard copy.

9. Cold Start (§2108.01.d)

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant. Cold start notifications may be emailed to the Department at aqreports@alleghenycounty.us.

10. Monitoring of Malodorous Matter Beyond Facility Boundaries (§2104.04)

The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to ensure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 is not perceptible and record all findings and corrective action measures taken.

11. Emissions Inventory Statements (§2108.01.e & g)

a. Emissions inventory statements in accordance with §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.

b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

12. Orders (§2108.01.f)

In addition to meeting the requirements Site Level Conditions IV.7 through IV.11, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

13. Violations (§2108.01.g)

The failure to submit any report or update thereof required by Site Level Conditions IV.7 through IV.12 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

14. Emissions Testing (§2108.02)

a. **Orders:** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the permittee shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with the applicable requirements of this permit and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup but shall not extend the time beyond 60 days after achieving full production. Emissions testing shall comply with all applicable requirements of Article XXI, §2108.02.e.

b. **Tests by the Department:** Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.

c. **Testing Requirements:** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible

shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.

d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.

e. **Violations:** The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

15. Abrasive Blasting (§2105.51)

a. Except where such blasting is a part of a process requiring an operating permit , no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.

b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

16. Asbestos Abatement (§2105.62, §2105.63)

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

17. Volatile Organic Compound Storage Tanks (§2105.12.a)

No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

18. Permit Source Premises (§2105.40)

a. **General.** No person shall operate, or allow to be operated, any source for which a permit is required by Article XXI Part C in such manner that emissions from any open land, roadway, haul road, yard, or other premises located upon the source or from any material being transported within such source

or from any source-owned access road, haul road, or parking lot over five (5) parking spaces:

1) Are visible at or beyond the property line of such source;

2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or

3) Have an opacity of 60% or more at any time.

b. **Deposition on Other Premises:** Visible emissions from any solid or liquid material that has been deposited by any means from a source onto any other premises shall be considered emissions from such source within the meaning of Site Level Condition IV.18.a above.

19. Parking Lots and Roadways (§2105.42)

a. The permittee shall not maintain for use, or allow to be used, any parking lot over 50 parking spaces or used by more than 50 vehicles in any day or any other roadway carrying more than 100 vehicles in any day or 15 vehicles in any hour in such manner that emissions from such parking lot or roadway:

1) Are visible at or beyond the property line;

2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or

3) Have an opacity of 60% or more at any time.

b. Visible emissions from any solid or liquid material that has been deposited by any means from a parking lot or roadway onto any other premises shall be considered emissions from such parking lot or roadway.

c. Site Level Condition IV.19.a above shall apply during any repairs or maintenance done to such parking lot or roadway.

d. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.19 may be enforced by any municipal or local government unit having jurisdiction over the place where such parking lots or roadways are located. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.19.

20. Permit Source Transport (§2105.43)

a. No person shall transport, or allow to be transported, any solid or liquid material outside the boundary line of any source for which a permit is required by Article XXI Part C in such manner that there is any visible emission, leak, spill, or other escape of such material during transport.

b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.20 may be enforced by any municipal or local government unit having jurisdiction over the place where such visible emission, leak, spill, or other escape of material during transport occurs. Such enforcement shall be in accordance with the laws governing such municipal or local government

unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violation of Site Level Condition IV.20.

21. Construction and Land Clearing (§2105.45)

a. No person shall conduct, or allow to be conducted, any construction or land clearing activities in such manner that the opacity of emissions from such activities:

1) Equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
2) Equal or exceed 60% at any time.

b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.21 may be enforced by any municipal or local government unit having jurisdiction over the place where such construction or land clearing activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.21.

22. Mining (§2105.46)

No person shall conduct, or allow to be conducted, any mining activities in such manner that emissions from such activities:

a. Are visible at or beyond the property line;
b. Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
c. Have an opacity of 60% or more at any time.

23. Demolition (§2105.47)

a. No person shall conduct, or allow to be conducted, any demolition activities in such manner that the opacity of the emissions from such activities equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any 60-minute period.

b. Notwithstanding any other provisions of this permit, the prohibitions of Site Level Condition IV.23 may be enforced by any municipal or local government unit having jurisdiction over the place where such demolition activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.23.

24. Fugitive Emissions (§2105.49)

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

a. The use of asphalt, oil, water, or suitable chemicals for dust control;
b. The paving and maintenance of roadways, parking lots and the like;
c. The prompt removal of earth or other material which has been deposited by leaks from transport,

erosion or other means;

d. The adoption of work or other practices to minimize emissions;
e. Enclosure of the source; and
f. The proper hooding, venting, and collection of fugitive emissions.

25. Episode Plans (§2106.02)

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02.

26. New Source Performance Standards (§2105.05)

a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for any person to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if such person has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.

b. Any person who operates, or allows to be operated, any source subject to any NSPS shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is required by such standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.

27. National Emission Standards for Hazardous Air Pollutants (§2104.08)

The permittee shall comply with each applicable emission limitation, work practice standard, and operation and maintenance requirement of NESHAP Subpart CCCCC – Coke Ovens: Pushing, Quenching and Battery Stacks.

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Battery No. 13, 14 and 15 Pushing Emission Control (PEC) System: P052

Process Description:	Movable hood with stationary baghouse
Facility ID:	P052
Raw Material:	Coal
Material Produced:	Metallurgical coke
Design Rate:	545,675 tons of coal/year (per battery)
Total Annual Production:	423,400 tons of coke/year (per battery)
Max gas flow through control unit:	310,000 acfm @ 125°F
Control Device:	Belco-Pulse jet, model PM-14, 6-module baghouse

1. Restrictions:

a. The permittee shall not operate, or allow to be operated, Battery 13 or Battery 14 or Battery 15 coke ovens unless there is installed on each battery a pushing emission control system baghouse which is designed to reduce fugitive emissions from pushing to the minimum attainable through the use of BACT, nor shall the permittee operate, or allow to be operated Battery 13 or Battery 14 or Battery 15 coke ovens in such manner that: [§2105.21.e, §2102.04.b.6]

1) At any time, the filterable particulate mass emission rate from the pushing emission control system device, for Battery 13, 14 and 15 exceeds a rate determined by an outlet concentration of 0.004 gr/dscf from PEC baghouse stack. [§2105.21.e.3]

2) Fugitive pushing emissions or emissions from the pushing emission control system device outlet equal or exceed an opacity of 20% at any time, except if the Department determines in writing, upon written application from the person responsible for the coke ovens setting forth all information needed to make such determination, that such emissions are of only minor significance with respect to causing air pollution and do not prevent or interfere with the attainment or maintenance of any ambient air quality standard (any such determination shall be submitted as a proposed revision to Allegheny County's portion of the SIP). [§2105.21.e.4]

b. The permittee shall not operate, or allow to be operated at any time, coke oven batteries in such manner that the hot coke fails to be held under the hood of the pushing emission control device for at least 67 seconds immediately after the pusher ram begins to move and the damper to the PEC device is opened or for at least 15 seconds immediately following the fall of the last of the coke into the hot car, whichever is longer. This provision shall only be effective during the period from 30 days following the issuance of written notice by the Department to the permittee of such battery that EPA has required the implementation of the contingency measures under the portion of the PM-10 SIP for the Liberty Borough/Clairton area, until issuance of a written notice by the Department that such measures are no longer required. [§2105.21.e.6]

c. The permittee shall not operate, or allow to be operated Battery 13 or Battery 14 or Battery 15, unless the Battery 13, 14 and 15 PEC System baghouse is properly installed, operated and maintained according to the following conditions: [§2102.04.b.6, §2105.03]

1) Emissions due to the pushing of Battery 13, 14 and 15 coke ovens shall be vented through the PEC System baghouse dust collector.

