

# 65-00853



# COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

# TITLE V/STATE OPERATING PERMIT

Issue Date: January 30, 2014 Effective Date: January 30, 2014

Expiration Date: January 30, 2019

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

# TITLE V Permit No: 65-00853

Federal Tax Id - Plant Code: 25-1850170-1

Owner Information			
Name: ARCELORMITTAL MONESSEN LLC			
Mailing Address: 345 DONNER AVE			
MONESSEN, PA 15062			
Plant Information			
Plant information	OII		
Plant: ARCELORMITTAL MONESSEN LLC/MONESSEN COKE PL	LT		
Location: 65 Westmoreland County	65006 Monessen City		
SIC Code: 3312 Manufacturing - Blast Furnaces And Steel Mills			
Responsible Official			
Name: PAUL CHAMPAGNE			
Title: PLANT MANAGER			
Phone: (724) 684 - 1005			
Permit Contact Per	erson		
Name: GREGORY SHAMITKO			
Title: MGR OF ENV AFFAIRS			
Phone: (724) 684 - 1009			
[Signature]			
MARK A. WAYNER, SOUTHWEST REGION AIR PROGRAM MANAGER			





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Note: These same sub-sections are repeated for each source!





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# **SECTION A.** Site Inventory List

Source II	Source Name	Capacity/Throughput	Fuel/Material
032	TWO TAMPELLA BOILERS	286.000 MMBTU/HR	
110	COAL AND COKE HANDLING SYSTEMS		
111	COKE BY-PRODUCT RECOVERY PLT		
112	TAR AND LIGHT OIL LOADING		
114	PLANT ROADS		
125	900-BHP EMERGENCY DIESEL ENGINE		
801	COKE BATTERIES -CHARGING		
802	COKE BATTERIES -PUSHING		
803	COKE BATTERIES -QUENCHING		
805	COKE BATTERIES -COMBUST STK		
806	COKE BATTERIES -DOOR LEAK		
807	COKE BATTERIES -TOPSIDE		
808	COKE BATTERIES -SOAKING		
809	EXCESS COG FLARE		
810	MATERIAL HANDLING		
CD1	MINISTER-STEIN PUSHING EMISSIONS CONTROL SYSTEM (PECS)		
CO4	DESULFURIZATION PLANT		
CO5	COKE PUSHING BAGHOUSE		
CO6	BENZENE NESHAPS CONTROL SYSTEM		

# **PERMIT MAPS**







#001 [25 Pa. Code § 121.1]

**Definitions** 

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.512(c)(4)]

**Property Rights** 

This permit does not convey property rights of any sort, or any exclusive privileges.

#003 [25 Pa. Code § 127.446(a) and (c)]

**Permit Expiration** 

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#004 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]

#### **Permit Renewal**

- (a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.
- (b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.
- (c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).
- (d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#005 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

## **Transfer of Ownership or Operational Control**

- (a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:
  - (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,
- (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.

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(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

# #006 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA] Inspection and Entry

- (a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
  - (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.
- (b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.
- (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

## #007 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]

# **Compliance Requirements**

- (a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:
  - (1) Enforcement action
  - (2) Permit termination, revocation and reissuance or modification
  - (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

## #008 [25 Pa. Code § 127.512(c)(2)]

# Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.







# #009 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

# **Duty to Provide Information**

- (a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.
- (b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

# #010 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

#### Reopening and Revising the Title V Permit for Cause

- (a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.
- (b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:
- (1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.
- (2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.
- (3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- (4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.
- (d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

# #011 [25 Pa. Code § 127.543]

#### Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

# #012 [25 Pa. Code § 127.541]

## **Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541.







## #013 [25 Pa. Code §§ 121.1 & 127.462]

## **Minor Operating Permit Modifications**

- (a) The permittee may make minor operating permit modifications (as defined in 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.
- (b) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to an operational flexibility change authorized by 25 Pa. Code § 127.462.

#### #014 [25 Pa. Code § 127.450]

## **Administrative Operating Permit Amendments**

- (a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code § 127.450(a), according to procedures specified in § 127.450. Administrative amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations thereunder from being processed as an administrative amendment.
- (b) Upon taking final action granting a request for an administrative permit amendment in accordance with § 127.450(c), the Department will allow coverage under 25 Pa. Code § 127.516 (relating to permit shield) for administrative permit amendments which meet the relevant requirements of 25 Pa. Code Article III, unless precluded by the Clean Air Act or the regulations thereunder.

# #015 [25 Pa. Code § 127.512(b)]

#### **Severability Clause**

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

## #016 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

#### **Fee Payment**

- (a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).
- (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.
- (c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.
- (d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).
- (e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.
- (f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).





## #017 [25 Pa. Code §§ 127.14(b) & 127.449]

#### **Authorization for De Minimis Emission Increases**

- (a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:
  - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

- (b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:
- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
  - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
  - (4) Space heaters which heat by direct heat transfer.
  - (5) Laboratory equipment used exclusively for chemical or physical analysis.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more

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of the following:

- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.
- (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
- (3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.
- (e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) applies to de minimis emission increases and the installation of minor sources made pursuant to this permit condition.
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#### #018 [25 Pa. Code §§ 127.11a & 127.215]

## **Reactivation of Sources**

- (a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#### #019 [25 Pa. Code §§ 121.9 & 127.216]

#### Circumvention

- (a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

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# **SECTION B.** General Title V Requirements

## #020 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

#### **Submissions**

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the permit transmittal letter, or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Office of Air Enforcement and Compliance Assistance (3AP20)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

# #021 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

# **Sampling, Testing and Monitoring Procedures**

- (a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

# #022 [25 Pa. Code §§ 127.511 & Chapter 135]

## **Recordkeeping Requirements**

- (a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:
  - (1) The date, place (as defined in the permit) and time of sampling or measurements.
  - (2) The dates the analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of the analyses.
  - (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.







(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#### #023 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

#### **Reporting Requirements**

- (a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.
- (b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.
- (c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #020(c) of this permit.
- (d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#### #024 [25 Pa. Code § 127.513]

## **Compliance Certification**

- (a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:
  - (1) The identification of each term or condition of the permit that is the basis of the certification.
  - (2) The compliance status.
  - (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
  - (4) Whether compliance was continuous or intermittent.
- (b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #020 of this section.

#### #025 [25 Pa. Code § 127.3]

# **Operational Flexibility**

(a) The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:







- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit amendments)
- (7) Subchapter H (relating to general plan approvals and operating permits)
- (b) Unless precluded by the Clean Air Act or the regulations adopted thereunder, the permit shield authorized under 25 Pa. Code § 127.516 shall extend to operational flexibility changes made at this Title V facility pursuant to this permit condition and other applicable operational flexibility terms and conditions of this permit.

### #026 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]

## **Risk Management**

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:
  - (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
  - (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
  - (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.
- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation

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of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
  - (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.
- (2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #24 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

# #027 [25 Pa. Code § 127.512(e)]

# **Approved Economic Incentives and Emission Trading Programs**

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

# #028 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]

#### **Permit Shield**

- (a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:
  - (1) The applicable requirements are included and are specifically identified in this permit.
- (2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.
- (b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
  - (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
  - (4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.
- (c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department on minor or significant permit modifications, and operational flexibility changes shall be covered by the permit shield. Upon taking final action granting a request for an administrative permit amendment, the Department will allow coverage of the amendment by the permit shield in § 127.516 for administrative amendments which meet the relevant requirements of 25 Pa. Code Article III.
- (d) The permit shield authorized under § 127.516 is in effect for the permit terms and conditions in this Title V permit, including administrative operating permit amendments and minor operating permit modifications.







#### I. RESTRICTIONS.

## **Emission Restriction(s).**

#### # 001 [25 Pa. Code §121.7]

#### Prohibition of air pollution.

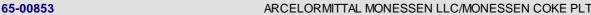
No person may permit air pollution as that term is defined in the act.

#### [25 Pa. Code §123.1]

#### Prohibition of certain fugitive emissions

- (a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:
  - (1) Construction or demolition of buildings or structures.
  - (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
  - (4) Clearing of land.
  - (5) Stockpiling of materials.
  - (6) Open burning operations.
  - (7) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.
- (8) Coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in § § 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations).
- (9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
  - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.
- (b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.
- (c) A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:
- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.







- (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.
- (d) The requirements contained in subsection (a) and 123.2 do not apply to fugitive emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

#### # 003 [25 Pa. Code §123.11]

#### **Combustion units**

- (a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:
  - (1) Not applicable.
  - (2) The rate determined by the following formula:

 $A = 3.6E^{(-0.56)}$ 

where

A = Allowable emissions in pounds per million BTUs of heat input,

E = Heat input to the combustion unit in millions of BTUs per hour,

when E is equal to or greater than 50 but less than 600.

- (3) Not applicable.
- (b) Allowable emissions under subsection (a) are graphically indicated in Appendix A of 25 Pa. Code Chapter 123.

#### [25 Pa. Code §123.11] # 004

#### **Combustion units**

As determined by the formula in 25 Pa. Code 123.11(a)(2) for calculating the allowable particulate emissions rate for combustion units with heat input capacity equal to or greater than 50 MMBtu/hr but less than 600 MMBtu/hr, the particulate emissions rate for the two Tampella Boilers, with rated heat input of 286 MMBtu/hr combined, shall not at any time exceed 0.15 lb/MMBtu.

#### # 005 [25 Pa. Code §123.13]

#### **Processes**

- a. In accordance with 25 Pa. Code §123.13(c)(1)(i), the Owner or Operator may not permit the emission into the outdoor atmosphere of particulate matter from each coke battery combustion stacks in excess of 0.04 grains per dry standard cubic foot (gr/dscf).
- b. In accordance with 25 Pa. Code §123.13(b), the Owner or Operator may not permit the emission into the outdoor atmosphere of particulate matter from the any byproduct coke production pushing operation or byproduct coke production pushing operation control device stack in excess of the following, whichever is greater:
  - 1. 0.02 grains per dry standard cubic foot (gr/dscf), or;
  - 2. The rate calculated by the following formula:

 $A = 0.76E^{1}0.42$ 

Where:

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A = Allowable emissions in pounds per hour.

E = Emission index = F X W pounds per hour.

F = Process factor in pounds per unit = 1 pound per ton of coke pushed, and

W = Production rate in units per hour (tons of coke pushed per hour)

#### # 006 [25 Pa. Code §123.31]

#### Limitations

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated. A malodor is defined in 25 Pa. Code 121.1 as "an odor which causes annoyance or discomfort to the public and which the Department determines to be objectionable to the public."

## # 007 [25 Pa. Code §123.41]

#### Limitations

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

#### # 008 [25 Pa. Code §123.42]

#### **Exceptions**

The limitations of 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).
- (4) When arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

#### # 009 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

This facility is classified as an area source of Hazardous Air Pollutants (HAPs) and as such, potential or actual emisisons, in the aggregate, may not equal or exceed either 10 tons of any hazardous air pollutant in any consecutive 12-month period, including any fugitive emissions of the pollutant, or 25 tons of a combination of the hazardous air pollutants in any consecutive 12-month period, including any fugitive emissions of the pollutants.

# Fuel Restriction(s).

#### # 010 [25 Pa. Code §123.23]

#### Byproduct coke oven gas

- a. No person may permit the emission of byproduct coke oven gas into the outdoor atmosphere unless the gas is first burned.
- b. No person may permit the flaring or combustion of a coke oven byproduct gas which contains sulfur compounds, expressed as equivalent hydrogen sulfide, in concentrations greater than 50 grains per 100 dry standard cubic feet. The sulfur compounds, expressed as equivalent hydrogen sulfide, emitted into the outdoor atmosphere from any tail gas sulfur recovery equipment utilized in a coke oven gas desulfurization system approved by the Department shall be included in the determination of these concentrations.





- c. Subsections (a) and (b) do not apply to emissions of coke oven gas from:
  - 1. An oven which is dampered off:
    - i. Prior to and during the pushing operation of the oven.
    - ii. Because of some malfunction associated with the oven.
  - 2. Unavoidable oven leakage occurring during the coking cycle.
- d. Sections 129.12 and 129.13 (relating to sulfuric acid plants; and sulfur recovery plants) may not be applicable to processes operated in conjunction with the desulfurization of byproduct coke oven gas, provided that the standards in this section have been complied with.

#### # 011 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- (a) The owner or operator may not permit the flaring or combustion of a coke oven byproduct gas which contains sulfur compounds, expressed as equivalent hydrogen sulfide, in concentrations greater than 45 grains per 100 dry standard cubic feet. The sulfur compounds, expressed as equivalent hydrogen sulfide, emitted into the outdoor atmosphere from any tail gas sulfur recovery equipment utilized in a coke oven gas desulfurization system approved by the Department shall be included in the determination of these concentrations.
- (b) Compliance with the sulfur compound limitation in part (a) of this condition demonstrates compliance with the less stringent sulfur compound limitation of 25 Pa. Code §123.23(b) contained in Condition #010(b).

## II. TESTING REQUIREMENTS.

## # 012 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

- a. The owner/operator shall provide two copies of the stack test results no later than 60 days after the completion of testing unless otherwise approved by the Department in writing.
- b. The owner/operator shall notify the Department of the date and time of any source testing at least two weeks prior to the scheduled test day such that an observer may be present.
- c. All stack testing shall be performed in accordance with 25 Pa. Code Chapter 139 and the Department's Source Testing Manual.
- d. A pre-test protocol shall be submitted to the Department for review and approval no less than 60 days prior to the scheduled test day.
- e. Visible emission observations shall be performed concurrently with any required stack testing.

#### # 013 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Compliance with the emission limits specified in this operating permit shall be established through stack testing within 180 days after reactivation of the coke plant and additionally at the specified intervals, as follows:

- a. Boiler stack emissions shall be tested annually for NOx and VOC. Boiler stack emissions shall also be tested at least once every five (5) years for CO and total PM (as defined in the Department's Source Testing Manual, Version 3.3).
- b. Stack emissions from coke battery 1B and 2 underfire stacks shall be tested annually for NOx and VOC. Coke battery 1B and 2 underfire stacks shall be tested for CO and total PM (as defined in the Department's Source Testing Manual, Version 3.3) at least once every five (5) years.







- c. The pushing emisisons control system (PECS) baghouse stack shall be tested annualy for total PM (as defined in the Department's Source Testing Manual, Version 3.3). If annual testing indicates that total PM emissions are less than 90% of the applicable limit, testing may be conducted once every two and one-half (2.5) years.
  - d. The boiler stack and coke battery 1B and 2 underfire stacks shall be tested to determine benzene emission rate(s).

#### III. MONITORING REQUIREMENTS.

## # 014 [25 Pa. Code §123.43]

#### Measuring techniques

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

## # 015 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

- a. The owner/operator shall install, operate, and maintain a Continuous H2S Monitoring Device to measure and quantify sulfur compound concentrations, expressed as equivalent hydrogen sulfide (H2S), in the desulfurized byproduct coke oven gas (COG) at this facility.
- b. The Continuous H2S Monitoring Device must meet and be operated in accordance with all applicable requirements of 40 CFR Part 60 Appendix B, Performance Specification 7, and applicable portions of the Department's Continuous Source Monitoring Manual, Revision 8.
- c. Compliance with the desulfurized COG sulfur compound concentration limitation of 45 grains per 100 dry standard cubic feet shall be determined using a 24-hr block average.
- d. During the phased approval of the Continuous H2S Monitor and periods of Continuous H2S Monitor downtime, compliance with the above referenced sulfur compound concentration limitation shall be established through daily desulfurized COG sampling and lab analysis using the Tutwiler Method (UOP Method 9-59, as detailed in 40 CFR §60.648 and at 72 FR 6320, 6330 (April 13, 2007) and 72 FR 32710 (June 13, 2007)) or other analytical method as approved in writing by the Department.
- e. The continuous H2S monitoring device, or source specific stack testing performed in accordance with Chapter 139, may be used to indicate compliance with the COG sulfur compound concentration standard of 25 Pa. Code §123.23(b).

# IV. RECORDKEEPING REQUIREMENTS.

# # 016 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The owner/operator shall measure (or calculate) and record the daily volume of byproduct coke oven gas (COG):

- a. Produced at this facility, and
- b. Combusted in the boilers, coke oven battery underfires, and flares.

## # 017 [25 Pa. Code §127.441]

### Operating permit terms and conditions.

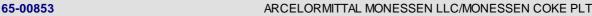
The owner or operator shall maintain records of all maintenance conducted on each source and control device at this facility to demonstrate that each is operated and maintained in accordance with good air pollution control practices and the requirements of 25 Pa. Code §127.444.

# 018 [25 Pa. Code §129.95]

Recordkeeping

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- (a) The owner and operator of a major NOx emitting facility or a major VOCs emitting facility shall keep records to demonstrate compliance with 129.91 -- 129.94.
- (b) The records shall provide sufficient data and calculations to clearly demonstrate that the requirements of 129.91 --129.94 are met.
- (c) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.
  - (d) The records shall be retained for at least 2 years and shall be made available to the Department on request.
- (e) An owner or operator claiming that a facility is exempt from the RACT requirements of 129.91 -- 129.94, based on the facility's potential to emit, shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to 129.91 -- 129.94.

#### # 019 [25 Pa. Code §135.5]

#### Recordkeeping

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with § § 135.3 and 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

# REPORTING REQUIREMENTS.

# [25 Pa. Code §127.441]

# Operating permit terms and conditions.

- (a) The owner or operator shall report each malfunction to the Department that occurs at this Title V facility. For purposes of this condition a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment or a process to operate in a normal or usual manner that may result in an increase in air emissions.
- (b) When the malfunction poses an imminent and substantial danger to the public health and safety or harm to the environment, the notification shall be submitted to the Department no later than on hour after the incident.
  - (1) The notice shall describe the:
    - (i) name and location of the facility;
    - (ii) nature and cause of the malfunction or breakdown;
    - (iii) time when the malfunction or breakdown was first observed;
    - (iv) expected duration of excess emissions; and
    - (v) estimated rate of emissions.
  - (2) The owner or operator shall notify the Department immediately when corrective measures have been accomplished.
- (3) Subsequent to the malfunction, the owner/operator shall submit a full report on the malfunction to the Department within 15 days, if requested.
- (4) The owner or operator shall submit reports on the operation and maintenance of the source to the Regional Air Program Manager at such intervals and in such form and detail as may be required by the Department. Information required in the reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and maintenance schedules.
- (c) Malfunction shall be reported to the Department at the following address:

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PADEP Office of Air Quality 400 Waterfront Drive Pittsburgh, PA 15222-4745 (412)442-4000

## # 021 [25 Pa. Code §135.3]

## Reporting

- (a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the proceeding calendar year and sources modified during the same period which were not previously reported.
- (b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.
- (c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

#### VI. WORK PRACTICE REQUIREMENTS.

# # 022 [25 Pa. Code §127.444]

# Compliance requirements.

A person may not cause or permit the operation of a source subject to this article unless the source and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the application and conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 023 [25 Pa. Code §127.11a]

#### Reactivation of sources.

- (a) Except as provided by 127.215 (relating to reactivation), a source which has been out of operation or production for at least 1 year but less than or equal to 5 years may be reactivated and will not be considered a new source if the following conditions are satisfied:
- (1) The owner or operator shall, within 1 year of the deactivation submit to the Department and implement a maintenance plan which includes the measures to be taken, including maintenance, upkeep, repair or rehabilitation procedures, which will enable the source to be reactivated in accordance with the terms of the permit issued to the source.
- (2) The owner or operator shall submit a reactivation plan to the Department for approval at least 60 days prior to the proposed date of reactivation. The reactivation plan shall include sufficient measures to ensure that the source will be reactivated in compliance with the permit requirements. The permittee may submit a reactivation plan to the Department at any time during the term of its operating permit. The reactivation plan may also be submitted to and reviewed by the Department as part of the plan approval or permit application or renewal process.
- (3) The owner or operator of the source shall submit a notice to the Department within 1 year of deactivation requesting preservation of emissions in the inventory and indicating the intent to reactivate the source.
- (4) The owner or operator of the source shall comply with the terms and conditions of the maintenance plan while the source is deactivated, and shall comply with the terms of the reactivation plan and operating permit upon reactivation.
  - (5) The owner or operator of the source with an approved reactivation plan and operating permit shall notify the



Department in writing at least 30 days prior to reactivation of the source.

- (b) A source which has been out of operation or production for more than 5 years but less than 10 years may be reactivated and will not be considered a new source if the following conditions are satisfied:
  - (1) The owner or operator of the source complies with the requirements of subsection (a).
- (2) The owner or operator of the source obtains a plan approval and operating permit which requires that the emission of air contaminants from the source will be controlled to the maximum extent, consistent with the best available technology as determined by the Department as of the date of reactivation.
- (c) A source which has been out of operation for 10 or more years shall meet the requirements of this chapter applicable to a new source.
- (d) Other provisions of this section to the contrary notwithstanding, a source that is out of production or operation on November 26, 1994, shall have 1 year to demonstrate compliance with the requirements of subsection (a)(1), (3) and (4).
- (e) A source located in a nonattainment area that would emit an air contaminant related to the nonattainment designation or a source that would emit NOx or VOC emissions may not be reactivated unless the proposed emissions are included in the SIP emission inventory or until the proposed emissions of these contaminants from the source are submitted to and approved by the EPA as an amendment of the SIP. The Department may refuse to allow reactivation of such a source for cause.
- (f) The source shall have an operating permit prior to reactivation.

# # 024 [25 Pa. Code §127.215]

#### Reactivation.

- (a) A facility which has been out of operation or production for 1 year or more during the term of its operating permit may be reactivated within the term of its operating permit and will not be considered a new facility subject to this subchapter if the following conditions are satisfied:
- (1) The permittee shall within 1 year of the deactivation submit in writing to the Department and implement a maintenance plan which includes the measures to be taken, including maintenance, upkeep, repair or rehabilitation procedures, which will enable the facility to be reactivated in accordance with the terms of the permit.
- (2) The permittee shall submit a reactivation plan at least 30 days prior to the proposed date of reactivation. The reactivation plan shall include sufficient measures to ensure that the facility will be reactivated in compliance with the permit requirements. The permittee may submit a reactivation plan to the Department at any time during the term of its operating permit. The reactivation plan may also be submitted to and approved in writing by the Department as part of the plan approval or permit application process.
- (3) The permittee shall notify the Department in writing within 1 year of deactivation requesting preservation of the emissions in the inventory and indicating the intent to reactivate the facility.
  - (4) The permittee shall comply with the terms and conditions of the following:
  - (i) Maintenance plan while the facility is deactivated.
  - (ii) Reactivation plan and the operating permit upon reactivation.
- (5) The permittee with an approved reactivation plan shall notify the Department in writing at least 30 days prior to reactivation of the facility.
- (b) The Department will approve or disapprove in writing the complete reactivation plan within 30 days of plan submission, unless additional time is required based on the size or complexity of the facility.







(c) For a facility which is deactivated in accordance with subsection (a), ERCs may be created only if an ERC registry application is filed within 2 years of deactivation.

#### # 025 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Note: The following conditions are numbered to coinside with RACT Operating Permit 65-000-853.]

- 5. Reasonably Achievable Control Technology (RACT) Operating Permit 65-000-853 applies to NOx and VOC sources at the Monessen Coke Plant and imposes the following conditions to meet the RACT provisions of 25 Pa. Code Chapter 129.
- 6. In accordance with 25 Pa. Code § 127.444, all sources and air cleaning devices shall be operated and maintained in accordance with good air pollution control practices.
- 7. Pursuant to 25 Pa. Code § 127.444, all sources and air cleaning devices shall be operated and maintained in accordance with the manufacturer's specifications, guidelines and procedures.
- 8. Pursuant to 25 Pa. Code § 127.441, the NOx potential to emit for each of the listed sources in any 12 consecutive month period is established as follows:

Source Tons Per Year (TPY) Coke Battery Combustion Stacks Battery 1B 357.0 Battery 2 260.2 31.7 Flare 4.8 Coke Pushing Coke Quenching 0.0 Coal Charging 0.7 Boilers 112.1

9. Pursuant to 25 Pa. Code § 127.441, the VOC potential to emit for each of the listed sources in any 12 consecutive month period is established as follows:

Source Coke Battery Combustion Stacks Battery 1B 21.9 Battery 2 28.9 Flare 27.6 **Boilers** 2.7 Coal Charging 36.2 Coke Pushing 0.6 Coke Quenching 5.4 Miscellaneous Sources 0.5 **Fuaitives** 8.14 Coke By-Products Plant

10. Pursuant to 25 Pa. Code § 127.441, the short-term allowable NOx emission limit for each of the listed sources is established as follows:

Source Pounds Per Hour

Coke Battery Combustion Stacks Battery 1B 81.5 Battery 2 59.4

11. Pursuant to 25 Pa. Code § 127.441, the short-term allowable VOC emission limit for each of the listed sources is







established as follows:

Source Pounds Per Hour

Coke Battery Combustion Stacks

Battery 1B 5.0 Battery 2 6.6

- 12. The owner/operator of this source shall verify compliance with the short-term VOC and NOx emission limits established herein for the coke battery combustion stacks by stack testing at the intervals established in the Title V Operating Permit issued for this site. Testing shall be conducted in accordance with 25 Pa. Code Chapter 139 and the Department's Source Testing Manual. Testing shall be conducted while sources are operating at routine operating conditions.
- a. Pursuant to 25 Pa. Code § 139.3, at least 45 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- b. Pursuant to 25 Pa. Code § 139.3, at least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- c. Pursuant to 25 Pa. Code § 139.53(a)(3), within 15 calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Division of Source Testing and Monitoring indicating the completion date of the on-site testing.
- d. Complete test report shall be submitted to the Department no later than 60 calendar days after completion of the onsite testing portion of an emission test program.
- e. Pursuant to 25 Pa. Code § 139.53(b), a complete test report shall include a summary of the emission results on the first page of the report indicating whether each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- i. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
  - ii. Permit number(s) and condition(s) which are the basis for the evaluation.
  - iii. Summary of results with respect to each applicable permit condition.
  - iv. Statement of compliance or non-compliance with each applicable permit condition.
- f. Pursuant to 25 Pa. Code § 139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- g. All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- h. Pursuant to 25 Pa. Code §§ 139.53(a)(1) and 139.53(a)(3), all submittals, besides notifications, shall be accomplished through PSIMS\*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp when it becomes available. If internet submittal cannot be accomplished, three copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks.
- 13. Emission reductions of the targeted contaminants below the level specified in this approval which are achieved by optimizing the effectiveness of equipment are not surplus emission reductions, and shall not be used to generate emission reduction credits. In order for the emission reductions to be creditable, the emission reductions must satisfy the requirements of 25 Pa. Code Chapter 127, Subchapter E.