2) The baghouse shall be equipped with automatic cleaning controls and instrumentation that shall continuously measure the differential pressure drop across the baghouse to within 5.0% of the measuring span of the device.
3) The normal operating differential pressure drop range across each baghouse module shall be maintained below the level provided in the Operation and Maintenance Plan averaged over the push.
4) When the pressure drop goes beyond the range specified in Condition V.A.1.c.3) above, cleaning, maintenance and other corrective actions shall be conducted, as necessary, to return the pressure drop to the specified range.

d. The permittee shall not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions from a coke oven battery that exceed 0.02 pound per ton (lb/ton) of coke: [§2102.04.e; §63.7290(a)]

e. For each PEC System the permittee shall: [§2102.04.e; §63.7290(b)(3)]

1) Maintain the minimum daily average fan motor amperes at or above the minimum level established during the most recent performance test; or
2) Maintain the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial performance test.

f. For each control device applied to pushing emissions and subject to the emission limit in V.A.1.d above, the permittee shall demonstrate continuous compliance by meeting the requirements in Conditions V.A.1.f.1) and V.A.1.f.2) below: [§2102.04.e; §63.7333 (a)]

1) Maintaining emissions of particulate matter at or below 0.02 pound per ton (lb/ton) of coke; and
2) Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than once every two years.

g. Battery 13, 14 and 15 PEC System baghouse emissions shall not exceed the limits listed in Table V.A-1 –at any time: [§2105.03]

Table V.A-1 – Emission Limitations for Batteries 13, 14, & 15 PEC System Baghouse

POLLUTANT	GR/DSCF	HOURLY EMISSION LIMIT (lb/hr)	ANNUAL EMISSION LIMIT (tons/year)*
Particulate Matter (filt.)	0.004	3.26	7.15
PM_{10} (filt.)	0.004	3.26	7.15

*A year is defined as any consecutive 12-month period.

2. Testing Requirements:

a. The permittee shall have baghouse emission stack tests for PM, PM_{10} and $PM_{2.5}$ conducted upon initial operation after modification and at least once every two years using EPA Methods No.1 through No.5, 201A and 202 (or other method specified by the Department) in accordance with the Site Level Condition IV.14 and performed according to §2108.02 of Article XXI. [§2108.02, §63.7321]

b. Visible emissions observations of the baghouse stack exhaust and fugitive pushing emissions shall be conducted at least once every two years, as specified in Section 109 of the Department's source testing manual and be done simultaneously with the baghouse stack tests. [§2108.02]

c. The permittee shall conduct each performance test according to the requirements in Condition V.A.2.d below. [§2102.04.e; §63.7322(a)]

d. To determine compliance with the process weighted mass rate of particulate matter (lb/ton of coke) in Condition V.A.1.d above use the following test methods and procedures: [§2102.04.e; §63.7322(b)]

1) Determine the concentration of particulate matter according to the following test methods in Appendix A to 40 CFR Part 60. [§2102.04.e; §63.7322(b)(1)]

i. Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
ii. Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.
iii. Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
iv. Method 4 to determine the moisture content of the stack gas.
v. Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.

2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 50 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (i.e., sample for an integral number of pushes) [§2102.04.e; §63.7322(b)(2)].

3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in the source test plan for calculating coke yield from the quantity of coal charged to an individual oven. [§2102.04.e; §63.7322(b)(3)]

4) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows: [§2102.04.e; §63.7322(b)(4)]

$$E_p = \frac{C \times Q \times T}{P \times K}$$

Where:

E_p = Process weighted mass emissions of particulate matter, lb/ton;
C = Concentration of particulate matter, gr/dscf;
Q = Volumetric flow rate of stack gas, dscf/hr;
T = Total time during a run that a sample is withdrawn from the stack during pushing, hr;
P = Total amount of coke pushed during the test run, tons; and
K = Conversion factor, 7,000 gr/lb.

e. For each capture system applied to pushing emissions, the permittee shall establish a site-specific operating limit for the fan motor amperes or volumetric flow rate according to the procedures in Condition V.A.2.e.1) or V.A.2.e.2) below: [§2102.04.e; §63.7323(c)]

1) If the permittee elects the operating limit in V.A.1.e.1) above for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test run. The operating limit is the lowest fan motor amperes recorded during any of the three runs that meet the emission limit.
2) If the permittee elects the operating limit in V.A.1.e.2) above for volumetric flow rate, measure and record the total volumetric flow rate at the inlet of the control device during each push sampled for each particulate matter test run. The operating limit is the lowest volumetric flow rate recorded during any of the three runs that meet the emission limit.

f. The permittee may change the operating limit for a capture system if the requirements in Conditions V.A.2.f.1) through (3) below are met: [§2102.04.e; §63.7323(e)]

1) Submit a written notification to the Department of the request to conduct a new performance test to revise the operating limit.
2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in §63.7290(a).
3) Establish revised operating limits according to the applicable procedures in Condition V.A.2.e above.

g. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition III.13 above and Article XXI §2108.02. [§2102.04.e]

3. Monitoring Requirements:

a. The permittee shall continuously monitor and record the differential pressure drop across each baghouse module. [§2102.04.e; §2103.12.i]

b. The permittee shall inspect the Battery 13, 14 and 15 PEC System baghouse, weekly, to insure compliance with Condition V.A.1.c above. [§2102.04.e; §2103.12.i]

c. The permittee shall meet each of the following requirements in paragraphs V.A.3.d.1) through (6) below for each coke oven battery. [§63.7291(a)]

1) 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), and document why the oven was not observed within a 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).

2) Observe and record the opacity of fugitive pushing emissions for at least four 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 four pushes. If necessary due to circumstances that were not reasonably avoidable, the permittee

may observe fewer than four consecutive pushes in a day; however, the permittee must observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. The permittee may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day.

3) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in the pushing schedule which results in a change in the sequence of consecutive pushes observed on any day.

4) If the average opacity for any individual push exceeds 30 percent opacity for any short battery or 35 percent opacity for any tall battery, the permittee must take corrective action and/or increase coking time for that oven. The permittee must complete corrective action or increase coking time within either 10 calendar days or the number of days determined using the following equation, whichever is greater:

$X = 0.55 \times Y$

Where:
X = Number of calendar days allowed to complete corrective action or increase coking time; and
Y = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under this equation, day one is the first day following the day an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery is observed. Any fraction produced by this equation 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.

5) The permittee shall demonstrate that:
   i. The corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in condition V.A.3.d.4) above, observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, the permittee may return the oven to the 90-day reading rotation described in condition V.A.3.d.1) above. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and the permittee must complete additional corrective action and/or increase coking time for that oven within the number of days allowed in condition V.A.3.d.4) above.

   ii. After implementing any additional corrective action and/or increased coking time required under condition V.A.3.d.5)i above or V.A.3.d.6)ii below, the permittee must demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in condition V.A.3.d.4) above, the permittee must observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent

or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, the permittee may return the oven to the 90-day reading rotation described in condition V.A.3.d.1) above. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and the permittee must follow the procedures in condition V.A.3.d.5)iii below.

iii. If the corrective action and/or increased coking time was unsuccessful as described in condition V.A.3.d.5)ii above, the permittee must repeat the procedures in condition V.A.3.d.5)ii above until the corrective action and/or increased coking time is successful. The permittee must report to the Department as a deviation each unsuccessful attempt at corrective action and/or increased coking time under condition V.A.3.d.5)ii above.

6) If at any time the permittee places an oven on increased coking time as a result of fugitive pushing emissions that exceed 30 percent for a short battery or 35 percent for a tall battery, the oven must be kept on the increased coking time until the oven qualifies for decreased coking time using one of the following procedures:

i. To qualify for a decreased coking time for an oven placed on increased coking time in accordance with condition V.A.3.d.4) or V.A.3.d.5) above, the permittee must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, the permittee must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, the permittee may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in condition V.A.3.d.1) above. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. the permittee must then return the oven to the previously established increased coking time or implement other corrective action(s) and/or increased coking time. If the permittee implements other corrective action and/or a coking time that is shorter than the previously established increased coking time, the procedures in paragraph V.A.3.d.5)ii above must be followed to confirm that the corrective action(s) and/or increased coking time was successful.

ii. If the attempt to qualify for decreased coking time was unsuccessful as described in condition V.A.3.d.6)i above, the permittee may again attempt to qualify for decreased coking time for the oven. To do this, the oven must be operated on the decreased coking time. After no more than two coking cycles on the decreased coking time, the permittee must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in V.A.3.r below or §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, the permittee may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in condition V.A.3.d.1) above. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. the permittee must then return the oven to the previously established increased coking time or implement other corrective action(s) and/or increased coking time. If the permittee implements other corrective action and/or a coking time that is shorter than the previously established increased coking time, the procedures in condition V.A.3.d.5)ii above must be followed to confirm that the corrective action(s) and/or increased coking time was successful.

iii. The permittee must report to the Department as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in condition V.A.3.d.6)ii above.

d. As provided in §63.6(g), the permittee may request to use an alternative to the work practice standards in Condition V.A.3.d above. [§2102.04.e; §63.7291(b)]

e. The permittee shall prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from coke battery(s). Each plan must address at a minimum the following elements. [§2102.04.e; §63.7300(c)]

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). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). In the event a defect or deficiency is found in the capture system (during a monthly inspection or between inspections), the permittee must complete repairs within 30 days after the date that the defect or deficiency is discovered. If it is determined that the repairs cannot be completed within 30 days, the permittee must submit a written request for an extension of time to complete the repairs that must be received by the Department not more than 20 days after the date that the defect or deficiency is discovered. The request must contain a description of the defect or deficiency, the steps needed and taken to correct the problem, the interim steps being taken to mitigate the emissions impact of the defect or deficiency, and a proposed schedule for completing the repairs. The request shall be deemed approved unless and until such time as the Department notifies the permittee that it objects to the request. The Department may consider all relevant factors in deciding whether to approve or deny the request (including feasibility and safety). Each approved schedule must provide for completion of repairs as expeditiously as practicable, and the Department may request modifications to the proposed schedule as part of the approval process.

2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

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 cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to:
   i. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
   ii. Sealing off defective bags or filter media.
   iii. Replacing defective bags or filter media or otherwise repairing the control device.
   iv. Sealing off a defective baghouse compartment.
   v. Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
   vi. Shutting down the process producing the particulate emissions

f. For the PEC system baghouse applied to pushing emissions from a coke oven battery, the permittee shall at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in V.A.3.h below and conduct inspections at their specified frequency according to the following requirements: [§2102.04.e; 63.7330(a)]

1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;
2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;
3) Check the compressed air supply for pulse-jet baghouses each day;
4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;
5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;
6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. The permittee does not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;
7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and
8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

g. The permittee shall install, operate, and maintain a bag leak detection system on the PEC system baghouse according to the following requirements: [§2102.04.e; §63.7331(a)]

1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;
2) The system must provide output of relative changes in particulate matter loadings;
3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;
4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, ``Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). The permittee may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;
5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;
6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition; and
7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

h. For each CPMS required in V.A.3.h above, the permittee must develop and make available for inspection upon request by the Department a site-specific monitoring plan that addresses the requirements in Conditions V.A.3.i.1) through V.A.3.i.6) below: [§2102.04.e; §63.7331(b)]

1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;
3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);
4) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(ii), (7), and (8);
5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

i. The permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. [§2102.04.e; §63.7331(c)]

j. The permittee shall operate and maintain each CPMS in continuous operation according to the site-specific monitoring plan. [§2102.04.e;§63.7331(d)]

k. If the permittee elects the operating limit in V.A.1.e.1) above for a capture system applied to pushing emissions, the permittee must install, operate, and maintain a device to measure the fan motor amperes.[§2102.04.e; §63.7331(h)]

l. If the permittee elects the operating limit in V.A.1.e.2) above for a capture system applied to pushing emissions, the permittee must install, operate, and maintain a device to measure the total volumetric flow rate at the inlet of the control device. [§2102.04.e; §63.7331(g)]

m. For each capture system applied to pushing emissions, the permittee shall at all times monitor the fan motor amperes according to the requirements in Condition V.A.3.l above or the volumetric flow rate according to the requirements in Condition V.A.3.m above. [§2102.04.e;§63.7330(d)]

n. 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 (or collect data at all required intervals) at all times the affected source is operating. [§2102.04.e; §63.7332(a)]

o. 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. [§2102.04.e;§63.7332(b)]

p. For each capture system applied to pushing emissions and subject to the operating limit in Condition V.A.1.e above, the permittee shall demonstrate continuous compliance by meeting the requirements in Condition V.A.3.q.1) or V.A.3.q.2) below: [§2102.04.e; §63.7333(d)]

1) If the permittee elects the operating limit for fan motor amperes in V.A.1.e.1) above:

i. Maintaining the daily average fan motor amperes at or above the minimum level established during the initial or subsequent performance test; and
ii. Checking the fan motor amperes at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

2) If the permittee elects the operating limit for volumetric flow rate in V.A.1.e.2) above:

i. Maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; and
ii. Checking the volumetric flow rate at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

q. The permittee shall demonstrate continuous compliance with the work practice standards for fugitive pushing emissions according to the following requirements: [§2102.04.e; §63.7334(a)]

1) Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except the permittee may make fewer or non-consecutive observations as permitted by Condition V.A.3.d.2) above. Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to Condition V.A.3.d.3) above.
2) Observe and record the opacity of fugitive emissions from each oven in a battery at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in paragraphs V.A.3.r.1) through V.A.3.r.8).
3) Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in Appendix A to 40 CFR Part 60 using a Method 9 certified observer unless the permittee has an approved alternative procedure under V.A.3.r.7) below.
4) Record pushing opacity observations at 15-second intervals as required in section 2.4 of Method 9 (Appendix A to 40 CFR Part 60). The requirement in section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in §63.6(h)(5)(ii) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.
5) If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (e.g., as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.
6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.
   i. Observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.
   ii. The permittee may reposition after the push to observe emissions during travel if necessary.