- 14. In accordance with 25 Pa. Code § 129.95, the owner and operator of this facility shall keep records to demonstrate compliance with the limits specified in this permit. The records shall provide sufficient data and calculations to clearly demonstrate compliance with the requirements of RACT Operating Permit 65-000-853. Data and information required to determine compliance shall be recorded and maintained in a time frame consistent with averaging periods to verify compliance. These records shall be retained for at least two years and made available to the Department upon request.
- 15. The expiration date shown on the RACT Operating Permit is for state purposes only. For federal enforcement purposes, the provisions of RACT Operating Permit 65-000-853 shall remain in effect as part of the State Implementation Plan (SIP), until replaced pursuant to 40 CFR 51, and approved by the U.S. Environmental Protection Agency (EPA).

## # 026 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

- a. The Coke Byproduct Recovery Plant at this facility is subject to applicable requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) under 40 CFR Part 61 Subpart L "NATIONAL EMISSION STANDARD FOR BENZENE EMISSIONS FROM COKE BY-PRODUCT RECOVERY PLANTS", 40 CFR Part 61 Subpart V "NATIONAL EMISSION STANDARD FOR EQUIPMENT LEAKS (FUGITIVE EMISSION SOURCES)", and 40 CFR Part 61 Subpart FF "NATIONAL EMISSION STANDARD FOR BENZENE WASTE OPERATIONS".
- b. The Coke Batteries at this facility are subject to applicable requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) under 40 CFR Part 63 Subpart L "NATIONAL EMISSION STANDARDS FOR COKE OVEN BATTERIES".
- c. The two (2) Coke Oven Gas Boilers at this facility are subject to applicable requirements of the New Source Performance Standards (NSPS) under 40 CFR Part 60 Subpart Db "STANDARDS OF PERFORMANCE FOR INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS".

# # 027 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

The corrected RACT limits have been included in the revised RACT Operating Permit that will be submitted to U.S. EPA for incorporation into the SIP. Until U.S. EPA revises the SIP, the 1998 RACT limits remain applicable requirements. Compliance with the 1998 RACT limits will be demonstrated by compliance with the following milestones:

- a. The owner/operator shall demonstrate compliance with the corrected RACT limits set forth (above) in accordance with the terms of this permit.
- b. Within 30 days after the end of each semi-annual reporting period during which the corrected RACT limits have not been approved by EPA for incorporation into the SIP, the owner/operator shall submit a written report to DEP identifying the status of U.S. EPA's SIP approval process for the revised RACT limits. Further, the owner/operator shall promptly provide any information requested by U.S. EPA to facilitate federal review of the proposed SIP revision.

#### VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to Title V General Requirements).

#### IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

# \*\*\* Permit Shield In Effect \*\*\*



65-00853



# SECTION D. Source Level Requirements

Source ID: 032 Source Name: TWO TAMPELLA BOILERS

Source Capacity/Throughput: 286.000 MMBTU/HR

#### I. RESTRICTIONS.

## **Emission Restriction(s).**

#### # 001 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

- a. The SOx emissions (as SO2) as measured in the combined boiler exhaust stack shall not exceed 63 pounds per hour (lbs/hr) or 275 tons per year (tpy).
- b. The VOC emissions from the combined boiler stack shall not exceed 2.7 tons per year (TPY).
- c. The NOx emissions from the combined boiler stack shall not exceed 112.1 tons per year (TPY).
- d. The NOx (as NO2) emissions rate as measured in the boiler exhaust stack shall not exceed 0.5 pounds NOx (as NO2) per million BTU heat input (lbs NOx/MMBtu) when buring Coke Oven Gas. [40 CFR 60.44b]
- e. The NOx (as NO2) emissions rate as measured in the boiler exhaust stack shall not exceed 0.1 pounds NOx (as NO2) per million BTU heat input (lbs NOx/MMBtu) when buring Natural Gas. [40 CFR 60.44b]
- f. The NOx (as NO2) emissions rate as measured in the boiler exhaust stack shall not exceed the rate in pounds NOx (as NO2) per million BTU heat input (lbs NOx/MMBtu) when burning any mixture of Coke Oven Gas and Natural Gas as determined using the procedure in 40 CFR 60.44b(b). [40 CFR 60.44b]

## # 002 [25 Pa. Code §127.441]

## Operating permit terms and conditions.

- a. In lieu of meeting the requirements of 40 CFR §60.48b(g)(1), the owner or operator of the 40 CFR Part 60 Subpart Db affected facilities has elected to and shall, pursuant to 40 CFR §60.48b(g)(2), monitor steam generating unit operating conditions and predict NOx emission rates as specified in a plan ("NOx Monitoring Plan") submitted pursuant to §60.49b(c) to demonstrate continuous compliance with the applicable NOx emissions limitations specified in 40 CFR §60.44b.
- b. The approved NOx Monitoring Plan was received by the Department on February 2, 2010, and is incorporated herein by reference.
- c. All revisions to the NOx Monitoring Plan must be approved in writing by the Department prior to implementation.
- d. For the NOx Monitoring Plan, a Relative Accuarcy Test Audit (RATA)--in accordance with 40 CFR Part 60 Appendicies A and B, Performance Specification Test 2, USEPA Method 19, and PADEP Relative Accuarcy (RA) precedures--must be conducted concurrently with each required steam generating unit stack test.
- # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.42b] Subpart Db Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Standard for sulfur dioxide.
- (a) (c) Not applicable.
- (d) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 and listed in paragraphs (d)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere any gases that contain SO2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.5 lb/MMBtu) heat input if the affected facility combusts oil other than very low sulfur oil. Percent reduction requirements are not applicable to affected facilities under paragraphs (d)(1), (2), (3) or (4) of this section.
- (1) Not applicable;
- (2) Not applicable; or

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- (3) Not applicable; or
- (4) The affected facility burns coke oven gas alone or in combination with natural gas or very low sulfur distillate oil.
- (e) Except as provided in paragraph (f) of this section, compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.
- (f) Not applicable.
- (g) Except as provided in paragraph (i) of this section and §60.45b(a), the SO2 emission limits and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.
- (h) (j) Not applicable.
- (1) Not applicable.
- (k) (1) Except as provided in paragraphs (k)(2), (k)(3), and (k)(4) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that contain SO2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO2 emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input.
- (2) Units firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with any other fuels with a potential SO2 emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO2 emissions limit in paragraph 60.42b(k)(1).
- (3) Not applicable.
- (4) Not applicable.
- # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.43b] Subpart Db Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Standard for particulate matter.
- (a) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts coal or combusts mixtures of coal with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:
- (1) Not applicable.
- (i) Not applicable, or
- (ii) Not applicable.
- (2) Not applicable.
- (3) Not applicable, and
- (i) Not applicable,
- (ii) Not applicable,
- (iii) Not applicable, and

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- (iv) Not applicable.
- (4) An affected facility burning coke oven gas alone or in combination with other fuels not subject to a PM standard under §60.43b and not using a post-combustion technology (except a wet scrubber) for reducing PM or SO2 emissions is not subject to the PM limits under §60.43b(a)
- (b) (e) Not applicable.
- (f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- (g) The PM and opacity standards apply at all times, except during periods of startup, shutdown or malfunction.
- (h) Not applicable.

# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44b] Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Standard for nitrogen oxides.

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NOX (expressed as NO2) in excess of the following emission limits:

	limits	gen oxide e s (expresse ) heat input	d as
Fuel/steam generating unit type	   ng.	/J   Ib/M	  MBTu
(1) Natural gas and distillate oil, except (4)	):	43	0.10
(ii) High heat release rate(2) Not applicable.	l	86	0.10
(3) Coal: (i-v) Not applicable. (vi) Coal-derived synthetic fuels		210	0.50
(4) Not applicable.			

(b) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts mixtures of coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NOX in excess of a limit determined by the use of the following formula:

En = [(ELgo \* Hgo) + (ELro \* Hro) + (ELg\* Hg)] / (Hgo + Hro + Hg)

Where:

En = NOX emission limit (expressed as NO2), ng/J (lb/MMBtu);







ELgo = Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBtu);

Hgo = Heat input from combustion of natural gas or distillate oil, J (MMBtu);

ELro = Appropriate emission limit from paragraph (a)(2) for combustion of residual oil, ng/J (lb/MMBtu);

Hro = Heat input from combustion of residual oil, J (MMBtu);

ELc = Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBtu); and

Hc = Heat input from combustion of coal, J (MMBtu).

- (c) Except as provided under paragraph (I) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal or oil, or a mixture of these fuels with natural gas, and wood, municipal-type solid waste, or any other fuel shall cause to be discharged into the atmosphere any gases that contain NOX in excess of the emission limit for the coal or oil, or mixtures of these fuels with natural gas combusted in the affected facility, as determined pursuant to paragraph (a) or (b) of this section, unless the affected facility has an annual capacity factor for coal or oil, or mixture of these fuels with natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, or a mixture of these fuels with natural gas.
- (d) (g) Not applicable.
- (h) For purposes of paragraph (i) of this section, the NOX standards under this section apply at all times including periods of startup, shutdown, or malfunction.
- (i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.
- (j) (l) Not applicable.

## II. TESTING REQUIREMENTS.

# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.45b] Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units Compliance and performance test methods and procedures for sulfur dioxide.

- (a) The SO2 emission standards under §60.42b apply at all times. Facilities burning coke oven gas alone or in combination with any other gaseous fuels or distillate oil are allowed to exceed the limit 30 operating days per calendar year for SO2control system maintenance.
- (b) In conducting the performance tests required under §60.8, the owner or operator shall use the methods and procedures in appendix A (including fuel certification and sampling) of this part or the methods and procedures as specified in this section, except as provided in §60.8(b). Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.
- (c) The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential SO2 emission rate (% Ps) and the SO2 emission rate (Es) pursuant to §60.42b following the procedures listed below, except as provided under paragraph (d) and (k) of this section.
- (1) The initial performance test shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the SO2 standards shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
- (2) If only coal, only oil, or a mixture of coal and oil is combusted, the following procedures are used:
- (i) The procedures in Method 19 of appendix A-7 of this part are used to determine the hourly SO2 emission rate (Eho) and the 30-day average emission rate (Eao). The hourly averages used to compute the 30-day averages are obtained from the CEMS of §60.47b(a) or (b).





(ii) The percent of potential SO2 emission rate (%Ps) emitted to the atmosphere is computed using the following formula:

%Ps = 100 \* [1 - (%Rg / 100)] \* [1 - (%Rf / 100)]

#### Where:

%Ps = Potential SO2 emission rate, percent;

%Rg = SO2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and %Rf = SO2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

- (3) If coal or oil is combusted with other fuels, the same procedures required in paragraph (c)(2) of this section are used, except as provided in the following:
- (i) An adjusted hourly SO2 emission rate (Ehoo) is used in Equation 19-19 of Method 19 of appendix A of this part to compute an adjusted 30-day average emission rate (Eaoo). The Ehoo is computed using the following formula:

Ehoo = [Eho - Ew \* (1 - Xk)] / Xk

#### Where:

Ehoo = Adjusted hourly SO2 emission rate, ng/J (lb/MMBtu);

Eho = Hourly SO2 emission rate, ng/J (lb/MMBtu);

Ew = SO2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by the fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value Ew for each fuel lot is used for each hourly average during the time that the lot is being combusted; and

Xk = Fraction of total heat input from fuel combustion derived from coal, oil, or coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(ii) To compute the percent of potential SO2 emission rate (%Ps), an adjusted %Rg (%Rgo) is computed from the adjusted Eaoo from paragraph (b)(3)(i) of this section and an adjusted average SO2 inlet rate (Eaio) using the following formula:

%Rgo = 100 \* [1.0 - (Eaoo / Eaoi)]

To compute Eaio, an adjusted hourly SO2 inlet rate (Ehio) is used. The Ehio is computed using the following formula:

Ehio = [Ehi - Ew \* (1 - Xk)] / Xk

#### Where:

Ehio = Adjusted hourly SO2 inlet rate, ng/J (lb/MMBtu); and

Ehi = Hourly SO2 inlet rate, ng/J (lb/MMBtu).

- (4) The owner or operator of an affected facility subject to paragraph (c)(3) of this section does not have to measure parameters Ew or Xk if the owner or operator elects to assume that Xk = 1.0. Owners or operators of affected facilities who assume Xk = 1.0 shall:
- (i) Determine %Ps following the procedures in paragraph (c)(2) of this section; and
- (ii) Sulfur dioxide emissions (Es) are considered to be in compliance with SO2 emission limits under §60.42b.
- (5) The owner or operator of an affected facility that qualifies under the provisions of §60.42b(d) does not have to measure parameters Ew or Xk under paragraph (c)(3) of this section if the owner or operator of the affected facility elects to measure SO2 emission rates of the coal or oil following the fuel sampling and analysis procedures under Method 19 of appendix A-7 of this part.
- (d) (e) Not applicable.
- (f) For the initial performance test required under §60.8, compliance with the SO2 emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO2 for the first



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# **SECTION D.** Source Level Requirements

30 consecutive steam generating unit operating days, except as provided under paragraph (d) of this section. The initial performance test is the only test for which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first steam generating unit operating day of the 30 successive steam generating unit operating days is completed within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.

- (g) After the initial performance test required under §60.8, compliance with the SO2 emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO2 for 30 successive steam generating unit operating days, except as provided under paragraph (d). A separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate and percent reduction for SO2 are calculated to show compliance with the standard.
- (h) Except as provided under paragraph (i) of this section, the owner or operator of an affected facility shall use all valid SO2 emissions data in calculating %Ps and Eho under paragraph (c), of this section whether or not the minimum emissions data requirements under §60.46b are achieved. All valid emissions data, including valid SO2 emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating %Ps and Eho pursuant to paragraph (c) of this section.
- (i) (j) Not applicable.
- (k) The owner or operator of an affected facility seeking to demonstrate compliance under §\$60.42b(d)(4), 60.42b(j), 60.42b(k)(2), and 60.42b(k)(3) (when not burning coal) shall follow the applicable procedures under §60.49b(r).
- # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.46b] Subpart Db Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.
- (a) The PM emission standards and opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction. The NOX emission standards under §60.44b apply at all times.
- (b) Not applicable.
- (c) Compliance with the NOX emission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.
- (d) To determine compliance with the PM emission limits and opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, using the following procedures and reference methods:
- (1) (6) Not applicable.
- (7) Method 9 of appendix A of this part is used for determining the opacity of stack emissions.
- (e) To determine compliance with the emission limits for NOX required under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring NOX under §60.48(b).
- (1) For the initial compliance test, NOX from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NOX emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.
- (2) Not applicable.
- (3) Not applicable.





- (4) Following the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NOX standards in § 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NOX emissions data collected pursuant to § 60.48b(g)(1) or § 60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NOX emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOX emission data for the preceding 30 steam generating unit operating days
- (5) Not applicable.
- (f) (j) Not applicable.

#### III. MONITORING REQUIREMENTS.

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.47b] Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Emission monitoring for sulfur dioxide.

- (a) Except as provided in paragraphs (b) and (f) of this section, the owner or operator of an affected facility subject to the SO2 standards under §60.42b shall install, calibrate, maintain, and operate CEMS for measuring SO2 concentrations and either O2 or CO2 concentrations and shall record the output of the systems. For units complying with the percent reduction standard, the SO2 and either O2 or CO2 concentrations shall both be monitored at the inlet and outlet of the SO2 control device. If the owner or operator has installed and certified SO2 and O2 or CO2 CEMS according to the requirements of §75.20(c)(1) of this chapter and appendix A to part 75 of this chapter, and is continuing to meet the ongoing quality assurance requirements of §75.21 of this chapter and appendix B to part 75 of this chapter, those CEMS may be used to meet the requirements of this section, provided that:
- (1) When relative accuracy testing is conducted, SO2 concentration data and CO2 (or O2) data are collected simultaneously; and
- (2) In addition to meeting the applicable SO2 and CO2 (or O2) relative accuracy specifications in Figure 2 of appendix B to part 75 of this chapter, the relative accuracy (RA) standard in section 13.2 of Performance Specification 2 in appendix B to this part is met when the RA is calculated on a lb/MMBtu basis; and
- (3) The reporting requirements of §60.49b are met. SO2 and CO2 (or O2) data used to meet the requirements of §60.49b shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the SO2 data have been bias adjusted according to the procedures of part 75 of this chapter.
- (b) As an alternative to operating CEMS as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO2 emissions and percent reduction by:
- (1) Collecting coal or oil samples in an as-fired condition at the inlet to the steam generating unit and analyzing them for sulfur and heat content according to Method 19 of appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO2 input rate, or
- (2) Measuring SO2 according to Method 6B of appendix A of this part at the inlet or outlet to the SO2 control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO2 and CO2 measurement train operated at the candidate location and a second similar train operated according to the procedures in section 3.2 and the applicable procedures in section 7 of Performance Specification 2. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 or 3B of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both



sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent.

- (3) A daily SO2 emission rate, ED, shall be determined using the procedure described in Method 6A of appendix A of this part, section 7.6.2 (Equation 6A-8) and stated in ng/J (lb/MMBtu) heat input.
- (4) The mean 30-day emission rate is calculated using the daily measured values in ng/J (lb/MMBtu) for 30 successive steam generating unit operating days using equation 19-20 of Method 19 of appendix A of this part.
- (c) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in paragraph (b) of this section.
- (d) (e) Not applicable.
- (f) The owner or operator of an affected facility that combusts very low sulfur oil or is demonstrating compliance under §60.45b(k) is not subject to the emission monitoring requirements under paragraph (a) of this section if the owner or operator maintains fuel records as described in §60.49b(r).
- # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48b] Subpart Db Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Emission monitoring for particulate matter and nitrogen oxides.
- (a) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous opacity monitoring systems (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard under §60.43b and meeting the conditions under paragraphs (j)(1), (2), (3), (4), or (5) of this section who elects not to install a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43b and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. If during the initial 60 minutes of observation all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent, the observation period may be reduced from 3 hours to 60 minutes.
- (1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.
- (i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;
- (ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;
- (iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or
- (iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 30 calendar days from the date that the most recent performance test was conducted.
- (2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to



the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

- (i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period) the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 30 calendar days according to the requirements in §60.46d(d)(7).
- (ii) If no visible emissions are observed for 30 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.
- (3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.
- (b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility subject to a NOX standard under §60.44b shall comply with either paragraphs (b)(1) or (b)(2) of this section.
- (1) Install, calibrate, maintain, and operate CEMS for measuring NOX and O2 (or CO2) emissions discharged to the atmosphere, and shall record the output of the system; or
- (2) If the owner or operator has installed a NOX emission rate CEMS to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of §60.49b. Data reported to meet the requirements of §60.49b shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.
- (c) The CEMS required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- (d) The 1-hour average NOX emission rates measured by the continuous NOX monitor required by paragraph (b) of this section and required under §60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(h)(2).
- (e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.
- (1) For affected facilities combusting coal, wood or municipal-type solid waste, the span value for a COMS shall be between 60 and 80 percent.
- (2) For affected facilities combusting coal, oil, or natural gas, the span value for NOX is determined using one of the



	procedures:

(i) Except as provided under paragraph (e)(2)(ii) of this section, NOX span values shall be determined as follows:

		I
Fuel   Span values for NOX (p	pm)	   
Natural gas   500. Oil   500. Coal   1,000. Mixtures   500 (x + y) + 1,000z.	     	<sub> </sub>

#### Where:

- x = Fraction of total heat input derived from natural gas;
- y = Fraction of total heat input derived from oil; and
- z = Fraction of total heat input derived from coal.
- (ii) As an alternative to meeting the requirements of paragraph (e)(2)(i) of this section, the owner or operator of an affected facility may elect to use the NOX span values determined according to section 2.1.2 in appendix A to part 75 of this chapter.
- (3) All span values computed under paragraph (e)(2)(i) of this section for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm. Span values computed under paragraph (e)(2)(ii) of this section shall be rounded off according to section 2.1.2 in appendix A to part 75 of this chapter.
- (f) When NOX emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.
- (g) The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall:
- (1) Comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of this section; or
- (2) Monitor steam generating unit operating conditions and predict NOX emission rates as specified in a plan submitted pursuant to §60.49b(c).
- (h) Not applicable.
- (i) Not applicable.
- (j) The owner or operator of an affected facility that meets the conditions in either paragraph (j)(1), (2), (3), (4), (5), or (6) of this section is not required to install or operate a COMS for measuring opacity if:
- (1) Not applicable; or
- (2) Not applicable; or
- (3) The affected facility burns coke oven gas alone or in combination with fuels meeting the criteria in paragraph (j)(2) of this section and does not use a post-combustion technology to reduce SO2 or PM emissions; or
- (4) (6) Not applicable.
- (7) The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must







include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

- (k) Not applicable.
- (I) An owner or operator of an affected facility that is subject to an opacity standard under § 60.43b(f) is not required to operate a COMS provided that the unit burns only gaseous fuels and/or liquid fuels (excluding residue oil) with a potential SO2 emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit operates according to a written site-specific monitoring plan approved by the permitting authority is not required to operate a COMS. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§ 60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under § 60.49b(h).

#### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### V. REPORTING REQUIREMENTS.

# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b] Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.

- (a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:
- (1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility;
- (2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §§60.42b(d)(1), 60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), 60.44b(c), (d), (e), (i), (j), (k), 60.45b(d), (g), 60.46b(h), or 60.48b(i);
- (3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired; and
- (4) Not applicable.
- (b) The owner or operator of each affected facility subject to the SO2, PM, and/or NOX emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of this part. The owner or operator of each affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.
- (c) The owner or operator of each affected facility subject to the NOX standard in §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in §60.48b(g)(2) and the records to be maintained in §60.49b(g). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. An affected facility burning coke oven gas alone or in combination with other gaseous fuels or distillate oil shall submit this plan to the Administrator for approval within 360 days of the initial startup of the affected facility or by November 30, 2009, whichever date comes later. If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall:
- (1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and



NOX emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level);

- (2) Include the data and information that the owner or operator used to identify the relationship between NOX emission rates and these operating conditions; and
- (3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g).
- (d) Except as provided in paragraph (d)(2) of this section, the owner or operator of an affected facility shall record and maintain records as specified in paragraph (d)(1) of this section.
- (1) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
- (2) As an alternative to meeting the requirements of paragraph (d)(1) of this section, the owner or operator of an affected facility that is subject to a federally enforceable permit restricting fuel use to a single fuel such that the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions may elect to record and maintain records of the amount of each fuel combusted during each calendar month.
- (e) Not applicable.
- (f) For an affected facility subject to the opacity standard in §60.43b, the owner or operator shall maintain records of opacity. In addition, an owner or operator that elects to monitor emissions according to the requirements in §60.48b(a) shall maintain records according to the requirements specified in paragraphs (f)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.
- (1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(1)(i) through (iii) of this section.
- (i) Dates and time intervals of all opacity observation periods;
- (ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
- (iii) Copies of all visible emission observer opacity field data sheets;
- (2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(2)(i) through (iv) of this section.
- (i) Dates and time intervals of all visible emissions observation periods;
- (ii) Name and affiliation for each visible emission observer participating in the performance test;
- (iii) Copies of all visible emission observer opacity field data sheets; and
- (iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.
- (3) Not applicable.



- (g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NOX standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:
- (1) Calendar date;
- (2) The average hourly NOX emission rates (expressed as NO2) (ng/J or lb/MMBtu heat input) measured or predicted;
- (3) The 30-day average NOX emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
- (4) Identification of the steam generating unit operating days when the calculated 30-day average NOX emission rates are in excess of the NOX emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
- (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
- (6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
- (7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
- (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- (9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
- (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.
- (h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.
- (1) Any affected facility subject to the opacity standards in §60.43b(f) or to the operating parameter monitoring requirements in §60.13(i)(1).
- (2) Any affected facility that is subject to the NOX standard of §60.44b, and that:
- (i) Combusts natural gas, distillate oil, gasified coal, or residual oil with a nitrogen content of 0.3 weight percent or less; or
- (ii) Has a heat input capacity of 73 MW (250 MMBtu/hr) or less and is required to monitor NOXemissions on a continuous basis under §60.48b(g)(1) or steam generating unit operating conditions under §60.48b(g)(2).
- (3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).
- (4) For purposes of §60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NOX emission rate, as determined under §60.46b(e), that exceeds the applicable emission limits in §60.44b.
- (i) The owner or operator of any affected facility subject to the continuous monitoring requirements for NOX under §60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.
- (j) The owner or operator of any affected facility subject to the SO2 standards under §60.42b shall submit reports.





- (k) For each affected facility subject to the compliance and performance testing requirements of §60.45b and the reporting requirement in paragraph (j) of this section, the following information shall be reported to the Administrator:
- (1) Calendar dates covered in the reporting period;
- (2) Each 30-day average SO2 emission rate (ng/J or lb/MMBtu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken; For an exceedance due to maintenance of the SO2control system covered in paragraph 60.45b(a), the report shall identify the days on which the maintenance was performed and a description of the maintenance;
- (3) Each 30-day average percent reduction in SO2 emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken;
- (4) Identification of the steam generating unit operating days that coal or oil was combusted and for which SO2 or diluent (O2 or CO2) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken;
- (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;
- (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;
- (7) Identification of times when hourly averages have been obtained based on manual sampling methods;
- (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- (9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3;
- (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part; and
- (11) The annual capacity factor of each fired as provided under paragraph (d) of this section.
- (I) (n) Not applicable.
- (o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.
- (p) (q) Not applicable.
- (r) The owner or operator of an affected facility who elects to use the fuel based compliance alternatives in §60.42b or §60.43b shall either:
- (1) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in §60.42b(j) or §60.42b(k) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit. For the purposes of this section, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period; or
- (2) The owner or operator of an affected facility who elects to demonstrate compliance based on fuel analysis in §60.42b or





§60.43b shall develop and submit a site-specific fuel analysis plan to the Administrator for review and approval no later than 60 days before the date you intend to demonstrate compliance. Each fuel analysis plan shall include a minimum initial requirement of weekly testing and each analysis report shall contain, at a minimum, the following information:

- (i) The potential sulfur emissions rate of the representative fuel mixture in ng/J heat input;
- (ii) The method used to determine the potential sulfur emissions rate of each constituent of the mixture. For distillate oil and natural gas a fuel receipt or tariff sheet is acceptable;
- (iii) The ratio of different fuels in the mixture; and
- (iv) The owner or operator can petition the Administrator to approve monthly or quarterly sampling in place of weekly sampling.
- (s) (u) Not applicable.
- (v) The owner or operator of an affected facility may submit electronic quarterly reports for SO2 and/or NOX and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.
- (w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.
- (x) (y) Not applicable.

#### VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### VII. ADDITIONAL REQUIREMENTS.

# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40b] Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Applicability and delegation of authority.

[Subpart Db revised at 72 FR 32742, June 13, 2007]

- (a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).
- (b) (f) Not applicable.
- (g) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, the following authorities shall be retained by the Administrator and not transferred to a State.
- (1) Section 60.44b(f).





- (2) Section 60.44b(g).
- (3) Section 60.49b(a)(4).
- (h) (i) Not applicable.
- (j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).
- (k) (m) Not applicable.
- # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40b] Subpart Db Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Applicability and delegation of authority.

The two (2) Tampella boilers herein identified and rated at 143 MMBtu/hr each, are subject to applicable requirements of the New Source Performance Standards for Industrial-Commercial-Institution Steam Generating Units promulgated in 40 CFR Part 60 Subpart Db.

# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.41b] Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Byproduct/waste means any liquid or gaseous substance produced at chemical manufacturing plants, petroleum refineries, or pulp and paper mills (except natural gas, distillate oil, or residual oil) and combusted in a steam generating unit for heat recovery or for disposal. Gaseous substances with carbon dioxide (CO2) levels greater than 50 percent or carbon monoxide levels greater than 10 percent are not byproduct/waste for the purpose of this subpart.

Chemical manufacturing plants mean industrial plants that are classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 28.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, coke oven gas, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any byproduct of coal mining or coal cleaning operations with an ash content greater than 50 percent, by weight, and a heating value less than 13,900 kJ/kg (6,000 Btu/lb) on a dry basis.

Cogeneration, also known as combined heat and power, means a facility that simultaneously produces both electric (or mechanical) and useful thermal energy from the same primary energy source.

Coke oven gas means the volatile constituents generated in the gaseous exhaust during the carbonization of bituminous coal to form coke.

Combined cycle system means a system in which a separate source, such as a gas turbine, internal combustion engine, kiln, etc., provides exhaust gas to a steam generating unit.



Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §60.17) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO2 control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline slurries or solutions used in dry flue gas desulfurization technology include but are not limited to lime and sodium.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO2 control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means combustion of fuel in a bed or series of beds (including but not limited to bubbling bed units and circulating bed units) of limestone aggregate (or other sorbent materials) in which these materials are forced upward by the flow of combustion air and the gaseous products of combustion.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Gaseous fuel means any fuel that is present as a gas at ISO conditions. This includes, but is not limited to, natural gas and gasified coal (including coke oven gas).

Gross output means the gross useful work performed by the steam generated. For units generating only electricity, the gross useful work performed is the gross electrical output from the turbine/generator set. For cogeneration units, the gross useful work performed is the gross electrical or mechanical output plus 75 percent of the useful thermal output measured relative to ISO conditions that is not used to generate additional electrical or mechanical output or to enhance the performance of the unit (i.e., steam delivered to an industrial process).

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hr) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.







High heat release rate means a heat release rate greater than 730,000 J/sec-m3 (70,000 Btu/hr-ft3).

ISO Conditions means a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals. Lignite means a type of coal classified as lignite A or lignite B by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

Low heat release rate means a heat release rate of 730,000 J/sec-m3 (70,000 Btu/hr-ft3) or less.

Mass-feed stoker steam generating unit means a steam generating unit where solid fuel is introduced directly into a retort or is fed directly onto a grate where it is combusted.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Municipal-type solid waste means refuse, more than 50 percent of which is waste consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials, and noncombustible materials such as glass and rock.

# Natural gas means:

- (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
- (2) liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17).
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil. Petroleum refinery means industrial plants as classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 29.

Very low sulfur oil means for units constructed, reconstructed, or modified on or before February 28, 2005, oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO2emission control, has a SO2emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and not located in a noncontinental area, very low sulfur oil means oil that contains no more than 0.30 weight percent sulfur or that, when combusted without SO2 emission control, has a SO2 emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and located in a noncontinental area, very low sulfur oil means oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO2 emission control, has a SO2emission rate equal to or less than 215 ng/J (0.50 lb/MMBtu) heat input.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Pulp and paper mills means industrial plants that are classified by the Department of Commerce under North American Industry Classification System (NAICS) Code 322 or Standard Industrial Classification (SIC) Code 26.

Pulverized coal-fired steam generating unit means a steam generating unit in which pulverized coal is introduced into an air stream that carries the coal to the combustion chamber of the steam generating unit where it is fired in suspension. This includes both conventional pulverized coal-fired and micropulverized coal-fired steam generating units. Residual oil means crude oil, fuel oil numbers 1 and 2 that have a nitrogen content greater than 0.05 weight percent, and all fuel oil numbers 4, 5 and 6, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).







Spreader stoker steam generating unit means a steam generating unit in which solid fuel is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.

Steam generating unit means a device that combusts any fuel or byproduct/waste and produces steam or heats water or any other heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Very low sulfur oil means for units constructed, reconstructed, or modified on or before February 28, 2005, an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO2 emission control. has a SO2 emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005, very low sulfur oil means an oil that contains no more than 0.3 weight percent sulfur or that, when combusted without SO2 emission control, has a SO2 emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu) heat input.

Wet flue gas desulfurization technology means a SO2 control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gas with an alkaline slurry or solution and forming a liquid material. This definition applies to devices where the aqueous liquid material product of this contact is subsequently converted to other forms. Alkaline reagents used in wet flue gas desulfurization technology include, but are not limited to, lime, limestone, and sodium.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO2.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavingsand processed pellets made from wood or other forest residues.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

# \*\*\* Permit Shield in Effect. \*\*\*

DEP Auth ID: 747468







Source ID: 110 Source Name: COAL AND COKE HANDLING SYSTEMS

Source Capacity/Throughput:

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*







Source ID: 111 Source Name: COKE BY-PRODUCT RECOVERY PLT

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 40 CFR PART 61 SUBPART FF

40 CFR PART 61 SUBPART V

#### I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [40 CFR Part 61 NESHAPs §40 CFR 61.134]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Standard: Naphthalene processing, final coolers, and final-cooler cooling towers.

(a) No ("zero") emissions are allowed from naphthalene processing, final coolers and final-cooler cooling towers at coke by-product recovery plants.

#### II. TESTING REQUIREMENTS.

# # 002 [40 CFR Part 61 NESHAPs §40 CFR 61.137]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Test methods and procedures.

- (a) Each owner or operator subject to the provisions of this subpart shall comply with the requirements in 61.245 of 40 CFR part 61, subpart V.
- (b) To determine whether or not a piece of equipment is in benzene service, the methods in 61.245(d) shall be used, except that, for exhausters, the percent benzene shall be 1 percent by weight, rather than the 10 percent by weight described in 61.245(d).

# III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### IV. RECORDKEEPING REQUIREMENTS.

# # 003 [40 CFR Part 61 NESHAPs §40 CFR 61.138]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Recordkeeping and reporting requirements.

- (a) The following information pertaining to the design of control equipment installed to comply with 61.132 through 61.134 shall be recorded and kept in a readily accessible location:
  - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
  - (2) The dates and descriptions of any changes in the design specifications.
- (b) The following information pertaining to sources subject to 61.132 and sources subject to 61.133 shall be recorded and maintained for 2 years following each semiannual (and other) inspection and each annual maintenance inspection:
  - (1) The date of the inspection and the name of the inspector.
- (2) A brief description of each visible defect in the source or control equipment and the method and date of repair of the defect.
- (3) The presence of a leak, as measured using the method described in 61.245(c). The record shall include the date of attempted and actual repair and method of repair of the leak.
  - (4) A brief description of any system abnormalities found during the annual maintenance inspection, the repairs made,





the date of attempted repair, and the date of actual repair.

- (c) Each owner or operator of a source subject to 61.135 shall comply with 61.246.
- (d) For foundry coke by-product recovery plants, the annual coke production of both furnace and foundry coke shall be recorded and maintained for 2 years following each determination.
- (e) (1) An owner or operator of any source to which this subpart applies shall submit a statement in writing notifying the Administrator that the requirements of this subpart and 40 CFR 61, subpart V, have been implemented.
- (2) In the case of an existing source or a new source that has an initial startup date preceding the effective date, the statement is to be submitted within 90 days of the effective date, unless a waiver of compliance is granted under 61.11, along with the information required under 61.10. If a waiver of compliance is granted, the statement is to be submitted on a date scheduled by the Administrator.
- (3) In the case of a new source that did not have an initial startup date preceding the effective date, the statement shall be submitted with the application for approval of construction, as described under 61.07.
  - (4) The statement is to contain the following information for each source:
    - (i) Type of source (e.g., a light-oil sump or pump).
- (ii) For equipment in benzene service, equipment identification number and process unit identification: percent by weight benzene in the fluid at the equipment; and process fluid state in the equipment (gas/vapor or liquid).
- (iii) Method of compliance with the standard (e.g., "gas blanketing," "monthly leak detection and repair," or "equipped with dual mechanical seals"). This includes whether the plant plans to be a furnace or foundry coke by-product recovery plant for the purposes of 61.132(d).
- (f) A report shall be submitted to the Administrator semiannually starting 6 months after the initial reports required in 61.138(e) and 61.10, which includes the following information:
  - (1) For sources subject to 61.132 and sources subject to 61.133,
    - (i) A brief description of any visible defect in the source or ductwork,
    - (ii) The number of leaks detected and repaired, and
- (iii) A brief description of any system abnormalities found during each annual maintenance inspection that occurred in the reporting period and the repairs made.
  - (2) For equipment in benzene service subject to 61.135(a), information required by 61.247(b).
  - (3) For each exhauster subject to 61.135 for each quarter during the semiannual reporting period,
    - (i) The number of exhausters for which leaks were detected as described in 61.135 (d) and (e)(5),
    - (ii) The number of exhausters for which leaks were repaired as required in 61.135 (d) and (e)(6),
- (iii) The results of performance tests to determine compliance with 61.135(g) conducted within the semiannual reporting period.
- (4) A statement signed by the owner or operator stating whether all provisions of 40 CFR part 61, subpart L, have been fulfilled during the semiannual reporting period.
  - (5) For foundry coke by-product recovery plants, the annual coke production of both furnace and foundry coke, if

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# **SECTION D.** Source Level Requirements

determined during the reporting period.

(6) Revisions to items reported according to paragraph (e) of this section if changes have occurred since the initial report or subsequent revisions to the initial report.

Note: Compliance with the requirements of 61.10(c) is not required for revisions documented under this paragraph.

- (g) In the first report submitted as required in 61.138(e), the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule unless a revised schedule has been submitted in a previous semiannual report.
- (h) An owner or operator electing to comply with the provisions of 61.243-1 and 61.243-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.
- (i) An application for approval of construction or modification, as required under 61.05(a) and 61.07, will not be required for sources subject to 61.135 if:
  - (1) The new source complies with 61.135, and
  - (2) In the next semiannual report required by 61.138(f), the information described in 61.138(e)(4) is reported.

[55 FR 38073, Sept. 14, 1990; 55 FR 14037, Apr. 13, 1990]

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

# # 004 [40 CFR Part 61 NESHAPs §40 CFR 61.132]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Standard: Process vessels, storage tanks, and tar-intercepting sumps.

- (a) (1) Each owner or operator of a furnace or a foundry coke byproduct recovery plant shall enclose and seal all openings on each process vessel, tar storage tank, and tar-intercepting sump.
- (2) The owner or operator shall duct gases from each process vessel, tar storage tank, and tar-intercepting sump to the gas collection system, gas distribution system, or other enclosed point in the by-product recovery process where the benzene in the gas will be recovered or destroyed. This control system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.
- (i) Except, the owner or operator may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.
- (ii) The owner or operator may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the owner or operator elects to maintain an opening on part of the liquid surface of the tar decanter, the owner or operator shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.
- (b) Following the installation of any control equipment used to meet the requirements of paragraph (a) of this section, the



owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR part 60, appendix A) and procedures specified in 61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

- (1) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.
  - (2) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.
- (3) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
- (4) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.
- (c) Following the installation of any control system used to meet the requirements of paragraph (a) of this section, the owner or operator shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection.
- (d) Each owner or operator of a furnace coke by-product recovery plant also shall comply with the requirements of paragraphs (a)-(c) of this section for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

[54 FR 38073, Sept. 14, 1989, as amended at 65 FR 62157, Oct. 17, 2000]

# # 005 [40 CFR Part 61 NESHAPs §40 CFR 61.133]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Standard: Light-oil sumps.

- (a) Each owner or operator of a light-oil sump shall enclose and seal the liquid surface in the sump to form a closed system to contain the emissions.
- (1) Except, the owner or operator may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.
- (2) Except, the owner or operator may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.
- (3) The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.
- (b) The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.
- (c) Following the installation of any control equipment used to meet the requirements of paragraph (a) of this section, the owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Reference Method 21 (40 CFR part 60, appendix A) and the procedures specified in 61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.
- (1) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Reference Method 21, a leak is detected.





- (2) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.
- (3) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
- (4) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

[54 FR 38073, Sept. 14, 1989, as amended at 65 FR 62157, Oct. 17, 2000]

# # 006 [40 CFR Part 61 NESHAPs §40 CFR 61.135]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Standard: Equipment leaks.

- (a) Each owner or operator of equipment in benzene service shall comply with the requirements of 40 CFR 61, subpart V, except as provided in this section.
- (b) The provisions of 61.242-3 and 61.242-9 of subpart V do not apply to this subpart.
- (c) Each piece of equipment in benzene service to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.
- (d) Each exhauster shall be monitored quarterly to detect leaks by the methods specified in §61.245(b) except as provided in §61.136(d) and paragraphs (e)-(g) of this section.
  - (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (2) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in §61.242-10 (a) and (b). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) Each exhauster equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluids to the atmosphere is exempt from the requirements of paragraph (d) of this section provided the following requirements are met:
  - (1) Each exhauster seal system is:
    - (i) Operated with the barrier fluid at a pressure that is greater than the exhauster stuffing box pressure; or
- (ii) Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of §61.242-11; or
- (iii) Equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere.
  - (2) The barrier fluid is not in benzene service.
- (3) Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- (4) (i) Each sensor as described in paragraph (e)(3) of this section shall be checked daily or shall be equipped with an audible alarm.
- (ii) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
  - (5) If the sensor indicates failure of the seal system, the barrier system, or both (based on the criterion determined under



paragraph (e)(4)(ii) of this section), a leak is detected.

- (6) (i) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §61.242-10.
  - (ii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (f) An exhauster is exempt from the requirements of paragraph (d) of this section if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of §61.242-11 except as provided in paragraph (g) of this section.
- (g) Any exhauster that is designated, as described in §61.246(e) for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (d) of this section if the exhauster:
- (1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in §61.245(c); and
- (2) Is tested for compliance with paragraph (g)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.
- (h) Any exhauster that is in vacuum service is excluded from the requirements of this subpart if it is identified as required in §61.246(e)(5).

### # 007 [40 CFR Part 61 NESHAPs §40 CFR 61.139]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Provisions for alternative means for process vessels, storage tanks, and tar-intercepting sumps.

- (a) As an alternative means of emission limitation for a source subject to 61.132(a)(2) or 61.132(d), the owner or operator may route gases from the source through a closed-vent system to a carbon adsorber or vapor incinerator that is at least 98 percent efficient at removing benzene from the gas stream.
  - (1) The provisions of 61.132(a)(1) and 61.132(a)(2)(i) and (ii) shall apply to the source.
- (2) The seals on the source and closed vent system shall be designed and operated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in 61.245(c).
  - (3) The provisions of 61.132(b) shall apply to the seals and closed vent system.
- (b) For each carbon adsorber, the owner or operator shall adhere to the following practices:
- (1) Benzene captured by each carbon adsorber shall be recycled or destroyed in a manner that prevents benzene from being emitted to the atmosphere.
- (2) Carbon removed from each carbon adsorber shall be regenerated or destroyed in a manner that prevents benzene from being emitted to the atmosphere.
- (3) For each regenerative carbon adsorber, the owner or operator shall initiate regeneration of the spent carbon bed and vent the emissions from the source to a regenerated carbon bed no later than when the benzene concentration or organic vapor concentration level in the adsorber outlet vent reaches the maximum concentration point, as determined in 61.139(h).
- (4) For each non-regenerative carbon adsorber, the owner or operator shall replace the carbon at the scheduled replacement time, or as soon as practicable (but not later than 16 hours) after an exceedance of the maximum concentration point is detected, whichever is sooner.







- (i) For each non-regenerative carbon adsorber, the scheduled replacement time means the day that is estimated to be 90 percent of the demonstrated bed life, as defined in 61.139(h)(5).
- (ii) For each non-regenerative carbon adsorber, an exceedance of the maximum concentration point shall mean any concentration greater than or equal to the maximum concentration point as determined in 61.139(h).
- (c) Compliance with the provisions of this section shall be determined as follows:
- (1) For each carbon adsorber and vapor incinerator, the owner or operator shall demonstrate compliance with the efficiency limit by a compliance test as specified in 61.13 and 61.139(g). If a waiver of compliance has been granted under 61.11, the deadline for conducting the initial compliance test shall be incorporated into the terms of the waiver. The benzene removal efficiency rate for each carbon adsorber and vapor incinerator shall be calculated as in the following equation:

#### Where:

E=percent removal of benzene.

Caj =concentration of benzene in vents after the control device, parts per million (ppm).

Cbi =volumetric flow in vents after the control device, standard cubic meters/minute (scm/min).

Qaj =volumetric flow rate in vents after the control device, standard cubic meters/minute (scm/min).

Qbi =volumetric flow rate in vents before the control device, scm/min.

m=number of vents after the control device.

n=number of vents before the control device.

- (2) Compliance with all other provisions in this section shall be determined by inspections or the review of records and reports.
- (d) For each regenerative carbon adsorber, the owner or operator shall install and operate a monitoring device that continuously indicates and records either the concentration of benzene or the concentration level of organic compounds in the outlet vent of the carbon adsorber. The monitoring device shall be installed, calibrated, maintained and operated in accordance with the manufacturer's specifications.
  - (1) Measurement of benzene concentration shall be made according to 61.139(g)(2).
- (2) All measurements of organic compound concentration levels shall be reasonable indicators of benzene concentration.
- (i) The monitoring device for measuring organic compound concentration levels shall be based on one of the following detection principles: Infrared absorption, flame ionization, catalytic oxidation, photoionization, or thermal conductivity.
- (ii) The monitoring device shall meet the requirements of part 60, appendix A, method 21, sections 2, 3, 4.1, 4.2, and 4.4. For the purpose of the application of method 21 to this section, the words "leak definition" shall be the maximum concentration point, which would be estimated until it is established under 61.139(h). The calibration gas shall either be benzene or methane and shall be at a concentration associated with 125 percent of the expected organic compound concentration level for the carbon adsorber outlet vent.



- (e) For each non-regenerative carbon adsorber, the owner or operator shall monitor either the concentration of benzene or the concentration level of organic compounds at the outlet vent of the adsorber. The monitoring device shall be calibrated, operated and maintained in accordance with the manufacturer's specifications.
- (1) Measurements of benzene concentration shall be made according to 61.139(g)(2). The measurement shall be conducted over at least one 5-minute interval during which flow into the carbon adsorber is expected to occur.
- (2) All measurements of organic compound concentration levels shall be reasonable indicators of benzene concentration.
- (i) The monitoring device for measuring organic compound concentration levels shall meet the requirements of paragraphs 61.139(d)(2)(i) and (ii).
- (ii) The probe inlet of the monitoring device shall be placed at approximately the center of the carbon adsorber outlet vent. The probe shall be held there for at least 5 minutes during which flow into the carbon adsorber is expected to occur. The maximum reading during that period shall be used as the measurement.
- (3) Monitoring shall be performed at least once within the first 7 days after replacement of the carbon bed occurs, and monthly thereafter until 10 days before the scheduled replacement time, at which point monitoring shall be done daily except as specified in paragraphs (e)(4) and (e)(5) of this section.
- (4) If an owner or operator detects an exceedance of the maximum concentration point during the monthly monitoring or on the first day of daily monitoring as prescribed in paragraph (e)(3) of this section, then, after replacing the bed, the owner or operator shall begin the daily monitoring of the replacement carbon bed on the day after the last scheduled monthly monitoring before the exceedance was detected, or 10 days before the exceedance was detected, whichever is longer.
- (5) If an owner or operator detects an exceedance of the maximum concentration point during the daily monitoring as prescribed in paragraph (e)(3) of this section, except on the first day, then, after replacing the bed, the owner or operator shall begin the daily monitoring of the replacement carbon bed 10 days before the exceedance was detected.
- (6) If the owner or operator is monitoring on the schedule required in paragraph (e)(4) or paragraph (e)(5) of this section, and the scheduled replacement time is reached without exceeding the maximum concentration point, the owner or operator may return to the monitoring schedule in paragraph (e)(3) of this section for subsequent carbon beds.

Note: This note provides an example of the monitoring schedules in paragraphs (e)(3), (e)(4) and (e)(5) of this section. Assume that the scheduled replacement time for a non-regenerative carbon adsorber is the 105th day after installation. According to the monitoring schedule in paragraph (e)(3) of this section, initial monitoring would be done within 7 days after installation, monthly monitoring would be done on the 30th, 60th and 90th days, and daily monitoring would begin on the 95th day after installation. Now assume that an exceedance of the maximum concentration point is detected on the 90th day after installation. On the replacement carbon bed, the owner or operator would begin daily monitoring on the 61st day after installation (i.e. the day after the last scheduled monthly monitoring before the exceedance was detected), according to the requirements in paragraph (e)(4) of this section. If, instead, the exceedance were detected on the first bed on the 95th day, the daily monitoring of the replacement bed would begin on the 85th day after installation (i.e., 10 days before the point in the cycle where the exceedance was detected); this is a second example of the requirements in paragraph (e)(4) of this section. Finally, assume that an exceedance of the maximum concentration point is detected on the 100th day after the first carbon adsorber was installed. According to paragraph (e)(5) of this section, daily monitoring of the replacement bed would begin on the 90th day after installation (i.e., 10 days earlier than when the exceedance was detected on the previous bed). In all of these examples, the initial monitoring of the replacement bed within 7 days of installation and the monthly, monitoring would proceed as set out in paragraph (e)(3) of this section until daily monitoring was required.

- (f) For each vapor incinerator, the owner or operator shall comply with the monitoring requirements specified below:
- (1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a temperature monitoring device equipped with a continuous recorder and having an accuracy of 1 percent of the temperature being monitored expressed in degrees Celsius or 0.5C, whichever is greater.



- (i) Where a vapor incinerator other than a catalytic incinerator is used, the temperature monitoring device shall be installed in the firebox.
- (ii) Where a catalytic incinerator is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.
  - (2) Comply with paragraph (f)(2)(i), paragraph (f)(2)(ii), or paragraph (f)(3)(iii) of this section.
- (i) Install, calibrate, maintain and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow to the incinerator at least once every hour for each source. The flow indicator shall be installed in the vent stream from each source at a point closest to the inlet of each vapor incinerator and before being joined with any other vent stream.
- (ii) Install, calibrate, maintain and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow away from the vapor incinerator at least once every 15 minutes. The flow indicator shall be installed in each bypass line, immediately downstream of the valve that, if opened, would divert the vent stream away from the vapor incinerator.
- (iii) Where a valve that opens a bypass line is secured in the closed position with a car seal or a lock-and-key configuration, a flow indicator is not required. The owner or operator shall perform a visual inspection at least once every month to check the position of the valve and the condition of the car seal or lock-and-key configuration. The owner or operator shall also record the date and duration of each time that the valve was opened and the vent stream diverted away from the vapor incinerator.
- (g) In conducting the compliance tests required in 61.139(c), and measurements specified in 61.139(d)(1), (e)(1) and (h)(3)(ii), the owner or operator shall use as reference methods the test methods and procedures in appendix A to 40 CFR part 60, or other methods as specified in this paragraph, except as specified in 61.13.
  - (1) For compliance tests, as described in 61.139(c)(1), the following provisions apply.
- (i) All tests shall be run under representative emission concentration and vent flow rate conditions. For sources with intermittent flow rates, representative conditions shall include typical emission surges (for example, during the loading of a storage tank).
- (ii) Each test shall consist of three separate runs. These runs will be averaged to yield the volumetric flow rates and benzene concentrations in the equation in 61.139(c)(1). Each run shall be a minimum of 1 hour.
- (A) For each regenerative carbon adsorber, each run shall take place in one adsorption cycle, to include a minimum of 1 hour of sampling immediately preceding the initiation of carbon bed regeneration.
  - (B) For each non-regenerative carbon adsorber, all runs can occur during one adsorption cycle.
- (iii) The measurements during the runs shall be paired so that the inlet and outlet to the control device are measured simultaneously.
  - (iv) Method 1 or 1A shall be used as applicable for locating measurement sites.
  - (v) Method 2, 2A, or 2D shall be used as applicable for measuring vent flow rates.
- (vi) Method 18 shall be used for determining the benzene concentrations (Caj and Cbi). Either follow section 7.1, "Integrated Bag Sampling and Analysis," or section 7.2, "Direct Interface Sampling and Analysis Procedure." A separation column constructed of stainless steel, 1.83 m by 3.2 mm, containing 10 percent 1,2,3-tris (2-cyanoethoxy) propane (TECP) on 80/100 mesh Chromosorb P AW, with a column temperature of 80C, a detector temperature of 225C, and a flow rate of approximately 20 ml/min, may produce adequate separations. The analyst can use other columns, provided that the precision and accuracy of the analysis of benzene standards is not impaired. The analyst shall have available for review



information confirming that there is adequate resolution of the benzene peak.