7) If it is infeasible to implement the procedures in Conditions V.A.3.r.1) through V.A.3.r.6) above for an oven due to physical obstructions, nighttime pushes, or other reasons, the permittee may apply to the Department for permission to use an alternative procedure. The application must provide a detailed explanation of why it is infeasible to use the procedures in Conditions V.A.3.r.1)through V.A.3.r.6) above, identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

8) For each oven observed that exceeds an opacity of 30 percent for any short battery or 35 percent for any tall battery, the permittee must take corrective action and/or increase the coking time in accordance with Condition V.A.3.d above. Maintain records documenting conformance with Condition V.A.3.d above.

r. To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in V.A.3.h above, the permittee shall inspect and maintain each baghouse according to the requirements in Conditions V.A.3.h.1)through V.A.3.h.7) above and record all information needed to document conformance with these requirements. If the permittee increases or decreases the sensitivity of the bag leak detection system beyond the limits specified in Condition V.A.3.h.6) above a copy of the required written certification by a responsible official must be included in the next semiannual compliance report. [§2102.04.e; §2103.12.i; §63.7335(c)]

4. Record Keeping Requirements:

a. The results of the inspections required by condition V.A.3.b above shall be recorded weekly along with the differential pressure drop across the baghouse. [§2103.12.j; §2102.04.b.6]

b. Episodes of non-compliance with Conditions V.A.1.a through V.A.1.g and V.A.3.b above and corrective actions taken shall be recorded upon occurrence. [§2103.12.j; §2102.04.b.6]

c. The permittee shall keep records of each baghouse maintenance inspection and repair, replacement or other corrective action. [§2103.12.j; §2102.04.b.6]

d. The permittee shall keep the following records: [§2103.12.j; §2102.04.e; §63.7342(a)]

1) A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that was submitted, according to the requirements in §63.10(b)(2)(xiv).
2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

e. For each COMS or CEMS, the permittee shall keep the following records. [§2102.04.e; §63.7342(b)]

1) Records described in §63.10(b)(2)(vi) through (xi).
2) Monitoring data for COMS during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

3) Previous (that is, superceded) versions of the performance evaluation plan as required in §63.8(d)(3).
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.

f. The permittee shall keep the records in §63.6(h)(6) for visual observations. [§2102.04.e; §63.7342(c)]

g. The permittee shall keep the records required in Conditions V.A.3.s above and V.A.4.l through V.A.4.n below to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies. [§2102.04.e; §63.7342(d)]

h. The permittee shall keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§2102.04.e; §63.7343(a)]

i. As specified in §63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§2102.04.e; §63.7343(b)]

j. The permittee shall keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). Records may be kept offsite for the remaining 3 years. [§2103.12.j; §2102.04.e; §63.7343(c)]

k. 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 Condition V.A.3.f above by meeting the following requirements: [§2103.12.j; §2102.04.e; §63.7335(b)]

1) Making monthly inspections of capture systems according to Condition V.A.3.f.1) above and recording all information needed to document conformance with these requirements;
2) Performing preventative maintenance for each control device according to Condition V.A.3.f.2) above 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 Condition V.A.3.f.3) above 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 corrective action was initiated, the corrective action(s) taken, and the date on which corrective action is completed.

l. The permittee shall inspect and maintain the pushing emission control baghouse as required in V.A.3.h.1) through V.A.3.h.7) above and record all information needed to document conformance with these requirements. If the permittee increases or decreases the sensitivity of the bag leak detection system beyond the limits specified in V.A.3.h.6) above, the permittee must include a copy of the required written certification by a responsible official in the next semiannual compliance report. [§2103.12.j; 63.7335(c)]

m. 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 plans shall be kept for the life of the affected source or until the affected source is no longer subject to the requirements of 40 CFR Part 63, Subpart CCCCC. [§2103.12.j; 63.7335(d)]

n. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. [§2103.12.j; §2102.04.e]

5. Reporting Requirements:

a. The permittee shall report all instances of non-compliance with conditions V.A.1.a through V.A.1.g, V.A.3.aand V.A.3.b above, and V.A.4.a through V.A.4.n above along with all corrective action taken to restore the subject equipment to compliance, to the Department every six months. [§2103.12.k; §2102.04.b.6]

b. Reporting instances of non-compliance in accordance with condition V.A.5.a above does not relieve the permittee of the requirement to report breakdowns in accordance with IV.8 above, if appropriate. [§2103.12.k; §2102.04.e]

c. No later than twenty (20) days after the end of each month, a written report of a summary of the following during each such month shall be submitted to the Department: [§2103.12.k; §2109.03 and Enforcement Order 202.E, 3/28/90]

1) For each individual coke battery or group of batteries served by the same push emission control system, and for all coke batteries combined:

i. The total number of pushes for the month;
ii. The total number of controlled pushes for the month; and the monthly percentage availability (on-line time) of the pushing control system, based on the total number of pushes and total number of controlled pushes.

2) For each outage of the pushing control system at each individual coke battery or group of batteries served by the same pushing emission control system:

i. The batteries affected;
ii. The starting and ending dates and times;
iii. The total time of each outage, to the nearest tenth of an hour;
iv. The corresponding Department Breakdown Number; and the reason(s) or cause(s) for the outage.

d. The permittee shall report each instance in which Conditions V.A.1.e and V.A.1.f was not met. This includes periods of startup, shutdown, and malfunction. The permittee shall also report each instance in which the permittee did not meet each work practice standard or operation and maintenance requirement in conditions V.A.6.a, V.A.6.b and V.A.6.c. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements of 40 CFR Part 63, Subpart CCCCC. These deviations must be reported according to the requirements in V.A.5.h through V.A.5.k below. [§2103.12.k; §2102.04.e; §63.7336(a)]

e. During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the startup, shutdown, and malfunction plan. [§2103.12.k; §2102.04.e; §63.7336(b)]

1) Consistent with §63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Department's

satisfaction that operations were in accordance with the startup, shutdown, and malfunction plan.

2) The Department will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

f. The permittee shall submit all of the notifications in §63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply by the specified dates. [§2103.12.k; §2102.04.e; §63.7340(a)]

g. The permittee shall submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1). [§2103.12.k; §2102.04.e; §63.7340(d)]

h. The permittee shall submit semiannual compliance reports for the PEC stacks to the Department according to the requirements in General Condition III.15 above. [§2103.12.k; §2102.04.e; §63.7341(a)]

i. Each semiannual compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in V.A.5.i.1) through V.A.5.i.3) below, and as applicable, Conditions V.A.5.i.4) through V.A.5.i.8) below. [§2103.12.k; §2102.04.e; §63.7341(c)]

1) Company name and address.
2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
3) Date of report and beginning and ending dates of the reporting period.
4) If there was a startup, shutdown, or malfunction during the reporting period and the permittee took actions consistent with the startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).
5) If there were no deviations from the continuous compliance requirements in Conditions V.A.3.p through V.A.3.r above and V.A.4.k through V.A.4.m above, a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.
6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.
7) For each deviation from an emission limitation in 40 CFR 63, Subpart CCCCC and for each deviation from the requirements for work practice standards in this 40 CFR Part 63, Subpart CCCCC that occurs at an affected source where the permittee is not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in this subpart, the compliance report must contain the information in Conditions V.A.5.i.4), V.A.5.i.7)i and V.A.5.i.7)ii below. This includes periods of startup, shutdown, and malfunction.
   i. The total operating time of each affected source during the reporting period.
   ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.
8) For each deviation from an emission limitation occurring at an affected source where the permittee is using a continuous monitoring system (including COMS, CEMS, or CPMS) to

comply with the emission limitation 40 CFR 63, Subpart CCCCC, the permittee must include the information in Conditions V.A.5.i.4), V.A.5.i.8)i through V.A.5.i.8)xii below. This includes periods of startup, shutdown, and malfunction.

i. The date and time that each malfunction started and stopped.
ii. The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.
iii. The date, time, and duration that each continuous monitoring system (including COMS, CEMS, or CPMS) was out-of-control, including the information in §63.8(c)(8).
iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
v. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
vii. A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.
viii. An identification of each HAP that was monitored at the affected source.
ix. A brief description of the process units.
x. A brief description of the continuous monitoring system.
xi. The date of the latest continuous monitoring system certification or audit.
xii. A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

j. If there is a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with the startup, shutdown, and malfunction plan, the permittee must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii). [§2103.12.k; §2102.04.e; §63.7341(d)]

k. If the permittee submits a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in 40 CFR Part 63, Subpart CCCCC, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation to report deviations from permit requirements to the Department. [§2103.12.k; §2102.04.e; §63.7341(e)]

l. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2103.12.k]

6. Work Practice Standard:

a. The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions in 40 CFR 63, Subpart A, §63.6(e)(3). [§2103.12.k; §2102.04.e; §63.7310(c)]

b. As required by §63.6(e)(1)(i), the permittee shall operate and maintain each coke battery including 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 40 CFR Part 63, Subpart

CCCCC. [§2103.12.k; §2102.04.e; §63.7300(a)]

c. The permittee shall be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements of 40 CFR 63, Subpart CCCCC at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2. [§2103.12.k; §2102.04.e; §63.7310(a)]

7. Additional Requirements:

None, except as provided elsewhere.

B. Battery No. 19 and 20 Pushing Emission Control (PEC) System: P053

Process Description:	Movable hood with stationary baghouse
Facility ID:	P053
Raw Material:	Coal
Material Produced:	Metallurgical coke
Design Rate:	1,002,290 tons of coal/year (per battery)
Total Annual Production:	777,815 tons of coke/year (per battery)
Max gas flow through control unit:	310,000 acfm @ 125°F
Control Device:	Belco-Pulse jet, model PM-14, 6-module baghouse

1. Restrictions:

a. The permittee shall not operate, or allow to be operated, Battery 19 or Battery 20 coke ovens unless there is installed on each battery a pushing emission control system baghouse which is designed to reduce fugitive emissions from pushing to the minimum attainable through the use of BACT, nor shall the permittee operate, or allow to be operated Battery 19 or Battery 20 coke ovens in such manner that: [§2105.21.e]

1) At any time, the filterable particulate mass emission rate from the pushing emission control system device, for Battery No. 19 and 20 exceeds a rate determined by an outlet concentration of 0.004 grains per dry standard cubic foot; [§2105.21.e.2]

2) Fugitive pushing emissions or emissions from the pushing emission control system device outlet equal or exceed an opacity of 20% at any time, except if the Department determines in writing, upon written application from the person responsible for the coke ovens setting forth all information needed to make such determination, that such emissions are of only minor significance with respect to causing air pollution and do not prevent or interfere with the attainment or maintenance of any ambient air quality standard (any such determination shall be submitted as a proposed revision to Allegheny County's portion of the SIP). [§2105.21.e.4]

b. The permittee shall not operate, or allow to be operated at any time, coke oven batteries in such manner that the hot coke fails to be held under the hood of the pushing emission control device for at least 67 seconds immediately after the pusher ram begins to move and the damper to the PEC device is opened or for at least 15 seconds immediately following the fall of the last of the coke into the hot car, whichever is longer. This provision shall only be effective during the period from 30 days following the issuance of written notice by the Department to the permittee of such battery that EPA has required the implementation of the contingency measures under the portion of the PM-10 SIP for the Liberty Borough/Clairton area, until issuance of a written notice by the Department that such measures are no longer required. [§2105.21.e.6]

c. The permittee shall not operate, or allow to be operated Battery 19 or Battery 20 unless the Battery 19 and 20 PEC System baghouse is properly installed, operated and maintained according to the following conditions, at all times: [§2105.03]

1) Emissions due to the pushing of Battery 19 and 20 coke ovens shall be vented through the PEC System baghouse dust collector.
2) The baghouse shall be equipped with automatic cleaning controls and instrumentation that shall continuously measure the differential pressure drop across the baghouse to within 5.0% of the measuring span of the device.

3) The normal operating differential pressure drop range across each baghouse module shall be maintained below the level provided in the Operation and Maintenance Plan averaged over the push
4) When the pressure drop goes beyond the range specified in Condition V.B.1.c.3) above, cleaning, maintenance and other corrective actions shall be conducted, as necessary, to return the pressure drop to the specified range.

d. The permittee shall not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions from a coke oven battery that exceed 0.02 pound per ton (lb/ton) of coke : [§2102.04.e; §63.7290(a)]

e. For each PEC System the permittee shall: [§2102.04.e; §63.7290(b)(3)]

1) Maintain the minimum daily average fan motor amperes at or above the minimum level established during the most recent performance test; or
2) Maintain the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial performance test.

f. For each control device applied to pushing emissions and subject to the emission limit in V.B.1.d above, the permittee shall demonstrate continuous compliance by meeting the requirements in Conditions V.B.1.f.1) and V.B.1.f.2) below: [§2102.04.e; §63.7333 (a)]

1) Maintaining emissions of particulate matter at or below 0.02 pound per ton (lb/ton) of coke if a moveable hood vented to a stationary control device is used to capture emissions; and
2) Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than once every two years.

g. Emissions from Battery 19 and 20 PEC System baghouse shall not exceed the limits listed in Table V-B-1 at any time: [§2105.03]

TABLE V-B-1 Emission Limitations for Battery 19 & 20 PEC System Baghouse

POLLUTANT	GR/DSCF	HOURLY EMISSION LIMIT (lb/hr)	ANNUAL EMISSION LIMIT (tons/year)*
Particulate Matter (filt.)	0.004	3.26	7.15
PM_{10} (filt.)	0.004	3.26	7.15

* A year is defined as any consecutive 12-month period.

2. Testing Requirements:

a. The permittee shall have baghouse emission stack tests conducted for PM, PM_{10} and $PM_{2.5}$ at least once every two years using EPA Methods No.1 through No.5, 201A and 202 (or other method specified), and performed according to Site Level Condition IV.13. [§2108.02, §63.7321]

b. Visible emissions observations of the baghouse stack exhaust and fugitive pushing emissions shall be conducted at least once every two years, as specified in Section 109 of the Department's source testing manual and be done simultaneously with the baghouse stack tests. [§2108.02]

c. The permittee shall conduct each performance test according to the requirements in Condition V.B.2.d below. [§2102.04.e; §63.7322(a)]

d. To determine compliance with the process weighted mass rate of particulate matter (lb/ton of coke) in Condition V.B.1.d above use the following test methods and procedures: [§2102.04.e; §63.7322(b)]

1) Determine the concentration of particulate matter according to the following test methods in Appendix A to 40 CFR Part 60. [§2102.04.e; §63.7322(b)(1)]

   i. Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
   ii. Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.
   iii. Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
   iv. Method 4 to determine the moisture content of the stack gas.
   v. Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.