- (A) If section 7.1 is used, the sample rate shall be adjusted to maintain a constant proportion to vent flow rate.
- (B) If section 7.2 is used, then each performance test run shall be conducted in intervals of 5 minutes. For each interval "t," readings from each measurement shall be recorded, and the flow rate (Qaj or Qbi) and the corresponding benzene concentration (Caj or Cbi) shall be determined. The sampling system shall be constructed to include a mixing chamber of a volume equal to 5 times the sampling flow rate per minute. Each analysis performed by the chromatograph will then represent an averaged emission value for a 5-minute time period. The vent flow rate readings shall be timed to account for the total sample system residence time. A dual column, dual detector chromatograph can be used to achieve an analysis interval of 5 minutes. The individual benzene concentrations shall be vent flow rate weighted to determine sample run average concentrations. The individual vent flow rates shall be time averaged to determine sample run average flow rates.
- (2) For testing the benzene concentration at the outlet vent of the carbon adsorber as specified under 61.139(d)(1), (e)(1) and (h)(3)(ii), the following provisions apply.
  - (i) The measurement shall be conducted over one 5-minute period.
  - (ii) The requirements in 61.139(g)(1)(i) shall apply to the extent practicable.
- (iii) The requirements in 61.139(g)(1)(vi) shall apply. Section 7.2 of method 18 shall be used as described in 61.139(g)(1)(vi)(B) for benzene concentration measurements.
- (h) For each carbon adsorber, the maximum concentration point shall be expressed either as a benzene concentration or organic compound concentration level, whichever is to be indicated by the monitoring device chosen under 61.139(d) or (e).
- (1) For each regenerative carbon adsorber, the owner or operator shall determine the maximum concentration point at the following times:
  - (i) No later than the deadline for the initial compliance test as specified in 61.139(c)(1);
  - (ii) At the request of the Administrator; and
  - (iii) At any time chosen by the owner or operator.
- (2) For each non-regenerative carbon adsorber, the owner or operator shall determine the maximum concentration point at the following times:
  - (i) On the first carbon bed to be installed in the adsorber;
  - (ii) At the request of the Administrator;
- (iii) On the next carbon bed after the maximum concentration point has been exceeded (before the scheduled replacement time) for each of three previous carbon beds in the adsorber since the most recent determination; and
  - (iv) At any other time chosen by the owner or operator.
- (3) The maximum concentration point for each carbon absorber shall be determined through the simultaneous measurement of the outlet of the carbon adsorber with the monitoring device and method 18, except as allowed in paragraph (h)(4) of this section.
- (i) Several data points shall be collected according to a schedule determined by the owner or operator. The schedule shall be designed to take frequent samples near the expected maximum concentration point.
  - (ii) Each data point shall consist of one 5-minute benzene concentration measurement using method 18 as specified



in 61.139(g)(2), and of a simultaneous measurement by the monitoring device. The monitoring device measurement shall be conducted according to 61.139(d) or (e), whichever is applicable.

- (iii) The maximum concentration point shall be the concentration level, as indicated by the monitoring device, for the last data point at which the benzene concentration is less than 2 percent of the average value of the benzene concentration at the inlet to the carbon adsorber during the most recent compliance test.
- (4) If the maximum concentration point is expressed as a benzene concentration, the owner or operator may determine it by calibrating the monitoring device with benzene at a concentration that is 2 percent of the average benzene concentration measured at the inlet to the carbon adsorber during the most recent compliance test. The reading on the monitoring device corresponding to the calibration concentration shall be the maximum concentration point. This method of determination would affect the owner or operator as follows:
- (i) For a regenerative carbon adsorber, the owner or operator is exempt from the provisions in paragraph (h)(3) of this section.
- (ii) For a non-regenerative carbon adsorber, the owner or operator is required to collect the data points in paragraph (h)(3) of this section with only the monitoring device, and is exempt from the simultaneous method 18 measurement.
- (5) For each non-regenerative carbon adsorber, the demonstrated bed life shall be the carbon bed life, measured in days from the time the bed is installed until the maximum concentration point is reached, for the carbon bed that is used to determine the maximum concentration point.
- (i) The following recordkeeping requirements are applicable to owners and operators of control devices subject to 61.139. All records shall be kept updated and in a readily accessible location.
  - (1) The following information shall be recorded for each control device for the life of the control device:
    - (i) The design characteristics of the control device and a list of the source or sources vented to it.
- (ii) A plan for proper operation, maintenance, and corrective action to achieve at least 98 percent control of benzene emissions.
  - (iii) The dates and descriptions of any changes in the design specifications or plan.
- (iv) For each carbon adsorber, the plan in paragraph (i)(1)(ii) of this section shall include the method for handling captured benzene and removed carbon to comply with 61.139(b)(1) and (2).
- (v) For each carbon adsorber for which organic compounds are monitored as provided under 61.139(d) and (e), documentation to show that the measurements of organic compound concentrations are reasonable indicators of benzene concentrations.
- (2) For each compliance test as specified in 61.139(c)(1), the date of the test, the results of the test, and other data needed to determine emissions shall be recorded as specified in 61.13(g) for at least 2 years or until the next compliance test on the control device, whichever is longer.
- (3) For each vapor incinerator, the average firebox temperature of the incinerator (or the average temperature upstream and downstream of the catalyst bed for a catalytic incinerator), measured and averaged over the most recent compliance test shall be recorded for at least 2 years or until the next compliance test on the incinerator, whichever is longer.
- (4) For each carbon adsorber, for each determination of a maximum concentration point as specified in 61.139(h), the date of the determination, the maximum concentration point, and data needed to make the determination shall be recorded for at least 2 years or until the next maximum concentration point determination on the carbon adsorber, whichever is longer.
- (5) For each carbon absorber, the dates of and data from the monitoring required in 61.139(d) and (e), the date and time of replacement of each carbon bed, the date of each exceedance of the maximum concentration point, and a brief

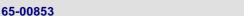


description of the corrective action taken shall be recorded for at least 2 years. Also, the occurrences when the captured benzene or spent carbon are not handled as required In 61.139(b)(1) and (2) shall be recorded for at least 2 years.

- (6) For each vapor incinerator, the data from the monitoring required in 61.139(f)(1), the dates of all periods of operation during which the parameter boundaries established during the most recent compliance test are exceeded, and a brief description of the corrective action taken shall be recorded for at least 2 years. A period of operation during which the parameter boundaries are exceeded is a 3-hour period of operation during which:
- (i) For each vapor incinerator other than a catalytic incinerator, the average combustion temperature is more than 28C (50F) below the average combustion temperature during the most recent performance test.
- (ii) For each catalytic incinerator, the average temperature of the vent stream immediately before the catalyst bed is more than 28C (50F) below the average temperature of the vent stream during the most recent performance test, or the average temperature difference across the catalyst bed is less than 80 percent of the average temperature difference across the catalyst bed during the most recent performance test.
  - (7) For each vapor incinerator, the following shall be recorded for at least 2 years:
- (i) If subject to 61.139(f)(2)(i), records of the flow indication, and of all periods when the vent stream is diverted from the vapor incinerator or has no flow rate.
- (ii) If subject to 61.139(f)(2)(ii), records of the flow indication, and of all periods when the vent stream is diverted from the vapor incinerator.
- (iii) If subject to 61.139(f)(2)(iii), records of the conditions found during each monthly inspection, and of each period when the car seal is broken, when the value position is changed, or when maintenance on the bypass line valve is performed.
- (j) The following reporting requirements are applicable to owners or operators of control devices subject to 61.139:
  - (1) Compliance tests shall be reported as specified in 61.13(f).
- (2) The following information shall be reported on a quarterly basis. Two of the quarterly reports shall be submitted as part of the semiannual reports required in 61.138(f).
  - (i) For each carbon adsorber:
- (A) The date and time of detection of each exceedance of the maximum concentration point and a brief description of the time and nature of the corrective action taken.
- (B) The date of each time that the captured benzene or removed carbon was not handled as required in 61.139(b)(1) and (2), and a brief description of the corrective action taken.
- (C) The date of each determination of the maximum concentration point, as described in 61.139(h), and a brief reason for the determination.
- (ii) For each vapor incinerator, the date and duration of each exceedance of the boundary parameters recorded under 61.139(i)(6) and a brief description of the corrective action taken.
  - (iii) For each vapor incinerator, the date and duration of each period specified as follows:
- (A) Each period recorded under 61.139(i)(7)(i) when the vent stream is diverted from the control device or has no flow rate:
  - (B) Each period recorded under 61.139(i)(7)(ii) when the vent stream is diverted from the control device; and



SECTION D.



**Source Level Requirements** 



- (C) Each period recorded under 61.139(i)(7)(iii) when the vent stream is diverted from the control device, when the car seal is broken, when the valve is unlocked, or when the valve position has changed.
- (iv) For each vapor incinerator, the owner or operator shall specify the method of monitoring chosen under 61.139(f)(2) in the first quarterly report. Any time the owner or operator changes that choice, he shall specify the change in the first quarterly report following the change.

[56 FR 47407, Sept. 19, 1991, as amended at 64 FR 7467, Feb. 12, 1999; 65 FR 62157, Oct. 17, 2000]

### VII. ADDITIONAL REQUIREMENTS.

# # 008 [40 CFR Part 61 NESHAPs §40 CFR 61.130]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Applicability, designation of sources, and delegation of authority.

- (a) The provisions of this subpart apply to each of the following sources at furnace and foundry coke by-product recovery plants: tar decanters, tar storage tanks, tar-intercepting sumps, flushing-liquor circulation tanks, light-oil sumps, light-oil condensers, light-oil decanters, wash-oil decanters, wash-oil circulation tanks, naphthalene processing, final cooler cooling towers, and the following equipment that are intended to operate in benzene service: pumps, valves, exhausters, pressure relief devices, sampling connection systems, open-ended valves or lines, flanges or other connectors, and control devices or systems required by 61.135.
- (b) The provisions of this subpart also apply to benzene storage tanks, BTX storage tanks, light-oil storage tanks, and excess ammonia-liquor storage tanks at furnace coke by-product recovery plants.
- (c) In delegating implementation and enforcement authority to a State under section 112 of the Act, the authorities contained in paragraph (d) of this section shall be retained by the Administrator and not transferred to a State.
- (d) Authorities that will not be delegated to States: §61.136(d).
- [61.130 amended at 56 FR 47406, Sept. 19, 1991]

# # 009 [40 CFR Part 61 NESHAPs §40 CFR 61.131]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, in subpart A of part 61, and in subpart V of part 61. The following terms shall have the specific meanings given them:

Annual coke production means the coke produced in the batteries connected to the coke by-product recovery plant over a 12-month period. The first 12-month period concludes on the first December 31 that comes at least 12 months after the effective date or after the date of initial startup if initial startup is after the effective date.

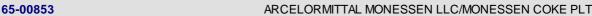
Benzene storage tank means any tank, reservoir, or container used to collect or store refined benzene.

BTX storage tank means any tank, reservoir, or container used to collect or store benzene-toluene-xylene or other light-oil fractions.

Car seal means a seal that is placed on the device used to change the position of a valve (e.g., from open to closed) such that the position of the valve cannot be changed without breaking the seal and requiring the replacement of the old seal, once broken, with a new seal.

Coke by-product recovery plant means any plant designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery.

Equipment means each pump, valve, exhauster, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in benzene service.





Excess ammonia-liquor storage tank means any tank, reservoir, or container used to collect or store a flushing liquor solution prior to ammonia or phenol recovery.

Exhauster means a fan located between the inlet gas flange and outlet gas flange of the coke oven gas line that provides motive power for coke oven gases.

Foundry coke means coke that is produced from raw materials with less than 26 percent volatile material by weight and that is subject to a coking period of 24 hours or more. Percent volatile material of the raw materials (by weight) is the weighted average percent volatile material of all raw materials (by weight) charged to the coke oven per coking cycle.

Foundry coke by-product recovery plant means a coke by-product recovery plant connected to coke batteries whose annual coke production is at least 75 percent foundry coke.

Flushing-liquor circulation tank means any vessel that functions to store or contain flushing liquor that is separated from the tar in the tar decanter and is recirculated as the cooled liquor to the gas collection system.

Furnace coke means coke produced in by-product ovens that is not foundry coke.

Furnace coke by-product recovery plant means a coke by-product recovery plant that is not a foundry coke by-product recovery plant.

In benzene service means a piece of equipment, other than an exhauster, that either contains or contacts a fluid (liquid or gas) that is at least 10 percent benzene by weight or any exhauster that either contains or contacts a fluid (liquid or gas) at least 1 percent benzene by weight as determined by the provisions of 61.137(b). The provisions of 61.137(b) also specify how to determine that a piece of equipment is not in benzene service.

Light-oil condenser means any unit in the light-oil recovery operation that functions to condense benzene-containing vapors.

Light-oil decanter means any vessel, tank, or other type of device in the light-oil recovery operation that functions to separate light oil from water downstream of the light-oil condenser. A light-oil decanter also may be known as a light-oil separator.

Light-oil storage tank means any tank, reservoir, or container used to collect or store crude or refined light-oil.

Light-oil sump means any tank, pit, enclosure, or slop tank in light-oil recovery operations that functions as a wastewater separation device for hydrocarbon liquids on the surface of the water.

Naphthalene processing means any operations required to recover naphthalene including the separation, refining, and drying of crude or refined naphthalene.

Non-regenerative carbon adsorber means a series, over time, of non-regenerative carbon beds applied to a single source or group of sources, where non-regenerative carbon beds are carbon beds that are either never regenerated or are moved from their location for regeneration.

Process vessel means each tar decanter, flushing-liquor circulation tank, light-oil condenser, light-oil decanter, wash-oil decanter, or wash-oil circulation tank.

Regenerative carbon adsorber means a carbon adsorber applied to a single source or group of sources, in which the carbon beds are regenerated without being moved from their location.

Semiannual means a 6-month period; the first semiannual period concludes on the last day of the last full month during the 180 days following initial startup for new sources; the first semiannual period concludes on the last day of the last full month during the 180 days after the effective date of the regulation for existing sources.

Tar decanter means any vessel, tank, or container that functions to separate heavy tar and sludge from flushing liquor by



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#### SECTION D. **Source Level Requirements**

means of gravity, heat, or chemical emulsion breakers. A tar decanter also may be known as a flushing-liquor decanter.

Tar storage tank means any vessel, tank, reservoir, or other type of container used to collect or store crude tar or tarentrained naphthalene, except for tar products obtained by distillation, such as coal tar pitch, creosotes, or carbolic oil. This definition also includes any vessel, tank, reservoir, or container used to reduce the water content of the tar by means of heat, residence time, chemical emulsion breakers, or centrifugal separation. A tar storage tank also may be known as a tardewatering tank.

Tar-intercepting sump means any tank, pit, or enclosure that serves to receive or separate tars and aqueous condensate discharged from the primary cooler. A tar-intercepting sump also may be known as a primary-cooler decanter.

Vapor incinerator means any enclosed combustion device that is used for destroying organic compounds and does not necessarily extract energy in the form of steam or process heat.

Wash-oil circulation tank means any vessel that functions to hold the wash oil used in light-oil recovery operations or the wash oil used in the wash-oil final cooler.

Wash-oil decanter means any vessel that functions to separate, by gravity, the condensed water from the wash oil received from a wash-oil final cooler or from a light-oil scrubber. [61.131 amended at 56 FR 47406, Sept. 19, 1991]

#### #010 [40 CFR Part 61 NESHAPs §40 CFR 61.136]

Subpart L--National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants Compliance provisions and alternative means of emission limitation.

- (a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 61.132 through 61.135 for each new and existing source, except as provided under 61.243-1 and 61.243-2.
- (b) Compliance with this subpart shall be determined by a review of records, review of performance test results, inspections, or any combination thereof, using the methods and procedures specified in 61.137.
- (c) On the first January 1 after the first year that a plant's annual coke production is less than 75 percent foundry coke, the coke by-product recovery plant becomes a furnace coke by-product recovery plant and shall comply with 61.132(d). Once a plant becomes a furnace coke by-product recovery plant, it will continue to be considered a furnace coke by-product recovery plant, regardless of the coke production in subsequent years.
- (d) (1) An owner or operator may request permission to use an alternative means of emission limitation to meet the requirements in 61.132, 61.133, and 61.135 of this subpart and 61.242-2, -5, -6, -7, -8, and -11 of subpart V. Permission to use an alternative means of emission limitation shall be requested as specified in 61.12(d).
- (2) When the Administrator evaluates requests for permission to use alternative means of emission limitation for sources subject to 61,132 and 61,133 (except tar decanters) the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 98 percent. For tar decanters, the Administrator shall compare test data for the means of emission limitation to a benzene control efficiency of 95 percent.
- (3) For any requests for permission to use an alternative to the work practices required under 61.135, the provisions of 61.244(c) shall apply.

# \*\*\* Permit Shield in Effect. \*\*\*



# 65-00853

# TITO OF

# **SECTION D.** Source Level Requirements

Source ID: 112 Source Name: TAR AND LIGHT OIL LOADING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 40 CFR PART 61 SUBPART V

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*







Source ID: 114 Source Name: PLANT ROADS

Source Capacity/Throughput:

### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 125 Source Name: 900-BHP EMERGENCY DIESEL ENGINE

Source Capacity/Throughput:

Conditions for this source occur in the following groups: 40 CFR PART 63 SUBPART ZZZZ - EXISTING

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



### 65-00853

# ARCELORMITTAL MONESSEN LLC/MONESSEN COKE PLT



#### SECTION D. **Source Level Requirements**

Source ID: 801 Source Name: COKE BATTERIES -CHARGING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: COKE OVEN BATTERY OPERATIONS

#### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### MONITORING REQUIREMENTS. III.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS. IV.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



### 65-00853

### ARCELORMITTAL MONESSEN LLC/MONESSEN COKE PLT



#### SECTION D. **Source Level Requirements**

Source ID: 802 Source Name: COKE BATTERIES -PUSHING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: COKE OVEN BATTERY OPERATIONS

#### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### MONITORING REQUIREMENTS. III.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS. IV.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 803 Source Name: COKE BATTERIES -QUENCHING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: COKE OVEN BATTERY OPERATIONS

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*







Source ID: 805 Source Name: COKE BATTERIES -COMBUST STK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: COKE OVEN BATTERY OPERATIONS

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 806 Source Name: COKE BATTERIES -DOOR LEAK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: COKE OVEN BATTERY OPERATIONS

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 807 Source Name: COKE BATTERIES -TOPSIDE

Source Capacity/Throughput:

Conditions for this source occur in the following groups: COKE OVEN BATTERY OPERATIONS

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*





Source ID: 808 Source Name: COKE BATTERIES -SOAKING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: COKE OVEN BATTERY OPERATIONS

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



# 65-00853



#### SECTION D. **Source Level Requirements**

Source ID: 809 Source Name: EXCESS COG FLARE

Source Capacity/Throughput:

Conditions for this source occur in the following groups: COKE OVEN BATTERY OPERATIONS

#### RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### MONITORING REQUIREMENTS. III.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### RECORDKEEPING REQUIREMENTS. IV.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

# \*\*\* Permit Shield in Effect. \*\*\*



65-00853



# **SECTION D.** Source Level Requirements

Source ID: 810 Source Name: MATERIAL HANDLING

Source Capacity/Throughput:

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

### IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

# \*\*\* Permit Shield in Effect. \*\*\*







Group Name: 40 CFR PART 61 SUBPART FF

Group Description: National Emission Standards for Benzene Waste Operations

Sources included in this group

ID Name
111 COKE BY-PRODUCT RECOVERY PLT

#### I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### II. TESTING REQUIREMENTS.

# # 001 [40 CFR Part 61 NESHAPs §40 CFR 61.355]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

Test methods, procedures, and compliance provisions.

- (a) An owner or operator shall determine the total annual benzene quantity from facility waste by the following procedure:
- (1) For each waste stream subject to this subpart having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in § 61.342(a), the owner or operator shall:
- (i) Determine the annual waste quantity for each waste stream using the procedures specified in paragraph (b) of this section.
- (ii) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in paragraph (c) of this section.
- (iii) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.
- (2) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to paragraph (b)(4) of this section.
  - (3) Not applicable.
- (4) If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:
- (i) Comply with the recordkeeping requirements of § 61.356 and reporting requirements of § 61.357 of this subpart; and
- (ii) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.
- (5) If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:
- (i) Comply with the recordkeeping requirements of  $\S$  61.356 and reporting requirements of  $\S$  61.357 of this subpart; and
- (ii) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.
  - (6) The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process



unit turnaround waste in paragraph (b)(4) of this section, shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with paragraphs (a) through (c) of this section. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.

- (b) For purposes of the calculation required by paragraph (a) of this section, an owner or operator shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in paragraphs (b) (1), (2), (3), and (4) of this section, by one of the methods given in paragraphs (b) (5) through (7) of this section.
- (1) The determination of annual waste quantity for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.
- (2) The determination of annual waste quantity for wastes at coke by-product plants subject to and complying with the control requirements of § 61.132, 61.133, 61.134, or 61.139 of subpart L of this part shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:
- (i) The transfer of wastes between units complying with the control requirements of subpart L of this part, process units, and the ammonia still is made through hard piping or other enclosed system.
  - (ii) The ammonia still meets the definition of a sour water stripper in § 61.341.
- (3) The determination of annual waste quantity for wastes that are received at hazardous waste treatment, storage, or disposal facilities from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
- (4) The determination of annual waste quantity for each process unit turnaround waste generated only at 2 year or greater intervals, may be made by dividing the total quantity of waste generated during the most recent process unit turnaround by the time period (in the nearest tenth of a year) between the turnaround resulting in generation of the waste and the most recent preceding process turnaround for the unit. The resulting annual waste quantity shall be included in the calculation of the annual benzene quantity as provided in paragraph (a)(1)(iii) of this section for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process turnaround. For estimates of total annual benzene quantity as specified in the 90-day report, required under § 61.357(a)(1), the owner or operator shall estimate the waste quantity generated during the most recent turnaround, and the time period between turnarounds in accordance with good engineering practices. If the owner or operator chooses not to annualize process unit turnaround waste, as specified in this paragraph, then the process unit turnaround waste quantity shall be included in the calculation of the annual benzene quantity for the year in which the turnaround occurs.
- (5) Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;
  - (6) Use the maximum design capacity of the waste management unit; or
  - (7) Use measurements that are representative of maximum waste generation rates.
- (c) For the purposes of the calculation required by §§ 61.355(a) of this subpart, an owner or operator shall determine the flow-weighted annual average ben- zene concentration in a manner that meets the requirements given in paragraph (c)(1) of this section using either of the methods given in paragraphs (c)(2) and (c)(3) of this section.
  - (1) The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:
- (i) The determination shall be made at the point of waste generation except for the specific cases given in paragraphs (c)(1)(i)(A) through (D) of this section.



- (A) The determination for sour water streams that are processed in sour water strippers shall be made at the point that the water exits the sour water stripper.
- (B) The determination for wastes at coke by-product plants subject to and complying with the control requirements of § 61.132, 61.133, 61.134, or 61.139 of subpart L of this part shall be made at the location that the waste stream exits the process unit component or waste management unit controlled by that subpart or at the exit of the ammonia still, provided that the following conditions are met:
- (1) The transfer of wastes between units complying with the control requirements of subpart L of this part, process units, and the ammonia still is made through hard piping or other enclosed system.
  - ( 2 ) The ammonia still meets the definition of a sour water stripper in  $\S$  61.341.
- (C) The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
- (D) The determination of flow-weighted annual average benzene concentration for process unit turnaround waste shall be made using either of the methods given in paragraph (c)(2) or (c)(3) of this section. The resulting flow-weighted annual average benzene concentration shall be included in the calculation of annual benzene quantity as provided in paragraph (a)(1)(iii) of this section for the year in which the turnaround occurs and for each subsequent year until the unit undergoes the next process unit turnaround.
- (ii) Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.
- (iii) Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination—to reduce the benzene concentration.
- (iv) The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in paragraphs (c)(1)(i)(A) through (D) of this section.
- (v) For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.
- (2) Knowledge of the waste. The owner or operator shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the owner or operator shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When an owner or operator and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under paragraph (c)(3) of this section shall be used to resolve the disagreement.
  - (3) Measurements of the benzene concentration in the waste stream in accordance with the following procedures:
- (i) Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.
  - (ii) For waste in enclosed pipes, the following procedures shall be used:
- (A) Samples shall be collected prior to the waste being exposed to the atmosphere in order to minimize the loss of benzene prior to sampling.
- (B) A static mixer shall be installed in the process line or in a by-pass line unless the owner or operator demonstrates that installation of a static mixer in the line is not necessary to accurately determine the benzene concentration of the waste stream.

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- (C) The sampling tap shall be located within two pipe diameters of the static mixer outlet.
- (D) Prior to the initiation of sampling, sample lines and cooling coil shall be purged with at least four volumes of waste.
- (E) After purging, the sample flow shall be directed to a sample container and the tip of the sampling tube shall be kept below the surface of the waste during sampling to minimize contact with the atmosphere.
- (F) Samples shall be collected at a flow rate such that the cooling coil is able to maintain a waste temperature less than 10 °C (50 °F).
- (G) After filling, the sample container shall be capped immediately (within 5 seconds) to leave a minimum headspace in the container.
- (H) The sample containers shall immediately be cooled and maintained at a temperature below 10 °C (50 °F) for transfer to the laboratory.
- (iii) When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.
- (iv) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:
- (A) Method 8020, Aromatic Volatile Organics, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of this part);
- (B) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of this part);
- (C) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of this part);
- (D) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in § 61.18 of this part);
- (E) Method 602, Purgeable Aromatics, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or
- (F) Method 624, Purgeables, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.
- (v) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:

$$\begin{array}{c}
 & \text{n} \\
C = (1/Qt) * Sum [(Qi)*(Ci)] \\
 & i-1
\end{array}$$

Where:

C<sup>-</sup>=Flow-weighted annual average benzene concentration for waste stream, ppmw.

Qt =Total annual waste quantity for waste stream, kg/yr (lb/yr).

n=Number of waste samples (at least 3).

Qi = Annual waste quantity for waste stream represented by Ci, kg/yr (lb/yr).







Ci =Measured concentration of benzene in waste sample i, ppmw.

(d) - (k) Not applicable.

[55 FR 8346, Mar. 7, 1990; 55 FR 12444, Apr. 3, 1990, as amended at 55 FR 37231, Sept. 10, 1990; 58 FR 3099, Jan. 7, 1993; 65 FR 62160, Oct. 17, 2000]

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### IV. RECORDKEEPING REQUIREMENTS.

#### # 002 [40 CFR Part 61 NESHAPs §40 CFR 61.356]

Subpart FF--National Emission Standard for Benzene Waste Operations

Recordkeeping requirements.

- (a) Each owner or operator of a facility subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.
- (b) Each owner or operator shall maintain records that identify each waste stream at the facility subject to this subpart, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart. In addition the owner or operator shall maintain the following records:
- (1) For each waste stream not controlled for benzene emissions in accordance with this subpart, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
  - (2) (6) Not applicable.
- (c) (n) Not applicable.