2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 50 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a. push (i.e., sample for an integral number of pushes) [§2102.04.e; §63.7322(b)(2)].

3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in the source test plan for calculating coke yield from the quantity of coal charged to an individual oven. [§2102.04.e; §63.7322(b)(3)]

4) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 of this section as follows: [§2102.04.e; §63.7322(b)(4)]

$$Ep = \frac{C \times Q \times T}{P \times K}$$

Where:

E_p = Process weighted mass emissions of particulate matter, lb/ton;
C = Concentration of particulate matter, gr/dscf;
Q = Volumetric flow rate of stack gas, dscf/hr;
T = Total time during a run that a sample is withdrawn from the stack during pushing, hr;
P = Total amount of coke pushed during the test run, tons; and
K = Conversion factor, 7,000 gr/lb.

e. For each capture system applied to pushing emissions, the permittee shall establish a site-specific operating limit for the fan motor amperes or volumetric flow rate according to the procedures in Condition V.B.2.e.1) or V.B.2.e.2) below: [§2102.04.e; §63.7323(c)]

1) If the permittee elects the operating limit in V.B.1.e.1) above for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test run. The operating limit is the lowest fan motor amperes recorded during any of the three runs

that meet the emission limit.

2) If the permittee elects the operating limit in V.B.1.e.2) above for volumetric flow rate, measure and record the total volumetric flow rate at the inlet of the control device during each push sampled for each particulate matter test run. The operating limit is the lowest volumetric flow rate recorded during any of the three runs that meet the emission limit.

f. The permittee may change the operating limit for a capture system if the requirements in Conditions V.B.2.f.1) through V.B.2.f.3) below are met: [§2102.04.e; §63.7323(e)]

1) Submit a written notification to the Department of the request to conduct a new performance test to revise the operating limit.
2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in §63.7290(a).
3) Establish revised operating limits according to the applicable procedures in Condition V.B.2.e above.

g. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Site Level Condition III.13 above and Article XXI §2108.02. [§2102.04.e]

3. Monitoring Requirements:

a. The permittee shall continuously monitor and record the differential pressure drop across each baghouse module. [§2103.12.i; §2102.04.e, §2103.12.i]

b. The permittee shall inspect the Battery 19 and 20 PEC System baghouse, weekly, to insure compliance with conditions V.B.1.c above. [§2102.04.e; §2103.12.i]

c. The permittee shall meet each of the following requirements in paragraphs V.B.1.c.1) through V.B.3.d.6) below for each coke oven battery. [§2103.12.i; 63.7291(a)]

1) 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), and document why the oven was not observed within a 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).

2) Observe and record the opacity of fugitive pushing emissions for at least four 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 four pushes. If necessary due to circumstances that were not reasonably avoidable, the permittee may observe fewer than four consecutive pushes in a day; however, the permittee must observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. The permittee may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day.

3) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in the

pushing schedule which results in a change in the sequence of consecutive pushes observed on any day

4) If the average opacity for any individual push exceeds 30 percent opacity for any short battery or 35 percent opacity for any tall battery, the permittee must take corrective action and/or increase coking time for that oven. The permittee must complete corrective action or increase coking time within either 10 calendar days or the number of days determined using the following equation, whichever is greater:

$X = 0.55 \times Y$

Where:
X = Number of calendar days allowed to complete corrective action or increase coking time; and
Y = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under this equation, day one is the first day following the day an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery is observed. Any fraction produced by this equation 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.

5) The permittee shall demonstrate that:

i. The corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph V.B.3.d.4) above, observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, the permittee may return the oven to the 90-day reading rotation described in paragraph V.B.3.d.1) above. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and the permittee must complete additional corrective action and/or increase coking time for that oven within the number of days allowed in paragraph V.B.3.d.4) above.

ii. After implementing any additional corrective action and/or increased coking time required under paragraph V.B.3.d.5)i or V.B.3.d.6)i below, the permittee must demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in paragraph V.B.3.d.4) above, the permittee must observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in §63.7334(a). The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, the permittee may return the oven to the 90-day reading rotation described in paragraph V.B.3.d.1) above. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and the permittee must follow the procedures in paragraph V.B.3.d.5)iii below.

iii. If the corrective action and/or increased coking time was unsuccessful as described in paragraphV.B.3.d.5)ii above, the permittee must repeat the procedures in paragraph V.B.3.d.5)ii above until the corrective action and/or increased coking time is successful. The permittee must report to the Department as a deviation each unsuccessful attempt at corrective action and/or increased coking time under paragraph V.B.3.d.5)ii above.

6) If at any time the permittee places an oven on increased coking time as a result of fugitive pushing emissions that exceed 30 percent for a short battery or 35 percent for a tall battery, the oven must be kept on the increased coking time until the oven qualifies for decreased coking time using one of the following procedures:

i. To qualify for a decreased coking time for an oven placed on increased coking time in accordance with condition V.B.3.d.4) or V.B.3.d.5) above, the permittee must operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, the permittee must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, the permittee may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in condition V.B.3.d.1) above. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. The permittee must then return the oven to the previously established increased coking time or implement other corrective action(s) and/or increased coking time. If the permittee implements other corrective action and/or a coking time that is shorter than the previously established increased coking time, the procedures in condition V.B.3.d.5)ii above must be followed to confirm that the corrective action(s) and/or increased coking time was successful.

ii. If the attempt to qualify for decreased coking time was unsuccessful as described in condition V.B.3.d.6)i above, the permittee may again attempt to qualify for decreased coking time for the oven. To do this, the oven must be operated on the decreased coking time. After no more than two coking cycles on the decreased coking time, the permittee must observe and record the opacity of the first two pushes that are capable of being observed using the procedures in V.B.3.r below or §63.7334(a). If the average opacity for each of the two pushes is 30 percent or less for a short battery or 35 percent or less for a tall battery, the permittee may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in condition V.B.3.d.1) above. If the average opacity of either push exceeds 30 percent for a short battery or 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. The permittee must then return the oven to the previously established increased coking time or implement other corrective action(s) and/or increased coking time. If the permittee implements other corrective action and/or a coking time that is shorter than the previously established increased coking time, the procedures in paragraph V.B.3.d.5)ii above must be followed to confirm that the corrective action(s) and/or increased coking time was successful.

iii. The permittee must report to the Department as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in paragraph V.B.3.d.6)ii above

d. As provided in §63.6(g), the permittee may request to use an alternative to the work practice standards in Condition V.B.3.c above. [§2103.12.i; §2102.04.e; §63.7291(b)]

e. The permittee shall prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from coke battery(s). Each plan must address at a minimum the following elements. [§2103.12.i; §2102.04.e; §63.7300(c)]

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). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). In the event a defect or deficiency is found in the capture system (during a monthly inspection or between inspections), the permittee must complete repairs within 30 days after the date that the defect or deficiency is discovered. If it is determined that the repairs cannot be completed within 30 days, the permittee must submit a written request for an extension of time to complete the repairs that must be received by the Department not more than 20 days after the date that the defect or deficiency is discovered. The request must contain a description of the defect or deficiency, the steps needed and taken to correct the problem, the interim steps being taken to mitigate the emissions impact of the defect or deficiency, and a proposed schedule for completing the repairs. The request shall be deemed approved unless and until such time as the Department notifies the permittee that it objects to the request. The Department may consider all relevant factors in deciding whether to approve or deny the request (including feasibility and safety). Each approved schedule must provide for completion of repairs as expeditiously as practicable, and the Department may request modifications to the proposed schedule as part of the approval process.