[55 FR 8346, Mar. 7, 1990; 55 FR 12444, Apr. 3, 1990; 55 FR 18331, May 2, 1990, as amended at 58 FR 3103, Jan. 7, 1993; 65 FR 62161, Oct. 17, 2000; 67 FR 68533, Nov. 12, 2002]

#### V. REPORTING REQUIREMENTS.

#### # 003 [40 CFR Part 61 NESHAPs §40 CFR 61.357]

Subpart FF--National Emission Standard for Benzene Waste Operations Reporting requirements.

- (a) Each owner or operator of a chemical plant, petroleum refinery, coke by-product recovery plant, and any facility managing wastes from these industries shall submit to the Administrator within 90 days after January 7, 1993, or by the initial startup for a new source with an initial startup after the effective date, a report that summarizes the regulatory status of each waste stream subject to § 61.342 and is determined by the procedures specified in § 61.355(c) to contain benzene. Each owner or operator subject to this subpart who has no benzene onsite in wastes, products, by-products, or intermediates shall submit an initial report that is a statement to this effect. For all other owners or operators subject to this subpart, the report shall include the following information:
  - (1) Total annual benzene quantity from facility waste determined in accordance with § 61.355(a) of this subpart.
- (2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of this subpart.
- (3) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart the following information shall be added to the table:





- (i) Whether or not the water content of the waste stream is greater than 10 percent;
- (ii) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
- (iii) Annual waste quantity for the waste stream;
- (iv) Range of benzene concentrations for the waste stream;
- (v) Annual average flow-weighted benzene concentration for the waste stream; and
- (vi) Annual benzene quantity for the waste stream.
- (4) The information required in paragraphs (a) (1), (2), and (3) of this section should represent the waste stream characteristics based on current configuration and operating conditions. An owner or operator only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in § 61.10(a).
- (b) If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.
- (c) If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of this section is not changed in the following year, the owner or operator may submit a statement to that effect.
- (d) (g) Not applicable.

[55 FR 8346, Mar. 7 1990; 55 FR 12444, Apr. 3, 1990, as amended at 55 FR 37231, Sept. 10, 1990; 58 FR 3105, Jan. 7, 1993; 65 FR 62161, Oct. 17, 2000]

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 004 [40 CFR Part 61 NESHAPs §40 CFR 61.342]

Subpart FF--National Emission Standard for Benzene Waste Operations

Standards: General.

- (a) An owner or operator of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of paragraphs (b) and (c) of this section. The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows:
  - (1) Not applicable.
- (2) The benzene in a material subject to this subpart that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.
- (3) Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of paragraphs (c) through (h) of this section. If the facility is managing remediation waste generated offsite, the benzene in this waste shall be





included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

- (4) The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in § 61.355(c)(1)(i) (A) through (C).
- (b) (f) Not applicable.
- (g) Compliance with this subpart will be determined by review of facility records and results from tests and inspections using methods and procedures specified in § 61.355 of this subpart.
- (h) Permission to use an alternative means of compliance to meet the requirements of §§ 61.342 through 61.352 of this subpart may be granted by the Administrator as provided in § 61.353 of this subpart.

[55 FR 8346, Mar. 7, 1990, as amended at 58 FR 3095, Jan. 7, 1993; 65 FR 62159, 62160, Oct. 17, 2000]

#### # 005 [40 CFR Part 61 NESHAPs §40 CFR 61.343]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

Standards: Tanks.

Not applicable.

#### # 006 [40 CFR Part 61 NESHAPs §40 CFR 61.344]

Subpart FF--National Emission Standard for Benzene Waste Operations

Standards: Surface impoundments.

Not applicable.

# # 007 [40 CFR Part 61 NESHAPs §40 CFR 61.345]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

Standards: Containers.

Not applicable.

#### # 008 [40 CFR Part 61 NESHAPs §40 CFR 61.346]

Subpart FF--National Emission Standard for Benzene Waste Operations

Standards: Individual drain systems.

Not applicable.

# # 009 [40 CFR Part 61 NESHAPs §40 CFR 61.347]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

Standards: Oil-water separators.

Not applicable.

## # 010 [40 CFR Part 61 NESHAPs §40 CFR 61.348]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

Standards: Treatment processes.

Not applicable.

#### # 011 [40 CFR Part 61 NESHAPs §40 CFR 61.349]

Subpart FF--National Emission Standard for Benzene Waste Operations

Standards: Closed-vent systems and control devices.

Not applicable.

# # 012 [40 CFR Part 61 NESHAPs §40 CFR 61.350]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

Standards: Delay of repair.

Not applicable.

#### # 013 [40 CFR Part 61 NESHAPs §40 CFR 61.351]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

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# **SECTION E.** Source Group Restrictions.

Alternative standards for tanks.

Not applicable.

#### # 014 [40 CFR Part 61 NESHAPs §40 CFR 61.352]

Subpart FF--National Emission Standard for Benzene Waste Operations

Alternative standards for oil-water separators.

Not applicable.

#### # 015 [40 CFR Part 61 NESHAPs §40 CFR 61.353]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

Alternative means of emission limitation.

Not applicable.

#### # 016 [40 CFR Part 61 NESHAPs §40 CFR 61.354]

**Subpart FF--National Emission Standard for Benzene Waste Operations** 

Monitoring of operations.

Not applicable.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 017 [40 CFR Part 61 NESHAPs §40 CFR 61.340]

Subpart FF--National Emission Standard for Benzene Waste Operations Applicability.

- (a) The provisions of this subpart apply to owners and operators of chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries.
- (b) Not applicable.
- (c) At each facility identified in paragraph (a) or (b) of this section, the following waste is exempt from the requirements of this subpart:
  - (1) Waste in the form of gases or vapors that is emitted from process fluids:
  - (2) Waste that is contained in a segregated stormwater sewer system.
- (d) At each facility identified in paragraph (a) or (b) of this section, any gaseous stream from a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in § 61.341, is exempt from this subpart. No testing, monitoring, recordkeeping, or reporting is required under this subpart for any gaseous stream from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

 $[55\ FR\ 8346, Mar.\ 7, 1990, as\ amended\ at\ 55\ FR\ 37231, Sept.\ 10, 1990; 58\ FR\ 3095, Jan.\ 7, 1993; 67\ FR\ 68531, Nov.\ 12, 2002]$ 

# # 018 [40 CFR Part 61 NESHAPs §40 CFR 61.341]

Subpart FF--National Emission Standard for Benzene Waste Operations

Definitions.

Benzene concentration means the fraction by weight of benzene in a waste as determined in accordance with the procedures specified in § 61.355 of this subpart.

Car-seal means a seal that is placed on a device that is used to change the position of a valve (e.g., from opened to closed) in such a way that the position of the valve cannot be changed without breaking the seal.

Chemical manufacturing plant means any facility engaged in the production of chemicals by chemical, thermal, physical, or biological processes for use as a product, co-product, by-product, or intermediate including but not limited to industrial organic chemicals, organic pesticide products, pharmaceutical preparations, paint and allied products, fertilizers, and agricultural chemicals. Examples of chemical manufacturing plants include facilities at which process units are operated to produce one or more of the following chemicals: benzenesulfonic acid, benzene, chlorobenzene, cumene, cyclohexane,



ethylene, ethylbenzene, hydroquinone, linear alklylbenzene, nitrobenzene, resorcinol, sulfolane, or styrene.

Closed-vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow inducing devices that transport gas or vapor from an emission source to a control device.

Coke by-product recovery plant means any facility designed and operated for the separation and recovery of coal tar derivatives (by-products) evolved from coal during the coking process of a coke oven battery.

Container means any portable waste management unit in which a material is stored, transported, treated, or otherwise handled. Examples of containers are drums, barrels, tank trucks, barges, dumpsters, tank cars, dump trucks, and ships.

Control device means an enclosed combustion device, vapor recovery system, or flare.

Cover means a device or system which is placed on or over a waste placed in a waste management unit so that the entire waste surface area is enclosed and sealed to minimize air emissions. A cover may have openings necessary for operation, inspection, and maintenance of the waste management unit such as access hatches, sampling ports, and gauge wells provided that each opening is closed and sealed when not in use. Example of covers include a fixed roof installed on a tank, a lid installed on a container, and an air-supported enclosure installed over a waste management unit.

External floating roof means a pontoon-type or double-deck type cover with certain rim sealing mechanisms that rests on the liquid surface in a waste management unit with no fixed roof.

Facility means all process units and product tanks that generate waste within a stationary source, and all waste management units that are used for waste treatment, storage, or disposal within a stationary source.

Fixed roof means a cover that is mounted on a waste management unit in a stationary manner and that does not move with fluctuations in liquid level.

Floating roof means a cover with certain rim sealing mechanisms consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and unit wall.

Flow indicator means a device which indicates whether gas flow is present in a line or vent system.

Fuel gas system means the offsite and onsite piping and control system that gathers gaseous streams generated by facility operations, may blend them with sources of gas, if available, and transports the blended gaseous fuel at suitable pressures for use as fuel in heaters, furnaces, boilers, incinerators, gas turbines, and other combustion devices located within or outside the facility. The fuel is piped directly to each individual combustion device, and the system typically operates at pressures over atmospheric.

Individual drain system means the system used to convey waste from a process unit, product storage tank, or waste management unit to a waste management unit. The term includes all process drains and common junction boxes, together with their associated sewer lines and other junction boxes, down to the receiving waste management unit.

Internal floating roof means a cover that rests or floats on the liquid surface inside a waste management unit that has a fixed roof.

Liquid-mounted seal means a foam or liquid-filled primary seal mounted in contact with the liquid between the waste management unit wall and the floating roof continuously around the circumference.

Loading means the introduction of waste into a waste management unit but not necessarily to complete capacity (also referred to as filling).

Maximum organic vapor pressure means the equilibrium partial pressure exerted by the waste at the temperature equal to the highest calendar-month average of the waste storage temperature for waste stored above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for waste stored at the ambient temperature, as determined:





- (1) In accordance with § 60.17(c); or
- (2) As obtained from standard reference texts; or
- (3) In accordance with § 60.17(a)(37); or
- (4) Any other method approved by the Administrator.

No detectable emissions means less than 500 parts per million by volume (ppmv) above background levels, as measured by a detection instrument reading in accordance with the procedures specified in § 61.355(h) of this subpart.

Oil-water separator means a waste management unit, generally a tank or surface impoundment, used to separate oil from water. An oil-water separator consists of not only the separation unit but also the forebay and other separator basins, skimmers, weirs, grit chambers, sludge hoppers, and bar screens that are located directly after the individual drain system and prior to additional treatment units such as an air flotation unit, clarifier, or biological treatment unit. Examples of an oil-water separator incude an API separator, parallel-plate interceptor, and corrugated-plate interceptor with the associated ancillary equipment.

Petroleum refinery means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum, or through the redistillation, cracking, or reforming of unfinished petroleum derivatives.

Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

Point of waste generation means the location where the waste stream exits the process unit component or storage tank prior to handling or treatment in an operation that is not an integral part of the production process, or in the case of waste management units that generate new wastes after treatment, the location where the waste stream exits the waste management unit component.

Process unit means equipment assembled and connected by pipes or ducts to produce intermediate or final products. A process unit can be operated independently if supplied with sufficient fuel or raw materials and sufficient product storage facilities.

Process unit turnaround means the shutting down of the operations of a process unit, the purging of the contents of the process unit, the maintenance or repair work, followed by restarting of the process.

Process unit turnaround waste means a waste that is generated as a result of a process unit turnaround.

Process wastewater means water which comes in contact with benzene during manufacturing or processing operations conducted within a process unit. Process wastewater is not organic wastes, process fluids, product tank drawdown, cooling tower blowdown, steam trap condensate, or landfill leachate.

Process wastewater stream means a waste stream that contains only process wastewater.

Product tank means a stationary unit that is designed to contain an accumulation of materials that are fed to or produced by a process unit, and is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

Product tank drawdown means any material or mixture of materials discharged from a product tank for the purpose of removing water or other contaminants from the product tank.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a



closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials.

Segregated stormwater sewer system means a drain and collection system designed and operated for the sole purpose of collecting rainfall runoff at a facility, and which is segregated from all other individual drain systems.

Sewer line means a lateral, trunk line, branch line, or other enclosed conduit used to convey waste to a downstream waste management unit.

Slop oil means the floating oil and solids that accumulate on the surface of an oil-water separator.

Sour water stream means a stream that:

- (1) Contains ammonia or sulfur compounds (usually hydrogen sulfide) at concentrations of 10 ppm by weight or more;
- (2) Is generated from separation of water from a feed stock, intermediate, or product that contained ammonia or sulfur compounds; and
  - (3) Requires treatment to remove the ammonia or sulfur compounds.

Sour water stripper means a unit that:

- (1) Is designed and operated to remove ammonia or sulfur compounds (usually hydrogen sulfide) from sour water streams;
  - (2) Has the sour water streams transferred to the stripper through hard piping or other enclosed system; and
- (3) Is operated in such a manner that the offgases are sent to a sulfur recovery unit, processing unit, incinerator, flare, or other combustion device.

Surface impoundment means a waste management unit which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or waste containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

Tank means a stationary waste management unit that is designed to contain an accumulation of waste and is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

Treatment process means a stream stripping unit, thin-film evaporation unit, waste incinerator, or any other process used to comply with § 61.348 of this subpart.

Vapor-mounted seal means a foam-filled primary seal mounted continuously around the perimeter of a waste management unit so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the unit wall, the liquid surface, and the floating roof.

Waste means any material resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, thermally, or biologically treated prior to being discarded, recycled, or discharged.

Waste management unit means a piece of equipment, structure, or transport mechanism used in handling, storage, treatment, or disposal of waste. Examples of a waste management unit include a tank, surface impoundment, container, oil-water separator, individual drain system, steam stripping unit, thin-film evaporation unit, waste incinerator, and landfill.

Waste stream means the waste generated by a particular process unit, product tank, or waste management unit. The characteristics of the waste stream (e.g., flow rate, benzene concentration, water content) are determined at the point of







waste generation. Examples of a waste stream include process wastewater, product tank drawdown, sludge and slop oil removed from waste management units, and landfill leachate.

Wastewater treatment system means any component, piece of equipment, or installation that receives, manages, or treats process wastewater, product tank drawdown, or landfill leachate prior to direct or indirect discharge in accordance with the National Pollutant Discharge Elimination System permit regulations under 40 CFR part 122. These systems typically include individual drain systems, oil-water separators, air flotation units, equalization tanks, and biological treatment units.

Water seal controls means a seal pot, p-leg trap, or other type of trap filled with water (e.g., flooded sewers that maintain water levels adequate to prevent air flow through the system) that creates a water barrier between the sewer line and the atmosphere. The water level of the seal must be maintained in the vertical leg of a drain in order to be considered a water seal.

[55 FR 8346, Mar. 7, 1990; 55 FR 12444, Apr. 3, 1990, as amended at 58 FR 3095, Jan. 7, 1993; 67 FR 68531, Nov. 12, 2002]

\*\*\* Permit Shield in Effect. \*\*\*

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Group Name: 40 CFR PART 61 SUBPART V

Group Description: National Emission Standards for Equipment Leaks

Sources included in this group

ID	Name
111	COKE BY-PRODUCT RECOVERY PLT
112	TAR AND LIGHT OIL LOADING

# I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### II. TESTING REQUIREMENTS.

# # 001 [40 CFR Part 61 NESHAPs §40 CFR 61.245]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources)

- Test methods and procedures.
- (a) Each owner or operator subject to the provisions of this subpart shall comply with the test methods and procedures requirements provided in this section.
- (b) Monitoring, as required in §§ 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:
  - (1) Monitoring shall comply with Method 21 of appendix A of 40 CFR part 60.
  - (2) The detection instrument shall meet the performance criteria of Method 21.
  - (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
  - (4) Calibration gases shall be:
    - (i) Zero air (less than 10 ppm of hydrocarbon in air); and
- (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
- (5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- (c) When equipment is tested for compliance with or monitored for no detectable emissions, the owner or operator shall comply with the following requirements:
  - (1) The requirements of paragraphs (b) (1) through (4) shall apply.
  - (2) The background level shall be determined, as set forth in Method 21.
- (3) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- (4) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
- (d) (1) Each piece of equipment within a process unit that can conceivably contain equipment in VHAP service is presumed to be in VHAP service unless an owner or operator demonstrates that the piece of equipment is not in VHAP service. For a piece of equipment to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10 percent by weight. For purposes of determining the percent VHAP content of the process fluid that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 (incorporated by the reference as specified in § 61.18) shall be used.
  - (2) (i) An owner or operator may use engineering judgment rather than the procedures in paragraph (d)(1) of this





section to demonstrate that the percent VHAP content does not exceed 10 percent by weight, provided that the engineering judgment demonstrates that the VHAP content clearly does not exceed 10 percent by weight. When an owner or operator and the Administrator do not agree on whether a piece of equipment is not in VHAP service, however, the procedures in paragraph (d)(1) of this section shall be used to resolve the disagreement.