2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

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 cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to:
   i. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
   ii. Sealing off defective bags or filter media.
   iii. Replacing defective bags or filter media or otherwise repairing the control device.
   iv. Sealing off a defective baghouse compartment.
   v. Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
   vi. Shutting down the process producing the particulate emissions

f. For the PEC system baghouse applied to pushing emissions from a coke oven battery, the permittee shall at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in V.B.3.h below and conduct inspections at their specified frequency according to the following requirements: [§2103.12.i; §2102.04.e; §63.7330(a)]

1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;
2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;
3) Check the compressed air supply for pulse-jet baghouses each day;
4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;
5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;
6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. The permittee does not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;
7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and
8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

g. The permittee shall install, operate, and maintain a bag leak detection system on the PEC system baghouse according to the following requirements: [§2103.12.i; §2102.04.e; §63.7331(a)]

1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;
2) The system must provide output of relative changes in particulate matter loadings;
3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;
4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, ``Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). The permittee may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;
5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;
6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in the operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition; and
7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

h. For each CPMS required in V.B.3.h above, the permittee must develop and make available for inspection upon request by the Department a site-specific monitoring plan that addresses the requirements in Conditions V.B.3.i.1) through V.B.3.i.6) below: [§2103.12.i; §2102.04.e; §63.7331(b)]

1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the

exhaust emissions (e.g., on or downstream of the last control device);
2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;
3) Performance evaluation procedures and acceptance criteria (e.g., calibrations);
4) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), (4)(ii), (7), and (8);
5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

i. The permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. [§2103.12.i; §2102.04.e; §63.7331(c)]

j. The permittee shall operate and maintain each CPMS in continuous operation according to the site-specific monitoring plan. [§2103.12.i; §2102.04.e; §63.7331(d)]

k. If the permittee elects the operating limit in V.B.1.e.1) above for a capture system applied to pushing emissions, the permittee must install, operate, and maintain a device to measure the fan motor amperes. [§2103.12.i; §2102.04.e; §63.7331(h)]

l. If the permittee elects the operating limit in V.B.1.e.2) for a capture system applied to pushing emissions, the permittee must install, operate, and maintain a device to measure the total volumetric flow rate at the inlet of the control device. [§2103.12.i; §2102.04.e; §63.7331(g)]

m. For each capture system applied to pushing emissions, the permittee shall at all times monitor the fan motor amperes according to the requirements in Condition V.B.3.l above or the volumetric flow rate according to the requirements in Condition V.B.3.m above. [§2103.12.i; §2102.04.e; §63.7330(d)]

n. 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 (or collect data at all required intervals) at all times the affected source is operating. [§2103.12.i; §2102.04.e; §63.7332(a)]

o. 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. [§2103.12.i; §2102.04.e; §63.7332(b)]

p. For each capture system applied to pushing emissions and subject to the operating limit in Condition V.B.1.e.1) above, the permittee shall demonstrate continuous compliance by meeting the requirements in Condition V.B.3.q.1) or V.B.3.q.2) below: [§2103.12.i; §2102.04.e; §63.7333(d)]

1) If the permittee elects the operating limit for fan motor amperes in V.B.1.e.1) above:

i. Maintaining the daily average fan motor amperes at or above the minimum level

established during the initial or subsequent performance test; and

ii. Checking the fan motor amperes at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

2) If the permittee elects the operating limit for volumetric flow rate in V.B.1.e.2) above:

i. Maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; and

ii. Checking the volumetric flow rate at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

q. The permittee shall demonstrate continuous compliance with the work practice standards for fugitive pushing emissions according to the following requirements: [§2103.12.i; §2102.04.e; §63.7334(a)]

1) Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except the permittee may make fewer or non-consecutive observations as permitted by Condition V.B.3.d.2) above. Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to Condition V.B.3.d.3) above.

2) Observe and record the opacity of fugitive emissions from each oven in a battery at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in paragraphs V.B.3.r.1) through V.B.3.r.8).

3) Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in Appendix A to 40 CFR Part 60 using a Method 9 certified observer unless there is an approved alternative procedure under V.B.3.r.7) below

4) Record pushing opacity observations at 15-second intervals as required in section 2.4 of Method 9 (Appendix A to 40 CFR Part 60). The requirement in section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in section 2.5 of Method 9 do not apply. The requirement in §63.6(h)(5)(ii) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

5) If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (e.g., as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.

6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower.

i. Observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes

and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences.

ii. The permittee may reposition after the push to observe emissions during travel if necessary.

7) If it is infeasible to implement the procedures in Conditions V.B.3.r.1) through V.B.3.r.6) above for an oven due to physical obstructions, nighttime pushes, or other reasons, the permittee may apply to the Department for permission to use an alternative procedure. The application must provide a detailed explanation of why it is infeasible to use the procedures in Conditions V.B.3.r.1) through V.B.3.r.6), identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

8) For each oven observed that exceeds an opacity of 30 percent for any short battery or 35 percent for any tall battery, the permittee must take corrective action and/or increase the coking time in accordance with Condition V.B.3.c above. Maintain records documenting conformance with Condition V.B.3.c above.

r. To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in V.B.3.h above, the permittee shall inspect and maintain each baghouse according to the requirements in Conditions V.B.3.h.1) through V.B.3.h.7) above and record all information needed to document conformance with these requirements. If the permittee increases or decreases the sensitivity of the bag leak detection system beyond the limits specified in Condition V.B.3.h.6) above, the permittee must include a copy of the required written certification by a responsible official in the next semiannual compliance report. [§2103.12.i; §2102.04.e; §63.7335(c)]

4. Record Keeping Requirements:

a. The results of the inspections required by condition V.B.3.b above shall be recorded weekly along with the differential pressure drop across the baghouse. [§2103.12.j]

b. Episodes of non-compliance with conditions V.B.1.a through V.B.1.g and V.B.3.b above and corrective actions taken shall be recorded upon occurrence. [§2103.12.j]

c. The permittee shall keep records of each baghouse maintenance inspection and repair, replacement or other corrective action. [§2103.12.j]

d. The permittee shall keep the following records: [§2103.12.j; §2102.04.e; §63.7342(a)]

1) A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that is submitted, according to the requirements in §63.10(b)(2)(xiv).
2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

e. For each COMS or CEMS, the permittee shall keep the following records. [§2103.12.j; §2102.04.e; §63.7342(b)]

1) Records described in §63.10(b)(2)(vi) through (xi).
2) Monitoring data for COMS during a performance evaluation as required in §63.6(h)(7)(i) and (ii).
3) Previous (that is, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
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.

f. The permittee shall keep the records in §63.6(h)(6) for visual observations. [§2103.12.j; §2102.04.e; §63.7342(c)]

g. The permittee shall keep the records required in Conditions V.B.3.q through V.B.3.s and V.B.4.k through V.B.4.m below to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement that applies. [§2103.12.j; §2102.04.e; §63.7342(d)]

h. The permittee shall keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§2103.12.j; §2102.04.e; §63.7343(a)]

i. As specified in §63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§2103.12.j; §2102.04.e; §63.7343(b); §2103.12.j]

j. The permittee shall keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). Records may be kept offsite for the remaining 3 years. [§2103.12.j; §2102.04.e; §63.7343(c)]

k. 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 Condition V.B.3.f above by meeting the following requirements: [§2103.12.j; §2102.04.e; §63.7335(b)]