- (ii) If an owner or operator determines that a piece of equipment is in VHAP service, the determination can be revised only after following the procedures in paragraph (d)(1) of this section.
- (3) Samples used in determining the percent VHAP content shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.
- (e) (1) Method 22 of appendix A of 40 CFR part 60 shall be used to determine compliance of flares with the visible emission provisions of this subpart.
- (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
  - (3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

```
n
HT = ( SUM Ci Hi )
i=1
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#### Where:

HT = Net heating value of the sample, MJ/scm (BTU/scf); where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg (77 °F and 14.7 psi), but the standard temperature for determining the volume corresponding to one mole is 20 °C (68 °F).

K = conversion constant, 1.740 × 10^7 (g-mole) (MJ)/(ppm-scm-kcal) (metric units); or 4.674 × 10^8 ((g-mole) (Btu)/(ppm-scf-kcal)) (English units)

Ci = Concentration of sample component "i" in ppm, as measured by Method 18 of appendix A to 40 CFR part 60 and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference as specified in § 61.18).

Hi = net heat of combustion of sample component "i" at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in § 61.18) if published values are not available or cannot be calculated.

- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Method 2, 2A, 2C, or 2D, as appropriate, by the unobstructed (free) cross section area of the flare tip.
  - (5) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation:

Vmax = K1 + K2 \* HT

#### Where:

Vmax = Maximum permitted velocity, m/sec (ft/sec).

HT = Net heating value of the gas being combusted, as determined in paragraph (e)(3) of this section, MJ/scm (Btu/scf).

K1 = 8.706 m/sec (metric units)

K1 = 28.56 ft/sec (English units)

 $K2 = 0.7084 \text{ m}^4 / (MJ\text{-sec}) \text{ (metric units)}$ 

 $K2 = 0.087 \text{ ft}^4 / (Btu-sec) (English units)$ 

[49 FR 23513, June 6, 1984, as amended at 49 FR 38946, Oct. 2, 1984; 49 FR 43647, Oct. 31, 1984; 53 FR 36972, Sept. 23, 1988; 54 FR 38077, Sept. 14, 1989; 65 FR 62158, Oct. 17, 2000]







#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

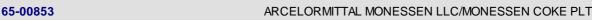
#### IV. RECORDKEEPING REQUIREMENTS.

# # 002 [40 CFR Part 61 NESHAPs §40 CFR 61.246]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Recordkeeping requirements.

- (a) (1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
- (2) An owner or operator of more than one process unit subject to the provisions of this subpart may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit.
- (b) When each leak is detected as specified in §§ 61.242-2, 61.242-3, 61.242-7, 61.242-8, and 61.135, the following requirements apply:
- (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in § 61.242-7(c) and no leak has been detected during those 2 months.
  - (3) The identification on equipment, except on a valve, may be removed after it has been repaired.
- (c) When each leak is detected as specified in §§ 61.242-2, 61.242-3. 61.242-7, 61.242-8, and 61.135, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
  - (1) The instrument and operator identification numbers and the equipment identification number.
  - (2) The date the leak was detected and the dates of each attempt to repair the leak.
  - (3) Repair methods applied in each attempt to repair the leak.
- (4) "Above 10,000" if the maximum instrument reading measured by the methods specified in § 61.245(a) after each repair attempt is equal to or greater than 10,000 ppm.
- (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
  - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
  - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
  - (9) The date of successful repair of the leak.
- (d) The following information pertaining to the design requirements for closed-vent systems and control devices described in § 61.242-11 shall be recorded and kept in a readily accessible location:
  - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
  - (2) The dates and descriptions of any changes in the design specifications.

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- (3) A description of the parameter or parameters monitored, as required in § 61.242-11(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
- (4) Periods when the closed-vent systems and control devices required in §§ 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9 are not operated as designed, including periods when a flare pilot light does not have a flame.
- (5) Dates of startups and shutdowns of the closed-vent systems and control devices required in §§ 61.242-2, 61.242-3, 61.242-4, 61.242-5 and 61.242-9.
- (e) The following information pertaining to all equipment to which a standard applies shall be recorded in a log that is kept in a readily accessible location:
  - (1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this subpart.
- (2) (i) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background.
  - (ii) The designation of this equipment for no detectable emissions shall be signed by the owner or operator.
  - (3) A list of equipment identification numbers for pressure relief devices required to comply with § 61.242-4(a).
  - (4) (i) The dates of each compliance test required in §§ 61.242-2(e), 61.242-4, 61.242-7(f), and 61.135(g).
    - (ii) The background level measured during each compliance test.
    - (iii) The maximum instrument reading measured at the equipment during each compliance test.
  - (5) A list of identification numbers for equipment in vacuum service.
- (f) The following information pertaining to all valves subject to the requirements of § 61.242-7(g) and
- (h) and to all pumps subject to the requirements of § 61.242-2(g) shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for valves and pumps that are designated as unsafe to monitor, an explanation for each valve or pump stating why the valve or pump is unsafe to monitor, and the plan for monitoring each valve or pump.
- (2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
- (g) The following information shall be recorded for valves complying with § 61.243-2:
  - (1) A schedule of monitoring.
  - (2) The percent of valves found leaking during each monitoring period.
- (h) The following information shall be recorded in a log that is kept in a readily accessible location:
  - (1) Design criterion required in §§ 61.242-2(d)(5) and 61.135(e)(4) and an explanation of the design criterion; and
  - (2) Any changes to this criterion and the reasons for the changes.
- (i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicability section of this subpart and other specific subparts:
  - (1) An analysis demonstrating the design capacity of the process unit, and

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

[49 FR 23513, June 6, 1984, as amended at 49 FR 38946, Oct. 2, 1984; 54 FR 38077, Sept. 14, 1989; 65 FR 78283, Dec. 14, 2000]

#### V. REPORTING REQUIREMENTS.

#### # 003 [40 CFR Part 61 NESHAPs §40 CFR 61.247]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Reporting requirements.

- (a) (1) An owner or operator of any piece of equipment to which this subpart applies shall submit a statement in writing notifying the Administrator that the requirements of §§ 61.242, 61.245, 61.246, and 61.247 are being implemented.
- (2) In the case of an existing source or a new source which has an initial startup date preceding the effective date, the statement is to be submitted within 90 days of the effective date, unless a waiver of compliance is granted under § 61.11, along with the information required under § 61.10. If a waiver of compliance is granted, the statement is to be submitted on a date scheduled by the Administrator.
- (3) In the case of new sources which did not have an initial startup date preceding December 14, 2000, the statement required under paragraph (a)(1) of this section shall be submitted with the application for approval of construction, as described in § 61.07.
- (4) For owners and operators complying with 40 CFR part 65, subpart C or F, the statement required under paragraph (a)(1) of this section shall notify the Administrator that the requirements of 40 CFR part 65, subpart C or F, are being implemented.
  - (5) The statement is to contain the following information for each source:
    - (i) Equipment identification number and process unit identification.
    - (ii) Type of equipment (for example, a pump or pipeline valve).
    - (iii) Percent by weight VHAP in the fluid at the equipment.
    - (iv) Process fluid state at the equipment (gas/vapor or liquid).
- (v) Method of compliance with the standard (for example, "monthly leak detection and repair" or "equipped with dual mechanical seals").
- (b) A report shall be submitted to the Administrator semiannually starting 6 months after the initial report required in paragraph (a) of this section, that includes the following information:
  - (1) Process unit identification.
  - (2) For each month during the semiannual reporting period,
    - (i) Number of valves for which leaks were detected as described in § 61.242-7(b) of § 61.243-2.
    - (ii) Number of valves for which leaks were not repaired as required in § 61.242-7(d).
    - (iii) Number of pumps for which leaks were detected as described in § 61.242-2 (b) and (d)(6).
    - (iv) Number of pumps for which leaks were not repaired as required in § 61.242-2 (c) and (d)(6).

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- (v) Not applicable.
- (vi) Not applicable.
- (vii) The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.
  - (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (4) Revisions to items reported according to paragraph (a) if changes have occurred since the initial report or subsequent revisions to the initial report.

NOTE: Compliance with the requirements of § 61.10(c) is not required for revisions documented under this paragraph.

- (5) The results of all performance tests and monitoring to determine compliance with no detectable emissions and with §§ 61.243-1 and 61.243-2 conducted within the semiannual reporting period.
- (c) In the first report submitted as required in paragraph (a) of this section, the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule, unless a revised schedule has been submitted in a previous semiannual report.
- (d) An owner or operator electing to comply with the provisions of §§ 61.243-1 and 61.243-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.
- (e) An application for approval of construction or modification, §§ 61.05(a) and 61.07, will not be required if—
  - (1) The new source complies with the standard, § 61.242;
  - (2) The new source is not part of the construction of a process unit; and
- (3) In the next semiannual report required by paragraph (b) of this section, the information in paragraph (a)(5) of this section is reported.
- (f) For owners or operators choosing to comply with 40 CFR part 65, subpart C or F, an application for approval of construction or modification, as required under §§ 61.05 and 61.07 will not be required if:
- (1) The new source complies with 40 CFR 65.106 through 65.115 and with 40 CFR part 65, subpart C, for surge control vessels and bottoms receivers:
  - (2) The new source is not part of the construction of a process unit; and
- (3) In the next semiannual report required by 40 CFR 65.120(b) and 65.48(b), the information in paragraph (a)(5) of this section is reported.

[49 FR 23513, June 6, 1984, as amended at 49 FR 38947, Oct. 2, 1984; 54 FR 38077, Sept. 14, 1989; 65 FR 78283, Dec. 14, 2000]

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 004 [40 CFR Part 61 NESHAPs §40 CFR 61.242-1]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources)

Standards: General.

- (a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§ 61.242-1 to 61.242-11 for each new and existing source as required in 40 CFR 61.05, except as provided in §§ 61.243 and 61.244.
- (b) Compliance with this subpart will be determined by review of records, review of performance test results, and inspection using the methods and procedures specified in § 61.245.







- (c) (1) An owner or operator may request a determination of alternative means of emission limitation to the requirements of §§ 61.242-2, 61.242-3, 61.242-5, 61.242-6, 61.242-7, 61.242-8, 61.242-9 and 61.242-11 as provided in § 61.244.
- (2) If the Administrator makes a determination that a means of emission limitation is at least a permissible alternative to the requirements of § 61.242-2, 61.242-3, 61.242-5, 61.242-6, 61.242-7, 61.242-8, 61.242-9 or 61.242-11, an owner or operator shall comply with the requirements of that determination.
- (d) Each piece of equipment to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment.
- (e) Equipment that is in vacuum service is excluded from the requirements of § 61.242-2, to § 61.242-11 if it is identified as required in § 61.246(e)(5).

[49 FR 23513, June 6, 1984; 49 FR 38946, Oct. 2, 1984]

#### # 005 [40 CFR Part 61 NESHAPs §40 CFR 61.242-10]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Standards: Delay of repair.

- (a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
- (b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VHAP service.
- (c) Delay of repair for valves will be allowed if:
- (1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
- (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with § 61.242-11.
- (d) Delay of repair for pumps will be allowed if:
  - (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
  - (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- (e) Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

[49 FR 23513, June 6, 1984, as amended at 65 FR 78282, Dec. 14, 2000]

# # 006 [40 CFR Part 61 NESHAPs §40 CFR 61.242-11]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Standards: Closed-vent systems and control devices.

- (a) Owners or operators of closed-vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section, except as provided in § 61.242-1(c).
- (b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.



- (c) Enclosed combustion devices shall be designed and operated to reduce the VHAP emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C.
- (d) Flares shall used to comply with this subpart shall comply with the requirements of § 60.18.
- (e) Owners or operators of control devices that are used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.
- (f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraph (f)(1) or (2) of this section, as applicable.
- (1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the following requirements:
  - (i) Conduct an initial inspection according to the procedures in § 61.245(b); and
  - (ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
  - (2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:
    - (i) Conduct an initial inspection according to the procedures in § 61.245(b); and
    - (ii) Conduct annual inspections according to the procedures in § 61.245(b).
- (g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.
  - (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
  - (2) Repair shall be completed no later than 15 calendar days after the leak is detected.
- (h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
- (i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (2) of this section.
- (j) Any parts of the closed vent system that are designated, as described in paragraph (I)(1) of this section, as unsafe-to-inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (2) of this section if they comply with the following requirements:
- (1) The owner or operator determines that the equipment is unsafe-to-inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraph (f)(1)(i) or (2) of this section; and
- (2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- (k) Any parts of the closed vent system that are designated, as described in paragraph (I)(2) of this section, as difficult-to-inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (2) of this section if they comply with the following requirements:
  - (1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting



personnel more than 2 meters above a support surface; and

- (2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.
- (I) The owner or operator shall record the following information:
- (1) Identification of all parts of the closed vent system that are designated as unsafe-to-inspect, an explanation of why the equipment is unsafe-to-inspect, and the plan for inspecting the equipment.
- (2) Identification of all parts of the closed vent system that are designated as difficult-to-inspect, an explanation of why the equipment is difficult-to-inspect, and the plan for inspecting the equipment.
  - (3) For each inspection during which a leak is detected, a record of the information specified in § 61.246(c).
- (4) For each inspection conducted in accordance with § 61.245(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- (5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
- (m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

[49 FR 23513, June 6, 1984; 49 FR 38946, Oct. 2, 1984, as amended at 51 FR 2702, Jan. 21, 1986; 65 FR 62158, Oct. 17, 2000; 65 FR 78282, Dec. 14, 2000]

# # 007 [40 CFR Part 61 NESHAPs §40 CFR 61.242-2]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Standards: Pumps.

- (a) (1) Each pump shall be monitored monthly to detect leaks by the methods specified in § 61.245(b), except as provided in § 61.242-1(c) and paragraphs (d), (e), (f) and (g) of this section.
- (2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- (b) (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
  - (2) If there are indications of liquids dripping from the pump seal, a leak is detected.
- (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 61.242-10.
  - (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraphs (a) and (b) of this section, provided the following requirements are met:
  - (1) Each dual mechanical seal system is:
    - (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
- (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of § 61.242-11; or



- (iii) Equipped with a system that purges the barrier fluid into a process stream with zero VHAP emissions to atmosphere.
- (2) The barrier fluid is not in VHAP service and, if the pump is covered by standards under 40 CFR part 60, is not in VOC service.
- (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
- (4) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
- (i) If there are indications of liquid dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in § 61.245 to determine the presence of VOC and VHAP in the barrier fluid.
- (ii) If the monitor reading (taking into account any background readings) indicates the presence of VHAP, a leak is detected. For the purpose of this paragraph, the monitor may be calibrated with VHAP, or may employ a gas chromatography column to limit the response of the monitor to VHAP, at the option of the owner or operator.
  - (iii) If an instrument reading of 10,000 ppm or greater (total VOC) is measured, a leak is detected.
  - (5) Each sensor as described in paragraph (d)(3) of this section is checked daily or is equipped with an audible alarm.
- (6) (i) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.
- (ii) If indications of liquids dripping from the pump seal exceed the criteria established in paragraph (d)(6)(i) of this section, or if, based on the criteria established in paragraph (d)(6)(i) of this section, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.
- (iii) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in § 61.242-10.
  - (iv) A first attempt at repair shall be made no later than five calendar days after each leak is detected.
- (e) Any pump that is designated, as described in § 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) if the pump:
  - (1) Has no externally actuated shaft penetrating the pump housing,
- (2) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in  $\S$  61.245(c), and
- (3) Is tested for compliance with paragraph (e)(2) initially upon designation, annually, and at other times requested by the Administrator.
- (f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a process or fuel gas system or to a control device that complies with the requirements of § 61.242-11, it is exempt from the requirements of paragraphs (a) through (e) of this section.
- (g) Any pump that is designated, as described in § 61.246(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:
- (1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and







- (2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.
- (h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

[49 FR 23513, June 6, 1984, as amended at 49 FR 38946, Oct. 2, 1984; 55 FR 28349, July 10, 1990; 65 FR 78281, Dec. 14, 2000]

#### # 008 [40 CFR Part 61 NESHAPs §40 CFR 61.242-3]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources)

Standards: Compressors.

(a) - (i) Not applicable.

#### # 009 [40 CFR Part 61 NESHAPs §40 CFR 61.242-4]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources)

Standards: Pressure relief devices in gas/vapor service.

- (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 61.245(c).
- (b) (1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions. as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in § 61.242-10.
- (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in § 61.245(c).
- (c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in § 61.242-11 is exempt from the requirements of paragraphs (a) and (b) of this section.
- (d) (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.
- (2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in § 61.242-10.

[49 FR 23513, June 6, 1984; 49 FR 38946, Oct. 2, 1984, as amended at 65 FR 78281, Dec. 14, 2000]

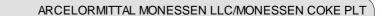
#### # 010 [40 CFR Part 61 NESHAPs §40 CFR 61.242-5]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Standards: Sampling connecting systems.

- (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in § 61.242-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.
- (b) Each closed-purge, closed-loop, or closed vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:
  - (1) Return the purged process fluid directly to the process line; or

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- (2) Collect and recycle the purged process fluid; or
- (3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of § 61.242-11; or
  - (4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:
- (i) A waste management unit as defined in 40 CFR 63.111 if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams; or
  - (ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or
- (iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.
- (c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

[65 FR 78281, Dec. 14, 2000]

# # 011 [40 CFR Part 61 NESHAPs §40 CFR 61.242-6]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Standards: Open-ended valves or lines.

- (a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in § 61.242-1(c).
- (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- (c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.
- (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this section.
- (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

[49 FR 23513, June 6, 1984, as amended at 65 FR 78282, Dec. 14, 2000]

# # 012 [40 CFR Part 61 NESHAPs §40 CFR 61.242-7]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Standards: Valves.

- (a) Each valve shall be monitored monthly to detect leaks by the method specified in § 61.245(b) and shall comply with paragraphs (b)-(e), except as provided in paragraphs (f), (g), and (h) of this section, § 61.243-1 or § 61.243-2, and § 61.242-1(c).
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) (1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.







- (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- (d) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in § 61.242-10.
  - (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
  - (1) Tightening of bonnet bolts;
  - (2) Replacement of bonnet bolts;
  - (3) Tightening of packing gland nuts; and
  - (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in § 61.246(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:
  - (1) Has no external actuating mechanism in contact with the process fluid;
- (2) Is operated with emissions less than 500 ppm above background, as measured by the method specified in § 61.245(c); and
- (3) Is tested for compliance with paragraph (f)(2) initially upon designation, annually, and at other times requested by the Administrator.
- (g) Any valve that is designated, as described in § 61.246(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:
- (1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a); and
- (2) The owner or operator of the valve has a written plan that requires monitoring of the valve as frequent as practicable during safe-to-monitor times.
- (h) Any valve that is designated, as described in § 61.246(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:
- (1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;
  - (2) The process unit within which the valve is located is an existing process unit; and
- (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

# # 013 [40 CFR Part 61 NESHAPs §40 CFR 61.242-8]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Standards: Pressure relief devices in liquid service and flanges and other connectors.

- (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pressure relief devices in liquid service and connectors, the owner or operator shall follow either one of the following procedures, except as provided in § 61.242-1(c):
- (1) The owner or operator shall monitor the equipment within 5 days by the method specified in § 61.245(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.







- (2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 61.242-10.
  - (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the best practices described under § 61.242-7(e).

[49 FR 23513, June 6, 1984; 49 FR 38946, Oct. 2, 1984, as amended at 65 FR 78282, Dec. 14, 2000]

#### # 014 [40 CFR Part 61 NESHAPs §40 CFR 61.242-9]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Standards: Product accumulator vessels.

Not applicable.

#### # 015 [40 CFR Part 61 NESHAPs §40 CFR 61.243-1]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Alternative standards for valves in VHAP service-- allowable percentage of valves leaking.

- (a) An owner or operator may elect to have all valves within a process unit to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
- (b) The following requirements shall be met if an owner or operator decides to comply with an allowable percentage of valves leaking:
- (1) An owner or operator must notify the Administrator that the owner or operator has elected to have all valves within a process unit to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in § 61.247(d).
- (2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.
  - (3) If a valve leak is detected, it shall be repaired in accordance with § 61.242-7(d) and (e).
- (c) Performance tests shall be conducted in the following manner:
- (1) All valves in VHAP service within the process unit shall be monitored within 1 week by the methods specified in § 61.245(b).
  - (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (3) The leak percentage shall be determined by dividing the number of valves in VHAP service for which leaks are detected by the number of valves in VHAP service within the process unit.
- (d) Owner or operators who elect to have all valves comply with this alternative standard shall not have a process unit with a leak percentage greater than 2.0 percent.
- (e) If an owner or operator decides no longer to comply with § 61.243-1, the owner or operator must notify the Administrator in writing that the work practice standard described in § 61.242-7(a)-(e) will be followed.

#### # 016 [40 CFR Part 61 NESHAPs §40 CFR 61.243-2]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources)

Alternative standards for valves in VHAP service--skip period leak detection and repair.

(a) (1) An owner or operator may elect for all valves within a process unit to comply with one of the alternative work practices







specified in paragraphs (b)(2) and (3) of this section.

- (2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in § 61.247(d).
- (b) (1) An owner or operator shall comply initially with the requirements for valves, as described in § 61.242-7.
- (2) After 2 consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip one of the quarterly leak detection periods for the valves in VHAP service.
- (3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in VHAP service.
- (4) If the percentage of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in § 61.242-7 but may again elect to use this section.

[49 FR 23513, June 6, 1984, as amended at 65 FR 62158, Oct. 17, 2000]

#### VII. ADDITIONAL REQUIREMENTS.

#### # 017 [40 CFR Part 61 NESHAPs §40 CFR 61.240]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Applicability and designation of sources.

- (a) The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart.
- (b) The provisions of this subpart apply to the sources listed in paragraph (a) after the date of promulgation of a specific subpart in part 61.
- (c) While the provisions of this subpart are effective, a source to which this subpart applies that is also subject to the provisions of 40 CFR part 60 only will be required to comply with the provisions of this subpart.
- (d) Alternative means of compliance.
- (1) Option to comply with part 65. Owners or operators may choose to comply with 40 CFR part 65 to satisfy the requirements of §§ 61.242-1 through 61.247 for equipment that is subject to this subpart and that is part of the same process unit. When choosing to comply with 40 CFR part 65, the requirements of §§ 61.245(d) and 61.246(i) and (j) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.
- (2) Part 65, subpart C or F. For owners or operators choosing to comply with 40 CFR part 65, each surge control vessel and bottoms receiver subject to this subpart that meets the conditions specified in table 1 or table 2 of this subpart shall meet the requirements for storage vessels in 40 CFR part 65, subpart C; all other equipment subject to this subpart shall meet the requirements in 40 CFR part 65, subpart F.
- (3) Part 61, subpart A. Owners or operators who choose to comply with 40 CFR part 65, subpart C or F, must also comply with §§ 61.01, 61.02, 61.05 through 61.08, 61.10(b) through (d), 61.11, and 61.15 for that equipment. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (d)(3) do not apply to owners or operators of equipment subject to this subpart complying with 40 CFR part 65, subpart C or F, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C or F, must comply with 40 CFR part 65, subpart A.
- (4) Rules referencing this subpart. Owners or operators referenced to this subpart from subpart F or J of this part may choose to comply with 40 CFR part 65 for all equipment listed in paragraph (a) of this section.



[49 FR 23513, June 6, 1984, as amended at 65 FR 78280, Dec. 14, 2000]

#### # 018 [40 CFR Part 61 NESHAPs §40 CFR 61.241]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, in subpart A of part 61, or in specific subparts of part 61; and the following terms shall have specific meaning given them:

Bottoms receiver means a tank that collects distillation bottoms before the stream is sent for storage or for further downstream processing.

Closed-vent system means a system that is not open to atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Connector means flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment. For the purpose of reporting and recordkeeping, connector means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

Control device means an enclosed combustion device, vapor recovery system, or flare.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

Equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver in VHAP service, and any control devices or systems required by this subpart.

First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.

In gas/vapor service means that a piece of equipment contains process fluid that is in the gaseous state at operating conditions.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgement and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, PO Box 2900, Fairfield, NJ 07007-2900).

In liquid service means that a piece of equipment is not in gas/vapor service.

In-situ sampling systems means nonextractive samplers or in-line samplers.

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa) (0.7 psia) below ambient pressure.

In VHAP service means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight a volatile hazardous air pollutant (VHAP) as determined according to the provisions of § 61.245(d). The provisions



of § 61.245(d) also specify how to determine that a piece of equipment is not in VHAP service.

In VOC service means, for the purposes of this subpart, that (a) the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight (see 40 CFR 60.2 for the definition of volatile organic compound or VOC and 40 CFR 60.485(d) to determine whether a piece of equipment is not in VOC service) and (b) the piece of equipment is not in heavy liquid service as defined in 40 CFR 60.481.

Maximum true vapor pressure means the equilibrium partial pressure exerted by the total VHAP in the stored or transferred liquid at the temperature equal to the highest calendar-month average of the liquid storage or transfer temperature for liquids stored or transferred above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for liquids stored or transferred at the ambient temperature, as determined:

- (1) In accordance with methods described in American Petroleum Institute Publication 2517, Evaporative Loss From External Floating-Roof Tanks (incorporated by reference as specified in § 61.18); or
  - (2) As obtained from standard reference texts; or
- (3) As determined by the American Society for Testing and Materials Method D2879-83, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope (incorporated by reference as specified in § 61.18); or
  - (4) Any other method approved by the Administrator.

Open-ended valve or line means any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

Process unit means equipment assembled to produce a VHAP or its derivatives as intermediates or final products, or equipment assembled to use a VHAP in the production of a product. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient product storage facilities.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.

Repaired means that equipment is adjusted, or otherwise altered, to eliminate a leak.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take non-routine grab samples is not considered a sampling connection system.

Semiannual means a 6-month period; the first semiannual period concludes on the last day of the last month during the 180 days following initial startup for new sources; and the first semiannual period concludes on the last day of the last full month during the 180 days after the effective date of a specific subpart that references this subpart for existing sources.

Sensor means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

Stuffing box pressure means the fluid (liquid or gas) pressure inside the casing or housing of a piece of equipment, on the process side of the inboard seal.

Surge control vessel means feed drums, recycle drums, and intermediate vessels. Surge control vessels are used within a process unit when in-process storage, mixing, or management of flow rates of volumes is needed on a recurring or ongoing basis to assist in production of a product.





Volatile hazardous air pollutant or VHAP means a substance regulated under this part for which a standard for equipment leaks of the substance has been proposed and promulgated. Benzene is a VHAP. Vinyl chloride is a VHAP.

[49 FR 23513, June 6, 1984; 49 FR 38946, Oct. 2, 1984, as amended at 51 FR 34915, Sept. 30, 1986; 54 FR 38076, Sept. 14, 1989; 65 FR 62158, Oct. 17, 2000; 65 FR 78280, Dec. 14, 2000]

#### # 019 [40 CFR Part 61 NESHAPs §40 CFR 61.244]

Subpart V--National Emission Standard for Equipment Leaks (Fugitive Emission Sources) Alternative means of emission limitation.

- (a) Permission to use an alternative means of emission limitation under section 112(e)(3) of the Clean Air Act shall be governed by the following procedures:
- (b) Where the standard is an equipment, design, or operational requirement:
- (1) Each owner or operator applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation to test data for the equipment, design, and operational requirements.
- (2) The Administrator may condition the permission on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.
- (c) Where the standard is a work practice:
- (1) Each owner or operator applying for permission shall be responsible for collecting and verifying test data for an alternative means of emission limitation.
- (2) For each source for which permission is requested, the emission reduction achieved by the required work practices shall be demonstrated for a minimum period of 12 months.
- (3) For each source for which permission is requested, the emission reduction achieved by the alternative means of emission limitation shall be demonstrated.
- (4) Each owner or operator applying for permission shall commit in writing each source to work practices that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practices.
- (5) The Administrator will compare the demonstrated emission reduction for the alternative means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4).
- (6) The Administrator may condition the permission on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practices of this subpart.
- $(d) \ An \ owner \ or \ operator \ may \ offer \ a \ unique \ approach \ to \ demonstrate \ the \ alternative \ means \ of \ emission \ limit ation.$
- (e) (1) Manufacturers of equipment used to control equipment leaks of a VHAP may apply to the Administrator for permission for an alternative means of emission limitation that achieves a reduction in emissions of the VHAP achieved by the equipment, design, and operational requirements of this subpart.
  - (2) The Administrator will grant permission according to the provisions of paragraphs (b), (c), and (d).

[49 FR 23513, June 6, 1984, as amended at 65 FR 62158, Oct. 17, 2000]

# \*\*\* Permit Shield in Effect. \*\*\*

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# SECTION E. Source Group Restrictions.

Group Name: 40 CFR PART 63 SUBPART ZZZZ - EXISTING

Group Description: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal

Sources included in this group

ID Name

125 900-BHP EMERGENCY DIESEL ENGINE

#### I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6600]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Not applicable.

## # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6601]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

Not applicable.

# # 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6602]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

Not applicable.

# # 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

[Note: The applicable requirements under this section are included in the Work Practice Requirements of this Source Group under the authority of 25 Pa. Code §127.441.]

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

# Fuel Restriction(s).

#### # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6604]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What fuel requirements must I meet if I own or operate an existing stationary CI RICE?

Not applicable.

#### II. TESTING REQUIREMENTS.

#### # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6610]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

By what date must I conduct the initial performance tests or other initial compliance demonstrations?

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# **SECTION E.** Source Group Restrictions.

Not applicable.

#### # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6611]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating (please see below)

Not applicable.

#### # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6612]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake (please see below)

Not applicable.

#### # 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6615]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

When must I conduct subsequent performance tests?

Not applicable.

#### # 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6620]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What performance tests and other procedures must I use?

Not applicable.

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### IV. RECORDKEEPING REQUIREMENTS.

#### # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

#### What records must I keep?

- (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in § 63.10(b)(2)(xiv).
- (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
  - (3) Not applicable.
  - (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (b) (d) Not applicable.







- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
  - (1) Not applicable.
  - (2) An existing stationary emergency RICE.
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.
- (f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
  - (1) Not applicable.
- (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

#### # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

#### V. REPORTING REQUIREMENTS.

## # 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6645]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What notifications must I submit and when?

Not applicable.

#### # 014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6650]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What reports must I submit and when?

- (a) (e) Not applicable.
- (f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance





report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) - (h) Not applicable.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Pursuant to 40 CFR §63.6625, if you own or operate an existing emergency stationary RICE at an area source of HAP emissions:

- (a) You must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §§63.6625(e) and (e)(3)]
- (b) You must install a non-resettable hour meter if one is not already installed. [40 CFR §63.6625(f)]
- (c) You must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. [40 CFR §63.6625(h)]
- (d) You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]

# # 016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 2d] Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each . . .

4. Emergency stationary CI RICE and black start stationary CI RICE. [See footnote (2).]

You must meet the following requirement, except during periods of startup . . .

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first; [See footnote (1).]
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

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#### Table 2d Footnotes:

- (1) Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.
- (2) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[75 FR page 9688, Mar. 3, 2010; 75 FR page 51595, Aug. 20, 2010]

#### # 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What are my general requirements for complying with this subpart?

- (a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.
- (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

# # 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What are my monitoring, installation, operation, and maintenance requirements?

[Note: The applicable requirements under this section of Subpart ZZZZ are included in the Work Practice Requirements of this Source Group under the authority of 25 Pa. Code §127.441.]

# VII. ADDITIONAL REQUIREMENTS.

#### # 019 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Pursuant to 40 CFR §63.6595(a)(1) relating to compliance dates for affected sources, if you have an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements of 40 CFR Part 63 Subpart ZZZZ no later than May 3, 2013.

#### # 020 [25 Pa. Code §127.441]

# Operating permit terms and conditions.

Pursuant to 40 CFR §63.6675, terms in this Source Group are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of 40 CFR Part 63; and in 40 CFR Part 63 Subpart ZZZZ as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.





CAA means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101-549, 104 Stat. 2399).

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.
  - (4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in § 63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
- (2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 63.6640(f).
- (3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 63.6640(f)(2)(ii) or (iii) and § 63.6640(f)(4)(i) or (ii).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.





Major Source, as used in Subpart ZZZZ, shall have the same meaning as in § 63.2, except that:

- (1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;
- (2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated;
- (3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and
- (4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in § 63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to § 63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to § 63.1270(a)(2).

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPP of this part, that tests stationary RICE.

Subpart means 40 CFR Part 63 Subpart ZZZZ.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]





#### # 021 [25 Pa. Code §127.441]

#### Operating permit terms and conditions.

Pursuant to the requirements of 40 CFR §63.6640, as an owner and operator of an emergency stationary RICE at an area source of HAP emissions:

- (a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirement in Table 2d (Items 4(a), 4(b), and 4(c)) of Subpart ZZZZ. [40 CFR §63.6640(a)]
- (b) You must report each instance in which you did not meet each emission limitation or operating limitation Table 2d. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. [40 CFR §63.6640(b)]
- (c) You must report each instance in which you did not meet the applicable requirements Table 8 of Subpart ZZZZ. [40 CFR §63.6640(e)]
- (d) You must operate the emergency stationary RICE according to the requirements in items (1) through (3) below. In order for the engine to be considered an emergency stationary RICE under Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in items (1) through (3) below, is prohibited. If you do not operate the engine according to the requirements in items (1) through (3) below, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines under Subpart ZZZZ. [40 CFR §63.6640(f)]
  - (1) There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR §63.6640(f)(1)]
- (2) You may operate your emergency stationary RICE for any combination of the purposes specified in item (i) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by item (3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph. [40 CFR §63.6640(f)(2)]
- (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR §63.6640(f)(2)(i)]
- (3) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. [40 CFR §63.6640(f)(4)]

#### # 022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

#### Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

- (a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
  - (b) Not applicable.
  - (c) An area source of HAP emissions is a source that is not a major source.



- (d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR Part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.
  - (e) (f) Not applicable.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

#### # 023 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What parts of my plant does this subpart cover?

This subpart applies to each affected source.

- (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
  - (1) Existing stationary RICE.
    - (i) (ii) Not applicable.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.
  - (2) Not applicable.
  - (3) Not applicable.
- (b) (c) Not applicable.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

#### # 024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6595]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

When do I have to comply with this subpart?

- (a) Affected sources.
- (1) [Note: The applicable requirements under this paragraph are included in the Additional Requirements of this Source Group under the authority of 25 Pa. Code §127.441].
  - (2) (7) Not applicable.
- (b) Area sources that become major sources. If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.
  - (1) Not applicable.
- (2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.



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# SECTION E. Source Group Restrictions.

(c) Not applicable.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

#### # 025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6630]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

How do I demonstrate initial compliance with the emission limitations and operating limitations?

Not applicable.

#### # 026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6635]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

How do I monitor and collect data to demonstrate continuous compliance?

Not applicable.

#### # 027 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

How do I demonstrate continuous compliance with the emission limitations and operating limitations?

[Note: The applicable requirements under this paragraph are included in the Additional Requirements of this Source Group under the authority of 25 Pa. Code §127.441.]

#### # 028 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6665]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

[75 FR 9678, Mar. 3, 2010]

#### # 029 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6670]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

#### Who implements and enforces this subpart?

- (a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are:
- (1) Approval of alternatives to the non-opacity emission limitations and operating limitations in § 63.6600 under § 63.6(g).
- (2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.
- (3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.
- (4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.
- (5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in § 63.6610(b).



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# **SECTION E.** Source Group Restrictions.

# 030 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6675]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What definitions apply to this subpart?

[Note: The applicable requirements under this paragaph are included in the Additional Requirements of this Source Group under the authority of 25 Pa. Code §127.441.]

\*\*\* Permit Shield in Effect. \*\*\*





Group Name: COKE OVEN BATTERY OPERATIONS

Group Description: Sources and controls directly associated with the coke oven batteries

Sources included in this group

ID	Name
801	COKE BATTERIES -CHARGING
802	COKE BATTERIES -PUSHING
803	COKE BATTERIES -QUENCHING
805	COKE BATTERIES -COMBUST STK
806	COKE BATTERIES -DOOR LEAK
807	COKE BATTERIES -TOPSIDE
808	COKE BATTERIES -SOAKING
809	EXCESS COG FLARE

#### I. RESTRICTIONS.

#### **Emission Restriction(s).**

#### # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.304]

Subpart L--National Emission Standards for Coke Oven Batteries Standards for compliance date extension.

- (a) An owner or operator of an existing coke oven battery (including a cold-idle coke oven battery), a padup rebuild, or a brownfield coke oven battery, may elect an extension of the compliance date for emission limits to be promulgated pursuant to section 112(f) of the Act in accordance with section 112(i)(8). To receive an extension of the compliance date from January 1, 2003, until January 1, 2020, the owner or operator shall notify the Administrator as described in 63.311(c) that the battery will comply with the emission limitations and requirements in this section in lieu of the applicable emission limitations in 63.302 or 63.303.
- (b) Except as provided in paragraphs (b)(4), (b)(5), and (b)(7) of this section and in 63.305, on and after the dates specified in this paragraph, no owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from a by-product coke oven battery that exceed any of the following emission limitations:
  - (1) On and after November 15, 1993;
    - (i) 7.0 percent leaking coke oven doors, as determined by the procedures in 63.309(d)(1);
    - (ii) 0.83 percent leaking topside port lids, as determined by the procedures in 63.309(d)(1);
    - (iii) 4.2 percent leaking offtake system(s), as determined by the procedures in 63.309(d)(1); and
    - (iv) 12 seconds of visible emissions per charge, as determined by the procedures in 63.309(d)(2).
  - (2) On and after January 1, 1998;
    - (i) For coke oven doors:
- (A) 4.3 percent leaking coke oven doors for each tall by-product coke oven battery and for each by-product coke oven battery owned or operated by a foundry coke producer, as determined by the procedures in 63.309(d)(1); and
- (B) 3.8 percent leaking coke oven doors on each by-product coke oven battery not subject to the emission limitation in paragraph (b)(2)(i)(A) of this section, as determined by the procedures in 63.309(d)(1);
  - (ii) 0.4 percent leaking topside port lids, as determined by the procedures in 63.309(d)(1);
  - (iii) 2.5 percent leaking offtake system(s), as determined by the procedures in 63.309(d)(1); and
  - (iv) 12 seconds of visible emissions per charge, as determined by the procedures in 63.309(d)(2).



- (3) On and after January 1, 2010, unless the Administrator promulgates more stringent limits pursuant to section 112(i)(8)(C) of the Act;
- (i) 4.0 percent leaking coke oven doors on each tall by-product coke oven battery and for each by-product coke oven battery owned or operated by a foundry coke producer, as determined by the procedures in 63.309(d)(1); and
- (ii) 3.3 percent leaking coke oven doors for each by-product coke oven battery not subject to the emission limitation in paragraph (b)(3)(i) of this section, as determined by the procedures in 63.309(d)(1).
- (4) No owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from a brownfield or padup rebuild by-product coke oven battery, other than those specified in paragraph (b)(4)(v) of this section, that exceed any of the following emission limitations:
  - (i) For coke oven doors;
- (A) 4.0 percent leaking coke oven doors for each tall by-product coke oven battery, as determined by the procedures in 63.309(d)(1); and
- (B) 3.3 percent leaking coke oven doors on each short by-product coke oven battery, as determined by the procedures in 63.309(d)(1);
  - (ii) 0.4 percent leaking topside port lids, as determined by the procedures in 63.309(d)(1);
  - (iii) 2.5 percent leaking offtake system(s), as determined by the procedures in 63.309(d)(1); and
  - (iv) 12 seconds of visible emissions per charge, as determined by the procedures in 63.309(d)(2).
- (v) The requirements of paragraph (b)(4) of this section shall not apply and the requirements of paragraphs (b)(1), (b)(2), and (b)(3) of this section do apply to the following brownfield or padup rebuild coke oven batteries:
  - (A) Bethlehem Steel-Burns Harbor, Battery No. 2;
  - (B) National Steel-Great Lakes, Battery No. 4; and
  - (C) Koppers-Woodward, Battery No. 3.
- (vi) To retain the exclusion provided in paragraph (b)(4)(v) of this section, a coke oven battery specified in paragraph (b)(4)(v) of this section shall commence construction not later than July 1, 1996, or 1 year after obtaining a construction permit, whichever is earlier.
- (5) The owner or operator of a cold-idle coke oven battery that shut down on or after November 15, 1990, shall comply with the following emission limitations:
- (i) For a brownfield coke oven battery or a padup rebuild coke oven battery, coke oven emissions shall not exceed the emission limitations in paragraph (b)(4) of this section; and
- (ii) For a cold-idle battery other than a brownfield or padup rebuild coke oven battery, coke oven emissions shall not exceed the emission limitations in paragraphs (b)(1) through (b)(3) of this section.
- (6) The owner or operator of a cold-idle coke oven battery that shut down prior to November 15, 1990, shall submit a written request to the Administrator to include the battery in the design capacity of a coke plant as of November 15, 1990. A copy of the request shall also be sent to Director, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711. The Administrator will review and approve or disapprove a request according to the following procedures:
  - (i) Requests will be reviewed for completeness in the order received. A complete request shall include:



- (A) Battery identification;
- (B) Design information, including the design capacity and number and size of ovens; and
- (C) A brief description of the owner or operator's plans for the cold-idle battery, including a statement whether construction of a padup rebuild or a brownfield coke oven battery is contemplated.
- (ii) A complete request shall be approved if the design capacity of the battery and the design capacity of all previous approvals does not exceed the capacity limit in paragraph (b)(6)(iii) of this section.
- (iii) The total nationwide coke capacity of coke oven batteries that receive approval under paragraph (b)(6) of this section shall not exceed 2.7 million Mg/yr.
- (iv) If a construction permit is required, an approval shall lapse if a construction permit is not issued within 3 years of the approval date, or if the construction permit lapses.
- (v) If a construction permit is not required, an approval will lapse if the battery is not restarted within 2 years of the approval date.
- [7] The owner or operator of a by-product coke oven battery with fewer than 30 ovens may elect to comply with an emission limitation of 2 or fewer leaking coke oven doors, as determined by the procedures in 63.309(d)(4), as an alternative to the emission limitation for coke oven doors in paragraphs (b)(2)(i), (b)(3) (i) through (ii), (b)(4)(i), (b)(5), and (b)(6) of this section.
- (c) On and after November 15, 1993, no owner or operator shall cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from an existing nonrecovery coke oven battery that exceed any of the emission limitations or requirements in 63.303(a).
- (d) Each owner or operator of an existing coke oven battery qualifying for a compliance date extension pursuant to this section shall make available, no later than January 1, 2000, to the surrounding communities the results of any risk assessment performed by the Administrator to determine the appropriate level of any emission standard established by the Administrator according to section 112(f) of the Act.

#### # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.305]

Subpart L--National Emission Standards for Coke Oven Batteries Alternative standards for coke oven doors equipped with sheds.