1) Making monthly inspections of capture systems according to Condition V.B.3.f.1) above and recording all information needed to document conformance with these requirements;
2) Performing preventative maintenance for each control device according to Condition V.B.3.f.2) above 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 Condition V.B.3.f.3) above 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 corrective action was initiated, the corrective action(s) taken, and the date on which corrective action is completed.

l. The permittee shall inspect and maintain the pushing emission control baghouse as required in V.B.3.h.1) through V.B.3.h.7) above and record all information needed to document conformance with these requirements. If the permittee increases or decreases the sensitivity of the bag leak detection system beyond the limits specified in V.F.3.h.6) above, a copy of the required written certification by a responsible official must be included in the next semiannual compliance report. [§2103.12.j; 63.7335(c)]

m. 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 plans shall be kept for the life of the affected source or until the affected source is no longer subject to the requirements of 40 CFR Part 63, Subpart CCCCC. [§2103.12.j; 63.7335(d)]

n. All records required under this section shall be maintained by the permittee for a period of five years following the date of such record. [§2103.12.j.2]

5. Reporting Requirements:

a. The permittee shall report all instances of non-compliance with conditions V.B.1.a through V.B.1.g, V.B.3.a and V.B.3.b above, and V.B.4.a through V.B.4.c above along with all corrective action taken to restore the subject equipment to compliance, to the Department every six months. [§2103.12.k]

b. Reporting instances of non-compliance in accordance with condition V.B.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with IV.8 above, if appropriate. [§2103.12.k]

c. No later than twenty (20) days after the end of each month, a written report of a summary of the following during each such month shall be submitted to the Department: [§2103.12.k; §2109.03 and Enforcement Order 202.E, 3/28/90]

1) For each individual coke battery or group of batteries served by the same push emission control system, and for all coke batteries combined:

i. The total number of pushes for the month;

ii. The total number of controlled pushes for the month; and the monthly percentage availability (on-line time) of the pushing control system, based on the total number of pushes and total number of controlled pushes.

2) For each outage of the pushing control system at each individual coke battery or group of batteries served by the same pushing emission control system:

i. The batteries affected;
ii. The starting and ending dates and times;
iii. The total time of each outage, to the nearest tenth of an hour;
iv. The corresponding Department Breakdown Number; and the reason(s) or cause(s) for the outage.

d. The permittee shall report each instance in which each emission limitation in Conditions V.B.1.d above, V.B.1.e and V.B.1.f was not met. This includes periods of startup, shutdown, and malfunction. The permittee shall also report each instance in which the permittee did not meet each work practice standard or operation and maintenance requirement in Conditions V.B.6.a, V.B.6.b and V.B.6.c. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements of 40 CFR Part 63, Subpart CCCCC. These deviations must be reported according to the requirements in V.B.5.h through V.B.5.k below. [§2103.12.k; §2102.04.e; §63.7336(a)]

e. During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the startup, shutdown, and malfunction plan. [§2103.12.k; §2102.04.e; §63.7336(b)]

1) Consistent with §63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Department's satisfaction that operations were in accordance with the startup, shutdown, and malfunction plan.
2) The Department will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

f. The permittee shall submit all of the notifications in §63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e) and (f)(4), and 63.9(b) through (h) that apply by the specified dates. [§2103.12.k; §2102.04.e; §63.7340(a)]

g. The permittee shall submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1). [§2103.12.k; §2102.04.e; §63.7340(d)]

h. The permittee shall submit semiannual compliance reports for the PEC stacks to the Department according to the requirements in General Condition III.15 above. [§2103.12.k; §2102.04.e; §63.7341(a)]

i. Each semiannual compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in V.B.5.i.1) through V.B.5.i.3) below, and as applicable, Conditions V.B.5.i.4) through V.B.5.i.8) below. [§2103.12.k; §2102.04.e; §63.7341(c)]

1) Company name and address.
2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
3) Date of report and beginning and ending dates of the reporting period.
4) If there was a startup, shutdown, or malfunction during the reporting period and the permittee took actions consistent with the startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).
5) If there were no deviations from the continuous compliance requirements in Conditions V.B.3.q through V.B.3.s above and V.B.4.k through V.B.4.m above, a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.
6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.
7) For each deviation from an emission limitation in 40 CFR 63, Subpart CCCCC and for each deviation from the requirements for work practice standards in this 40 CFR Part 63, Subpart CCCCC that occurs at an affected source where the permittee is not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in this subpart, the compliance report must contain the information in Conditions V.B.5.i.4), V.B.5.i.7)i and V.B.5.i.7)ii below. This includes periods of startup, shutdown, and malfunction.

i. The total operating time of each affected source during the reporting period.
ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

8) For each deviation from an emission limitation occurring at an affected source where the permittee is using a continuous monitoring system (including COMS, CEMS, or CPMS) to comply with the emission limitation 40 CFR 63, Subpart CCCCC, the permittee must include the information in Conditions V.B.5.i.4), V.B.5.i.8)i through V.B.5.i.8)xii below. This includes periods of startup, shutdown, and malfunction.

i. The date and time that each malfunction started and stopped.
ii. The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.
iii. The date, time, and duration that each continuous monitoring system (including COMS, CEMS, or CPMS) was out-of-control, including the information in §63.8(c)(8).
iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
v. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
vii. A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.
viii. An identification of each HAP that was monitored at the affected source.
ix. A brief description of the process units.
x. A brief description of the continuous monitoring system.
xi. The date of the latest continuous monitoring system certification or audit.
xii. A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

j. If there is a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with the startup, shutdown, and malfunction plan, the permittee must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii) [§2102.04.e; §63.7341(d)]

k. If the permittee submits a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emission limitation or work practice standard in 40 CFR Part 63, Subpart CCCCC, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation to report deviations from permit requirements to the Department. [§2102.04.e; §63.7341(e)]

l. Reporting instances of non-compliance does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. [§2102.04.e]

6. Work Practice Standard:

a. The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions in 40 CFR 63, Subpart A, §63.6(e)(3). [§2102.04.e; §63.7310(c)].

b. As required by §63.6(e)(1)(i), the permittee shall operate and maintain each coke battery including 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 40 CFR Part 63, Subpart CCCCC. [§2102.04.e; §63.7300(a)]

c. The permittee shall be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements of 40 CFR 63, Subpart CCCCC at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2. [§2102.04.e; §63.7310(a)]

7. Additional Requirements:

None, except as provided elsewhere.

VI. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios exist for this Installation.

VII. EMISSIONS LIMITATIONS SUMMARY

The annual emissions of particulate matter from Batteries 13-15 and 19-20 PEC Baghouse System shall not exceed the following at any time:

TABLE VII-1: Emission Limitations Summary

POLLUTANT	ANNUAL EMISSION LIMIT (tons/year)*
Particulate Matter (filterable)	14.3
Particulate Matter <10 μm (PM_{10})	14.3

*** A year is defined as any consecutive 12-month period.**