- (a) The owner or operator of a new or existing coke oven battery equipped with a shed for the capture of coke oven emissions from coke oven doors and an emission control device for the collection of the emissions may comply with an alternative to the applicable visible emission limitations for coke oven doors in 63.302 and 63.304 according to the procedures and requirements in this section.
- (b) To qualify for approval of an alternative standard, the owner or operator shall submit to the Administrator a test plan for the measurement of emissions. A copy of the request shall also be sent to the Director, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711. The plan shall describe the procedures to be used for the measurement of particulate matter; the parameters to be measured that affect the shed exhaust rate (e.g., damper settings, fan power) and the procedures for measuring such parameters; and if applicable under paragraph (c)(5)(ii) of this section, the procedures to be used for the measurement of benzene soluble organics, benzene, toluene, and xylene emitted from the control device for the shed. The owner or operator shall notify the Administrator at least 30 days before any performance test is conducted.
- (c) A complete test plan is deemed approved if no disapproval is received within 60 days of the submittal to the Administrator. After approval of the test plan, the owner or operator shall;
- (1) Determine the efficiency of the control device for removal of particulate matter by conducting measurements at the inlet and the outlet of the emission control device using Method 5 in appendix A to part 60 of this chapter, with the filter box operated at ambient temperature and in a manner to avoid condensation, with a backup filter;





- (2) Measure the visible emissions from coke oven doors that escape capture by the shed using Method 22 in appendix A to part 60of this chapter. For the purpose of approval of an alternative standard, no visible emissions may escape capture from the shed.
- (i) Visible emission observations shall be taken during conditions representative of normal operations, except that pushing shall be suspended and pushing emissions shall have cleared the shed; and
- (ii) Method 22 observations shall be performed by an observer certified according to the requirements of Method 9 in appendix A to part 60 of this chapter. The observer shall allow pushing emissions to be evacuated (typically 1 to 2 minutes) before making observations;
- (3) Measure the opacity of emissions from the control device using Method 9 in appendix A to part 60 of this chapter during conditions representative of normal operations, including pushing; and
- (i) If the control device has multiple stacks, the owner or operator shall use an evaluation based on visible emissions and opacity to select the stack with the highest opacity for testing under this section;
- (ii) The highest opacity, expressed as a 6-minute average, shall be used as the opacity standard for the control device.
- (4) Thoroughly inspect all compartments of each air cleaning device prior to the performance test for proper operation and for changes that signal the potential for malfunction, including the presence of tears, holes, and abrasions in filter bags; damaged seals; and for dust deposits on the clean side of bags; and
  - (5) Determine the allowable percent leaking doors under the shed using either of the following procedures:
    - (i) Calculate the allowable percent leaking doors using the following equation:

PLD = [(1.4(PLDstd)^2.5)/(1.4-eff/100)]^0.4

Where:

PLD = Allowable percent leaking doors for alternative standard.

PLDstd = Applicable visible emission limitation of percent leaking doors under this subpart that would otherwise apply to the coke oven battery, converted to the singlerun limit according to Table 1.

eff = Percent control efficiency for particulate matter for emission control device as determined according to paragraph (c)(1) of this section.

Table 1.--Conversion to Single-Run Limit

	Single-
	pass
	limit (98
	percent
30-run limit	level)
7.0	11.0
6.0	9.5
5.5	8.7
5.0	8.1
4.3	7.2
4.0	6.7
3.8	6.4
3.3	5.8



or;

- (ii) Calculate the allowable percent leaking doors using the following procedures:
- (A) Measure the total emission rate of benzene, toluene, and xylene exiting the control device using Method 18 in appendix A to part 60 of this chapter and the emission rate of benzene soluble organics entering the control device as described in the test plan submitted pursuant to paragraph (b) of this section; or
- (B) Measure benzene, toluene, xylene, and benzene soluble organics in the gas in the collector main as described in the test plan submitted pursuant to paragraph (b) of this section; and
- (C) Calculate the ratio (R) of benzene, toluene, and xylene to benzene soluble organics for the gas in the collector main, or as the sum of the outlet emission rates of benzene, toluene, and xylene, divided by the emission rate of benzene soluble organics as measured at the inlet to the control device; and
  - (D) Calculate the allowable percent leaking doors limit under the shed using the following equation:

 $PLD = [((R+1)(PLDstd)^2.5)/(R+1-eff/100)]^0.4$ 

Where:

R=Ratio of measured emissions of benzene, toluene, and xylene to measured emissions of benzene soluble organics.

- (iii) If the allowable percent leaking coke oven doors is calculated to exceed 15 percent leaking coke oven doors under paragraphs (c)(5)(i) or (c)(5)(ii) of this section, the owner or operator shall use 15 percent leaking coke oven doors for the purposes of this section.
  - (6) Monitor the parameters that affect the shed exhaust flow rate.
- (7) The owner or operator may request alternative sampling procedures to those specified in paragraph (c)(5)(ii) (A) and (B) of this section by submitting details on the procedures and the rationale for their use to the Administrator. Alternative procedures shall not be used without approval from the Administrator.
- (8) The owner or operator shall inform the Administrator of the schedule for conducting testing under the approved test plan and give the Administrator the opportunity to observe the tests.
- (d) After calculating the alternative standard for allowable percent leaking coke oven doors, the owner or operator shall submit the following information to the Administrator:
  - (1) Identity of the coke oven battery;
- (2) Visible emission limitation(s) for percent leaking doors currently applicable to the coke oven battery under this subpart and known future limitations for percent leaking coke oven doors;
  - (3) A written report including:
- (i) Appropriate measurements and calculations used to derive the allowable percent leaking coke oven doors requested as the alternative standard;
- (ii) Appropriate visible emission observations for the shed and opacity observations for the control device for the shed, including an alternative opacity standard, if applicable, as described in paragraph (c)(3) of this section based on the highest 6-minute average; and
- (iii) The parameter or parameters (e.g., fan power, damper position, or other) to be monitored and recorded to demonstrate that the exhaust flow rate measured during the test required by paragraph (c)(1) of this section is maintained, and the monitoring plan for such parameter(s).



- (iv) If the application is for a new shed, one of the following demonstrations:
- (A) A demonstration, using modeling procedures acceptable to the Administrator, that the expected concentrations of particulate emissions (including benzene soluble organics) under the shed at the bench level, when the proposed alternative standard was being met, would not exceed the expected concentrations of particulate emissions (including benzene soluble organics) if the shed were not present, the regulations under this subpart were met, and the battery was in compliance with federally enforceable limitations on pushing emissions; or
- (B) A demonstration that the shed (including the evacuation system) has been designed in accordance with generally accepted engineering principles for the effective capture and control of particulate emissions (including benzene soluble organics) as measured at the shed's perimeter, its control device, and at the bench level.
- (e) The Administrator will review the information and data submitted according to paragraph (d) of this section and may request additional information and data within 60 days of receipt of a complete request.
- (1) Except for applications subject to paragraph (e)(3) of this section, the Administrator shall approve or disapprove an alternative standard as expeditiously as practicable. The Administrator shall approve an alternative standard, unless the Administrator determines that the approved test plan has not been followed, or any required calculations are incorrect, or any demonstration required under paragraph (d)(3)(iv) of this section does not satisfy the applicable criteria under that paragraph. If the alternative standard is disapproved, the Administrator will issue a written notification to the owner or operator within the 60-day period.
- (2) The owner or operator shall comply with the applicable visible emission limitation for coke oven doors and all other requirements in this subpart prior to approval of an alternative standard. The owner or operator may apply for an alternative standard at any time after December 4, 1992.
- (3) An application for an alternative standard to the standard in 63.304(b)(1)(i) for any shed that is not a new shed that is filed on or before June 15, 1993, is deemed approved if a notice of disapproval has not been received 60 days after submission of a complete request. An approval under paragraph (e)(3) of this section shall be valid for a period of 1 year.
- (4) Notwithstanding the provisions of paragraph (e) of this section, no alternative standard shall be approved that exceeds 15 percent leaking coke oven doors (yard equivalent).
- (f) After approval of an alternative standard, the owner or operator shall comply with the following requirements:
- (1) The owner or operator shall not discharge or allow to be discharged to the atmosphere coke oven emissions from coke oven doors under sheds that exceed an approved alternative standard for percent leaking coke oven doors under sheds.
  - (i) All visible emission observations for compliance determinations shall be performed by a certified observer.
- (ii) Compliance with the alternative standard for doors shall be determined by a weekly performance test conducted according to the procedures and requirements in 63.309(d)(5) and Method 303 in appendix A to this part.
- (iii) If the visible emission limitation is achieved for 12 consecutive observations, compliance shall be determined by monthly rather than weekly performance tests. If any exceedance occurs during a performance test, weekly performance tests shall be resumed.
- (iv) Observations taken at times other than those specified in paragraphs (f)(1)(ii) and (f)(1)(iii) of this section shall be subject to the provisions of 63.309(f).
- (2) The certified observer shall monitor the visible coke oven emissions escaping capture by the shed on a weekly basis. The provision in paragraph (f)(6) of this section is applicable if visible coke oven emissions are observed during periods when pushing emissions have cleared the shed.
- (3) The owner or operator shall not discharge or allow to be discharged to the atmosphere any visible emissions from the shed's control device exhibiting more than 0 percent opacity unless an alternative limit has been approved under



paragraph (e) of this section.

- (4) The opacity of emissions from the control device for the shed shall be monitored in accordance with the requirements of either paragraph (f)(4)(i) or (f)(4)(ii) of this section, at the election of the owner or operator.
- (i) The owner or operator shall install, operate, and maintain a continuous opacity monitor, and record the output of the system, for the measurement of the opacity of emissions discharged from the emission control system.
- (A) Each continuous opacity monitoring system shall meet the requirements of Performance Specification 1 in appendix B to part 60 of this chapter; and
- (B) Each continuous opacity monitoring system shall be operated, calibrated, and maintained according to the procedures and requirements specified in part 52 of this chapter; or
- (ii) A certified observer shall monitor and record at least once each day during daylight hours, opacity observations for the control device for the shed using Method 9 in appendix A to part 60 of this chapter.
- (5) The owner or operator shall visually inspect the structural integrity of the shed at least once a quarter for defects, such as deterioration of sheet metal (e.g., holes in the shed), that may allow the escape of visible emissions.
- (i) The owner or operator shall record the time and date a defect is first observed, the time and date the defect is corrected or repaired, and a brief description of repairs or corrective actions taken;
- (ii) The owner or operator shall temporarily repair the defect as soon as possible, but no later than 5 days after detection of the defect;
- (iii) Unless a major repair is required, the owner or operator shall perform a complete repair of the defect within 15 days of detection of the defect. If a major repair is required (e.g., replacement of large sections of the shed), the owner or operator shall submit a repair schedule to the enforcement agency.
- (6) If the no visible emission limit for the shed specified in paragraph (f)(2) of this section is exceeded, the Administrator may require another test for the shed according to the approved test plan as specified in paragraph (c) of this section. If the certified observer observes visible coke oven emissions from the shed, except during periods of pushing or when pushing emissions have not cleared the shed, the owner or operator shall check to ensure that the shed and control device are working properly.
- (7) The owner or operator shall monitor the parameter(s) affecting shed exhaust flow rate, and record data, in accordance with the approved monitoring plan for these parameters.
- (8) The owner or operator shall not operate the exhaust system of the shed at an exhaust flow rate lower than that measured during the test required under paragraph (c)(1) of this section, as indicated by the monitored parameters.
- (g) Each side of a battery subject to an alternative standard for doors under this section shall be treated separately for purposes of 63.306(c) (plan implementation) and 63.306(d) (plan revisions) of this subpart. In making determinations under these provisions for the side of the battery subject to an alternative standard, the requirement that exceedances be independent shall not apply. During any period when work practices for doors for both sides of the battery are required to be implemented, 63.306(a)(3) shall apply in the same manner as if the provisions of a plan for a single emissions point were required to be implemented. Exceedances of the alternative standard for percent leaking doors under a shed is the only provision in this section implicating implementation of work practice requirements.
- (h) Multiple exceedances of the visible emission limitation for door leaks and/or the provisions of an alternative standard under this section for door leaks at a battery on a single day shall be considered a single violation.





#### II. TESTING REQUIREMENTS.

# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.309] **Subpart L--National Emission Standards for Coke Oven Batteries** Performance tests and procedures.

- (a) Except as otherwise provided, a daily performance test shall be conducted each day, 7 days per week for each new and existing coke oven battery, the results of which shall be used in accordance with procedures specified in this subpart to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in this subpart. If a facility pushes and charges only at night, then that facility must, at its option, change their schedule and charge during daylight hours or provide adequate lighting so that visible emission inspections can be made at night. "Adequate lighting" will be determined by the enforcement agency.
- (1) Each performance test is to be conducted according to the procedures and requirements in this section and in Method 303 or 303A in appendix A to this part or Methods 9 and 22 in appendix A to part 60 of this chapter (where applicable).
  - (2) Each performance test is to be conducted by a certified observer.
- (3) The certified observer shall complete any reasonable safety training program offered by the owner or operator prior to conducting any performance test at a coke oven battery.
- (4) Except as otherwise provided in paragraph (a)(5) of this section, the owner or operator shall pay an inspection fee to the enforcement agency each calendar quarter to defray the costs of the daily performance tests required under paragraph (a) of this section.
  - (i) The inspection fee shall be determined according to the following formula:

F=HXS (Eq. 3)

Where:

F=Fees to be paid by owner or operator.

H=Total person hours for inspections: 4 hours for 1 coke oven battery, 6.25 hours for 2 coke oven batteries, 8.25 hours for 3 coke oven batteries. For more than 3 coke oven batteries, use these hours to calculate the appropriate estimate of person hours.

S=Current average hourly rate for private visible emission inspectors in the relevant market.

- (ii) The enforcement agency may revise the value for H in equation 3 within 3 years after October 27, 1993 to reflect the amount of time actually required to conduct the inspections required under paragraph (a) of this section.
- (iii) The owner or operator shall not be required to pay an inspection fee (or any part thereof) under paragraph (a)(4) of this section, for any monitoring or inspection services required by paragraph (a) of this section that the owner or operator can demonstrate are covered by other fees collected by the enforcement agency.
- (iv) Upon request, the enforcement agency shall provide the owner or operator information concerning the inspection services covered by any other fees collected by the enforcement agency, and any information relied upon under paragraph (a)(4)(ii) of this section.
- (5) (i) The EPA shall be the enforcement agency during any period of time that a delegation of enforcement authority is not in effect or a withdrawal of enforcement authority under 63.313 is in effect, and the Administrator is responsible for performing the inspections required by this section, pursuant to 63.313(c).
- (ii) Within thirty (30) days of receiving notification from the Administrator that the EPA is the enforcement agency for a coke oven battery, the owner or operator shall enter into a contract providing for the inspections and performance tests required under this section to be performed by a Method 303 certified observer. The inspections and performance tests will be conducted at the expense of the owner or operator, during the period that the EPA is the implementing agency.



- (b) The enforcement agency shall commence daily performance tests on the applicable date specified in 63.300(a) or (c).
- (c) The certified observer shall conduct each performance test according to the requirements in this paragraph:
- (1) The certified observer shall conduct one run each day to observe and record visible emissions from each coke oven door (except for doors covered by an alternative standard under 63.305), topside port lid, and offtake system on each coke oven battery. The certified observer also shall conduct five runs to observe and record the seconds of visible emissions per charge for five consecutive charges from each coke oven battery. The observer may perform additional runs as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under Method 303 or Method 303A in appendix A to this part. Observations from fewer than five consecutive charges shall constitute a valid set of charging observations only in accordance with the procedures and conditions specified in sections 3.8 and 3.9 of Method 303 in appendix A to this part.
- (2) If a valid visible emissions value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid visible emissions value (or set of values) is obtained.
- (3) After each performance test for a by-product coke oven battery, the certified observer shall check and record the collecting main pressure according to the procedures in section 6.3 of Method 303 in appendix A to this part.
- (i) The owner or operator shall demonstrate pursuant to Method 303 in appendix A to this part the accuracy of the pressure measurement device upon request of the certified observer;
- (ii) The owner or operator shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection;
- (4) The certified observer shall monitor visible emissions from coke oven doors subject to an alternative standard under 63.305 on the schedule specified in 63.305(f).
- (5) If applicable, the certified observer shall monitor the opacity of any emissions escaping the control device for a shed covering doors subject to an alternative standard under 63.305 on the schedule specified in 63.305(f).
- (6) In no case shall the owner or operator knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.
- (d) Using the observations obtained from each performance test, the enforcement agency shall compute and record, in accordance with the procedures and requirements of Method 303 or 303A in appendix A to this part, for each day of operations on which a valid emissions value (or set of values) is obtained:
- (1) The 30-run rolling average of the percent leaking coke oven doors, topside port lids, and offtake systems on each coke oven battery, using the equations in sections 4.5.3.2, 5.6.5.2, and 5.6.6.2 of Method 303 (or section 3.4.3.2 of Method 303A) in appendix A to this part;
- (2) For by-product coke oven battery charging operations, the logarithmic 30-day rolling average of the seconds of visible emissions per charge for each battery, using the equation in section 3.9 of Method 303 in appendix A to this part;
- (3) For a battery subject to an alternative emission limitation for coke oven doors on by-product coke oven batteries pursuant to 63.305, the 30-run rolling average of the percent leaking coke oven doors for any side of the battery not subject to such alternative emission limitation:
- (4) For a by-product coke oven battery subject to the small battery emission limitation for coke oven doors pursuant to 63.304(b)(7), the 30-run rolling average of the number of leaking coke oven doors;
- (5) For an approved alternative emission limitation for coke oven doors according to 63.305, the weekly or monthly observation of the percent leaking coke oven doors using Method 303 in appendix A to this part, the percent opacity of visible emissions from the control device for the shed using Method 9 in appendix A to part 60 of this chapter, and visible emissions from the shed using Method 22 in appendix A to part 60 of this chapter;





- (e) The certified observer shall make available to the implementing agency as well as to the owner or operator, a copy of the daily inspection results by the end of the day and shall make available the calculated rolling average for each emission point to the owner or operator as soon as practicable following each performance test. The information provided by the certified observer is not a compliance determination. For the purpose of notifying an owner or operator of the results obtained by a certified observer, the person does not have to be certified.
- (f) Compliance shall not be determined more often than the schedule provided for performance tests under this section. If additional valid emissions observations are obtained (or in the case of charging, valid sets of emission observations), the arithmetic average of all valid values (or valid sets of values) obtained during the day shall be used in any computations performed to determine compliance under paragraph (d) of this section or determinations under 63.306.
- (g) Compliance with the alternative standards for nonrecovery coke oven batteries in 63.303; shed inspection, maintenance requirements, and monitoring requirements for parameters affecting the shed exhaust flow rate for batteries subject to alternative standards for coke oven doors under 63.305; work practice emission control plan requirements in 63.306; standards for bypass/bleeder stacks in 63.307; and standards for collecting mains in 63.308 is to be determined by the enforcement agency based on review of records and inspections.
- (h) For a flare installed to meet the requirements of 63.307(b):
- (1) Compliance with the provisions in 63.307(c) (visible emissions from flares) shall be determined using Method 22 in appendix A to part 60 of this chapter, with an observation period of 2 hours; and
- (2) Compliance with the provisions in 63.307(b)(4) (flare pilot light) shall be determined using a thermocouple or any other equivalent device.
- (i) No observations obtained during any program for training or for certifying observers under this subpart shall be used to determine compliance with the requirements of this subpart or any other federally enforceable standard.

#### III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

#### IV. RECORDKEEPING REQUIREMENTS.

# # 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.311] Subpart L--National Emission Standards for Coke Oven Batteries Reporting and recordkeeping requirements.

- (a) After the effective date of an approved permit in a State under part 70 of this chapter, the owner or operator shall submit all notifications and reports required by this subpart to the State permitting authority. Use of information provided by the certified observer shall be a sufficient basis for notifications required under 70.5(c)(9) of this chapter and the reasonable inquiry requirement of 70.5(d) of this chapter.
- (b) Initial compliance certification. The owner or operator of an existing or new coke oven battery shall provide a written statement(s) to certify compliance to the Administrator within 45 days of the applicable compliance date for the emission limitations or requirements in this subpart. The owner or operator shall include the following information in the initial compliance certification:
- (1) Statement, signed by the owner or operator, certifying that a bypass/bleeder stack flare system or an approved alternative control device or system has been installed as required in 63.307; and
- (2) Statement, signed by the owner or operator, certifying that a written startup, shutdown, and malfunction plan has been prepared as required in 63.310.
- (c) Notifications. The owner or operator shall provide written notification(s) to the Administrator of:
  - (1) Intention to construct a new coke oven battery (including reconstruction of an existing coke oven battery and





construction of a greenfield coke oven battery), a brownfield coke oven battery, or a padup rebuild coke oven battery, including the anticipated date of startup; and

- (2) Election to meet emission limitation(s) in this subpart as follows:
- (i) Notification of election to meet the emission limitations in 63.304(b)(1) or 63.304(c) either in lieu of or in addition to the applicable emission limitations in 63.302(a) or 63.303(a) must be received by the Administrator on or before November 15, 1993; or
- (ii) Notification of election to meet the emission limitations in 63.302(a)(1) or 63.303(a), as applicable, must be received by the Administrator on or before December 31, 1995; and
- (iii) Notification of election to meet the emission limitations in 63.304(b)(2) through (4) and 63.304(c) or election to meet residual risk standards to be developed according to section 112(f) of the Act in lieu of the emission standards in 63.304 must be received on or before January 1, 1998.
- (d) Semiannual compliance certification. The owner or operator of a coke oven battery shall include the following information in the semiannual compliance certification:
- (1) Certification, signed by the owner or operator, that no coke oven gas was vented, except through the bypass/bleeder stack flare system of a by-product coke oven battery during the reporting period or that a venting report has been submitted according to the requirements in paragraph (e) of this section;
- (2) Certification, signed by the owner or operator, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, and malfunction event did occur and a report was submitted according to the requirements in 63.310(e); and
  - (3) Certification, signed by the owner or operator, that work practices were implemented if applicable under 63.306.
- (e) Report for the venting of coke oven gas other than through a flare system. The owner or operator shall report any venting of coke oven gas through a bypass/bleeder stack that was not vented through the bypass/bleeder stack flare system to the Administrator as soon as practicable but no later than 24 hours after the beginning of the event. A written report shall be submitted within 30 days of the event and shall include a description of the event and, if applicable, a copy of the notification for a hazardous substance release required pursuant to 302.6 of this chapter.
- (f) Recordkeeping. The owner or operator shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the Administrator for the time period specified in 70.6(a)(3)(ii)(B) of this chapter. Copies of the work practice plan developed under 63.306 and the startup, shutdown, and malfunction plan developed under 63.310 shall be kept onsite at all times. The owner or operator shall maintain the following information:
  - (1) For nonrecovery coke oven batteries,
    - (i) Records of daily pressure monitoring, if applicable according to 63.303(a)(1)(ii) or 63.303(b)(1)(ii);
    - (ii) Records demonstrating the performance of work practice requirements according to 63.306(b)(7); and
- (iii) Design characteristics of each emission control system for the capture and collection of charging emissions, as required by 63.303(b)(2).
  - (2) For an approved alternative emission limitation according to 63.305;
    - (i) Monitoring records for parameter(s) that indicate the exhaust flow rate is maintained;
    - (ii) If applicable under 63.305(f)(4)(i);
      - (A) Records of opacity readings from the continuous opacity monitor for the control device for the shed; and

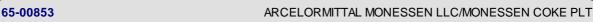


- (B) Records that demonstrate the continuous opacity monitoring system meets the requirements of Performance Specification 1 in appendix B to part 60 of this chapter and the operation and maintenance requirements in part 52 of this chapter; and
- (iii) Records of quarterly visual inspections as specified in 63.305(f)(5), including the time and date a defect is detected and repaired.
  - (3) A copy of the work practice plan required by 63.306 and any revision to the plan;
- (4) If the owner or operator is required under 63.306(c) to implement the provisions of a work practice plan for a particular emission point, the following records regarding the implementation of plan requirements for that emission point during the implementation period;
- (i) Copies of all written and audiovisual materials used in the training, the dates of each class, the names of the participants in each class, and documentation that all appropriate personnel have successfully completed the training required under 63.306(b)(1);
  - (ii) The records required to be maintained by the plan provisions implementing 63.306(b)(7);
- (iii) Records resulting from audits of the effectiveness of the work practice program for the particular emission point, as required under 63.306(b)(2)(i), 63.306(b)(3)(i), 63.306(b)(4)(i), or 63.306(b)(5)(i); and
- (iv) If the plan provisions for coke oven doors must be implemented, records of the inventory of doors and jambs as required under 63.306(b)(2)(vi); and
- (5) The design drawings and engineering specifications for the bypass/bleeder stack flare system or approved alternative control device or system as required under 63.307.
  - (6) Records specified in 63.310(f) regarding the basis of each malfunction notification.
- (g) Records required to be maintained and reports required to be filed with the Administrator under this subpart shall be made available in accordance with the requirements of this paragraph by the owner or operator to the authorized collective bargaining representative of the employees at a coke oven battery, for inspection and copying.
- (1) Requests under paragraph (g) of this section shall be submitted in writing, and shall identify the records or reports that are subject to the request with reasonable specificity;
- (2) The owner or operator shall produce the reports for inspection and copying within a reasonable period of time, not to exceed 30 days. A reasonable fee may be charged for copying (except for the first copy of any document), which shall not exceed the copying fee charged by the Administrator under part 2 of this chapter;
- (3) Nothing in paragraph (g) of this section shall require the production for inspection or copying of any portion of a document that contains trade secrets or confidential business information that the Administrator would be prohibited from disclosing to the public under part 2 of this chapter; and
- (4) The inspection or copying of a document under paragraph (g) of this section shall not in any way affect any property right of the owner or operator in such document under laws for the protection of intellectual property, including the copyright laws.

#### V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).





#### VI. WORK PRACTICE REQUIREMENTS.

#### # 005 [25 Pa. Code §129.16]

#### Door maintenance, adjustment and replacement practices

- (a) In the event a coke oven battery fails to comply with the emission standards contained in 123.44(a)(2) or (3) (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery) at any time after the effective date of the standards at a coke oven battery, the person responsible for the operation of such coke oven battery shall take the following action:
  - (1) Implement the following work practices:
    - (i) Self-sealing coke oven doors. Work practices for self-sealing coke oven doors shall conform with the following:
- (A) Within 1 hour after the charge of each oven, the oven doors shall be inspected for visible emissions, and any doors found leaking shall be recorded.
  - (B) Doors leaking one hour after the charge shall be adjusted prior to the end of the second hour after the charge.
- (C) Each oven door leaking one hour after the charge shall be reinspected for visible emissions 2 hours after the charge. A record shall be made of a door leaking 2 hours after the charge.
- (D) A door leaking two hours after each of two successive charges shall be replaced with a repaired, rebuilt, or new door prior to the next charge to that oven.
- (E) An adequate supply of repaired, rebuilt, and new doors shall be maintained onsite to allow the frequency of replacement necessary to comply with this subsection.
- (F) If a newly installed, repaired, rebuilt, or new door leaks more than two hours after charge, the door and jamb shall be inspected when the door is next removed from the oven. If the door is found to be defective, it shall be replaced with a repaired, rebuilt, or new door prior to the next charge to that oven. If the door is not found to be defective, the jamb shall be replaced prior to the next charge to that oven.
  - (ii) Luted doors. Work practices for luted doors shall conform to the following:
    - (A) Luted doors leaking 15 minutes after the charge shall be immediately reluted.
    - (B) Doors which fail to seal after the first reluting shall be recorded.
    - (C) Leaks appearing after the first reluting shall be immediately alluted.
  - (iii) Chuck doors. Work practices for chuck doors shall conform to the following:
- (A) Within 1 hour after the charge of each oven, the chuck door shall be inspected, and any door found leaking shall be recorded.
  - (B) Chuck doors leaking 1 hour after the charge shall be gasketed prior to the next charge to that oven.
- (C) If a freshly gasketed door is leaking 1 hour after the charge, it or the oven door shall be replaced prior to the next charge to that oven.
  - (iv) Cleaning. Doors and jambs shall be completely cleaned prior to each charge.
- (2) Keep and maintain records of the inspections required by paragraph (1), including the names of inspectors, the date and time of each door inspection and ovens observed leaking.
- (3) Within 90 days following a determination by the Department or the battery operator that this section is applicable, the person responsible for the operation of a coke oven battery shall submit to the Department for approval a work practice and maintenance manual which shall include, but not be limited to, the job titles of persons having responsibility for the various tasks required by paragraph (1), specify procedures to be followed to assure implementation of the requirements of





paragraph (1), and state the numbers of replacement doors and jambs to be kept on site for each battery.

(b) In addition to, or as a substitute for the requirements of paragraph (a)(1)--(3), the Department may issue an order establishing further obligations with respect to the control of door area emissions in the event compliance with 123.44(a)(2) and (a)(3) is not consistently achieved within the time allowed by an approved deferred compliance schedule. The obligations may include, but is not limited to, the specification of the maintenance and work practices as the Department finds will achieve consistent compliance with the standards and the installation of best available technology for door sealing or for the capture and cleaning of door area emissions.

# # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.306] Subpart L--National Emission Standards for Coke Oven Batteries Work practice standards.

- (a) Work practice plan. On or before November 15, 1993, each owner or operator shall prepare and submit to the Administrator a written emission control work practice plan for each coke oven battery. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations under this subpart or, for a coke oven battery not subject to visible emission limitations under this subpart, other federally enforceable visible emission limitations for these emission points.
- (1) The work practice plan must address each of the topics specified in paragraph (b) of this section in sufficient detail and with sufficient specificity to allow the Administrator to evaluate the plan for completeness and enforceability.
- (2) The initial plan and any revisions shall be submitted to the Administrator or the delegated State, local, or Tribal authority. The Administrator (or delegated State, local, or Tribal authority) may require revisions to the initial plan only where the Administrator (or delegated State, local, or Tribal authority) finds either that the plan does not address each subject area listed in paragraph (b) of this section for each emission point subject to a visible emission standard under this subpart, or that the plan is unenforceable because it contains requirements that are unclear.
- (3) During any period of time that an owner or operator is required to implement the provisions of a plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any recordkeeping requirement(s) under 63.311(f)(4) for the emission point during a particular day is a single violation.
- (b) Plan components. The owner or operator shall organize the work practice plan to indicate clearly which parts of the plan pertain to each emission point subject to visible emission standards under this subpart. Each of the following provisions, at a minimum, shall be addressed in the plan:
- (1) An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control and the requirements of this subpart, including work practice requirements. Contractors with responsibilities that impact emission control may be trained by the owner or operator or by qualified contractor personnel; however, the owner or operator shall ensure that the contractor training program complies with the requirements of this section. The training program in the plan must include:
- (i) A list, by job title, of all personnel that are required to be trained and the emission point(s) associated with each job title;
  - (ii) An outline of the subjects to be covered in the initial and refresher training for each group of personnel;
  - (iii) A description of the training method(s) that will be used (e.g., lecture, video tape);
  - (iv) A statement of the duration of initial training and the duration and frequency of refresher training;
- (v) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion of the initial and refresher training; and
- (vi) A description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment, including a copy of the form to be used, if applicable, as required under the plan provisions implementing paragraph (b)(7) of this section.



- (2) Procedures for controlling emissions from coke oven doors on by-product coke oven batteries, including:
- (i) A program for the inspection, adjustment, repair, and replacement of coke oven doors and jambs, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
- (ii) Procedures for identifying leaks that indicate a failure of the emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;
- (iii) Procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;
- (iv) For batteries equipped with self-sealing doors, procedures for use of supplemental gasketing and luting materials, if the owner or operator elects to use such procedures as part of the program to prevent exceedances;
- (v) For batteries equipped with hand-luted doors, procedures for luting and reluting, as necessary to prevent exceedances;
- (vi) Procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located onsite; and
- (vii) Procedures for monitoring and controlling collecting main back pressure, including corrective action if pressure control problems occur.
  - (3) Procedures for controlling emissions from charging operations on by-product coke oven batteries, including:
- (i) Procedures for equipment inspection, including the frequency of inspections, and replacement or repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
  - (ii) Procedures for ensuring that the larry car hoppers are filled properly with coal;
  - (iii) Procedures for the alignment of the larry car over the oven to be charged;
  - (iv) Procedures for filling the oven (e.g., procedures for staged or sequential charging);
  - (v) Procedures for ensuring that the coal is leveled properly in the oven; and
- (vi) Procedures and schedules for inspection and cleaning of offtake systems (including standpipes, standpipe caps, goosenecks, dampers, and mains), oven roofs, charging holes, topside port lids, the steam supply system, and liquor sprays.
  - (4) Procedures for controlling emissions from topside port lids on by-product coke oven batteries, including:
- (i) Procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and
- (ii) Procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing.
  - (5) Procedures for controlling emissions from offtake system(s) on by-product coke oven batteries, including:
    - (i) Procedures for equipment inspection and replacement or repair of offtake system components, including the



frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;

- (ii) Procedures for identifying offtake system components that leak and procedures for sealing leaks that are detected; and
  - (iii) Procedures for dampering off ovens prior to a push.
  - (6) Procedures for controlling emissions from nonrecovery coke oven batteries including:
- (i) Procedures for charging coal into the oven, including any special procedures for minimizing air infiltration during charging, maximizing the draft on the oven, and for replacing the door promptly after charging;
  - (ii) If applicable, procedures for the capture and control of charging emissions;
- (iii) Procedures for cleaning coke from the door sill area for both sides of the battery after completing the pushing operation and before replacing the coke oven door;
  - (iv) Procedures for cleaning coal from the door sill area after charging and before replacing the push side door;
  - (v) Procedures for filling gaps around the door perimeter with sealant material, if applicable; and
  - (vi) Procedures for detecting and controlling emissions from smoldering coal.
- (7) Procedures for maintaining, for each emission point subject to visible emission limitations under this subpart, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:
  - (i) Procedures for recording the performance of such plan requirements; and
  - (ii) Procedures for certifying the accuracy of such records by the owner or operator.
- (8) Any additional work practices or requirements specified by the Administrator according to paragraph (d) of this section.
- (c) Implementation of work practice plans. On and after November 15, 1993, the owner or operator of a coke oven battery shall implement the provisions of the coke oven emission control work practice plan according to the following requirements:
- (1) The owner or operator of a coke oven battery subject to visible emission limitations under this subpart on and after November 15, 1993, shall:
- (i) Implement the provisions of the work practice plan pertaining to a particular emission point following the second independent exceedance of the visible emission limitation for the emission point in any consecutive 6-month period, by no later than 3 days after receipt of written notification of the second such exceedance from the certified observer. For the purpose of this paragraph (c)(1)(i), the second exceedance is "independent" if either of the following criteria is met:
  - (A) The second exceedance occurs 30 days or more after the first exceedance;
- (B) In the case of coke oven doors, topside port lids, and offtake systems, the 29-run average, calculated by excluding the highest value in the 30-day period, exceeds the value of the applicable emission limitation; or
- (C) In the case of charging emissions, the 29-day logarithmic average, calculated in accordance with Method 303 in appendix A to this part by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.





- (ii) Continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days if work practice requirements are implemented pursuant to paragraph (c)(1)(i) of this section. After the visible emission limitation for a particular emission point is achieved for 90 consecutive days, any exceedances prior to the beginning of the 90 days are not included in making a determination under paragraph (c)(1)(i) of this section.
- (2) The owner or operator of a coke oven battery not subject to visible emission limitations under this subpart until December 31, 1995, shall:
- (i) Implement the provisions of the work practice plan pertaining to a particular emission point following the second exceedance in any consecutive 6-month period of a federally enforceable emission limitation for that emission point for coke oven doors, topside port lids, offtake systems, or charging operations by no later than 3 days after receipt of written notification from the applicable enforcement agency; and
- (ii) Continue to implement such plan provisions for 90 consecutive days after the most recent written notification from the enforcement agency of an exceedance of the visible emission limitation.
- (d) Revisions to plan. Revisions to the work practice emission control plan will be governed by the provisions in this paragraph (d) and in paragraph (a)(2) of this section. The reviewing authority is the Administrator or the delegated State, local, or Tribal authority.
- (1) The reviewing authority may request the owner or operator to review and revise as needed the work practice emission control plan for a particular emission point if there are 2 exceedances of the applicable visible emission limitation in the 6-month period that starts 30 days after the owner or operator is required to implement work practices under paragraph (c) of this section. In the case of a coke oven battery subject to visual emission limitations under this subpart, the second exceedance must be independent of the criteria in paragraph (c)(1)(i) of this section.
- (2) The reviewing authority may not request the owner or operator to review and revise the plan more than twice in any 12 consecutive month period for any particular emission point unless the reviewing authority disapproves the plan according to the provisions in paragraph (d)(6) of this section.
- (3) If the certified observer calculates that a second exceedance (or, if applicable, a second independent exceedance) has occurred, the certified observer shall notify the owner or operator. No later than 10 days after receipt of such a notification, the owner or operator shall notify the reviewing authority of any finding of whether work practices are related to the cause or the solution of the problem. The notification is subject to review by the reviewing authority according to the provisions in paragraph (d)(6) of this section.
- (4) The owner or operator shall submit a revised work practice plan within 60 days of notification from the reviewing authority under paragraph (d)(1) of this section, unless the reviewing authority grants an extension of time to submit the revised plan.
- (5) If the reviewing authority requires a plan revision, the reviewing authority may require the plan to address a subject area or areas in addition to those in paragraph (b) of this section, if the reviewing authority determines that without plan coverage of such an additional subject area, there is a reasonable probability of further exceedances of the visible emission limitation for the emission point for which a plan revision is required.
- (6) The reviewing authority may disapprove a plan revision required under paragraph (d) of this section if the reviewing authority determines that the revised plan is inadequate to prevent exceedances of the visible emission limitation under this subpart for the emission point for which a plan revision is required or, in the case of a battery not subject to visual emission limitations under this subpart, other federally enforceable emission limitations for such emission point. The reviewing authority may also disapprove the finding that may be submitted pursuant to paragraph (d)(3) of this section if the reviewing authority determines that a revised plan is needed to prevent exceedances of the applicable visible emission limitations.

# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.308] Subpart L--National Emission Standards for Coke Oven Batteries Standards for collecting mains.

(a) On and after November 15, 1993, the owner or operator of a by-product coke oven battery shall inspect the collecting







main for leaks at least once daily according to the procedures in Method 303 in appendix A to this part.

- (b) The owner or operator shall record the time and date a leak is first observed, the time and date the leak is temporarily sealed, and the time and date of repair.
- (c) The owner or operator shall temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of the leak.
- (d) The owner or operator shall initiate a collecting main repair as expeditiously as possible, but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak unless an alternative schedule is approved by the Administrator.

#### VII. ADDITIONAL REQUIREMENTS.

# # 008 [25 Pa. Code §121.1 A - L]

#### Definitions.

Charging: The operation by which coal is introduced into a coke oven.

Charging port: An opening on the oven through which coal is or may be introduced into a coke oven whether or not the opening is regularly used for that purpose, including a jumper pipe port.

Closed charging emissions: An air contaminant emitted during closed charging from equipment through or by which coal is transported from storage or preheat hoppers and from a point on the receiving oven, including, but not limited to, a transport pipe, duct, fitting, valve or charging port or offtake piping.

Coke oven: The chamber into which coal is introduced for coking, including, but not limited to, the doors, jambs, refractory floor, walls and ceiling, charging ports and charging port covers-that is, lids-and the offtake piping, damper and other ducts or piping associated therewith.

Coke oven battery: A process consisting of a jointly operated group of slot-type coke ovens, the operation of which results in the destructive distillation of coal by the indirect application of heat to separate the gaseous and liquid distillates from the carbon residue and includes coal preparation, coal charging, coking, separation and cleaning of the distillate, coke pushing, hot coke transfer and coke quenching. A coke oven battery is a single source for the purpose of this article and shall include, but not be limited to, the following, when present: the ovens; coal preheaters; underfiring systems; waste heat stack; offtake piping; flues; closed charging systems; door hoods; and operating equipment including larry cars, jumper pipes, pusher machines, door machines, mud trucks and quench cars associated with the operation of a battery. Existing batteries are identified as follows:

Koppers Industries-Monessen: #1B, #2 (operated as one battery for purposes of meeting the charging standard)

Coke oven gas collector main: The pipes or ducts by which the gaseous byproducts of coking are transported from the offtake piping of coke ovens to the byproduct plant.

Coke oven topside: The top of the coke oven, including, but not limited to, the charging ports; charging port covers-that is, lids; refractory ceiling; flue caps; and offtake piping associated with an oven.

#### [25 Pa. Code §121.1]

#### # 009 [25 Pa. Code §123.44]

#### Limitations of visible fugitive air contaminants from operation of any coke oven battery.

- (a) No person may permit the operation of a coke oven battery in such a manner that visible fugitive air contaminants are emitted in excess of the emissions allowed by the following limitations:
- (1) The following open charging limitation applies to all existing batteries listed in 121.1 (relating to definitions) except Jones and Laughlin's A-5 battery at Aliquippa. The following closed charging limitation shall apply to the A-5 battery at Aliquippa and any other existing battery on which a closed charging system is installed:





- (i) Open charging. At no time shall the aggregated times of visible open charging emissions during any four consecutive charges equal more than 75 seconds.
- (ii) Closed charging. At no time shall there be closed charging emissions during more than one charge out of any ten consecutive charges.
- (2) At no time may door area emissions from any coke oven exceed 40% opacity 15 minutes no longer after the last charge to that oven.
- (3) At no time shall there be any visible door area emissions from more than 10% of the door area of operating coke ovens, excluding the two-door area representing the last oven charged on any battery and any door areas obstructed from view.
- (4) At no time may there be visible topside emissions from more than 2.0% of the charging port seals on operating coke ovens in any battery, excluding visible emissions from no more than three ovens which may be dampered off.
- (5) At no time may there be topside emissions from more than 5.0% of the offtake piping on operating coke ovens in any battery, excluding visible emissions from open standpipe caps on no more than three ovens which may be dampered off.
- (6) At no time shall there be a topside emissions from any point on the topside other than allowed emissions from charging port seals and offtake piping under paragraphs (4) and (5).
  - (7) At no time may there be any visible emissions from the coke oven gas collector main.
- (b) The following techniques shall be used for measuring and recording visible fugitive air contaminants from a coke oven battery:
- (1) Observations of open and closed charging emissions shall be made from any point or points on the topside of a coke oven battery from which an observer can obtain an unobstructed view of the charging operation. The observer will determine and record the total number of seconds that charging emissions are visible during the charging of coal to the coke oven. The observer shall time the visible charging emissions with a stopwatch while observing the charging operation. Simultaneous emissions from more than one emission point shall be timed and recorded as one emission and may not be added individually to the total time. Open charging emissions shall not include any emissions observed after all the charging port covers have been firmly seated following the removal of the larry car, such as emissions occurring when a cover is temporarily removed to permit the sweep-in of spilled coal. The total number of seconds of visible emissions observed, clock time for the initiation and completion of the charging operation, battery identification, and oven number for each charge shall be recorded by the observer. In the event that observations of emissions from a charge are interrupted due to events beyond the control of observer, the data from that charge shall be invalidated and the observer shall note on his observation sheet the reason for invalidating the data. The observer shall then resume observation of the next consecutive charge or charges, and continue until he has obtained a set of four charges for comparison with the emission standard. Compliance with subsection (a)(1) shall be determined by summing the seconds of charging emissions observed during each of the four charges.
- (2) Observation of door area emissions for the purpose of determining compliance with subsection (a)(2) shall be made at a point above the top of the door but below the battery top, or at the top of any local door area emission control hood. The observer shall place himself no less than 25 feet from the face of the door in a location where his view of the door area is unobstructed.
- (3) Observations of door area emissions for determining compliance with subsection (a)(3) shall be made from a minimum distance of 25 feet from each door. Each door area shall be observed in sequence for only that period necessary to determine whether or not, at the time, there are visible emissions from any point on the door area while the observer walks along the side of the battery. If the observer's view of a door area is more than momentarily obstructed, for example, by door machinery, pushing machinery, coke guide, luter truck, or opaque steam plumes, he shall record the door area obstructed and the nature of the obstruction and continue the observations with the next door area in sequence which is not obstructed. The observer shall continue this procedure along the entire length of the battery for both sides and shall record the battery identification, battery side, and oven door identification number of each door area exhibiting visible emissions. Before completing the observation of door area emissions, the observer shall attempt to reobserve the obstructed doors.







Compliance with subsection (a)(3) shall be calculated by application of the following formula, which excludes two door areas representing the last oven charged from the numerator and obstructed door areas from the denominator:

```
(No. of door area with visible emissions) - 2
             ------ X 100 = 10% or less
(No. of door areas on oper- - (No. of door areas
ating ovens in the battery) obstructed from view)
```

(4) Observations of visible emissions from a coke oven topside, other than emissions from the topside defined as open or closed charging emissions or pushing emissions, shall be made and recorded during the time an observer walks the topside of a battery from one end to the other, positioning himself near the center line. During the traverse, the observer may stray from near the center line of the battery and walk as close to offtake piping as is necessary to determine whether an observed emission is emanating from the offtake piping. Each oven shall be observed in sequence. The observer shall record the battery identification, the points of topside emission from each oven, the oven number, and whether an oven was dampered off. Compliance with subsection (a)(4) shall be determined by application of the following formula:

```
(No. of charging ports with
(No. of charging ports - visible emissions on dampered
with visible emissions) off ovens, not to exceed three ovens)
        -----X 100 = 2% or less
(No. of charging ports - (No. of charging ports on
on operating ovens) dampered off ovens, not to
             exceed three ovens)
```

Compliance with subsection (a)(5) of this section shall be determined by application of the following formula:

```
(No. of off-take piping with
(No. of off-take piping visible emissions on dampered
with visible emissions) - off ovens, not to exceed 3 ovens)
        ------X 100 = 5% or less
(No. of off-take piping - (No. of off-take piping on
on operating ovens) dampered off ovens, not to
             exceed 3 ovens)
```

#### # 010 [25 Pa. Code §129.15]

#### Coke pushing operations

- (a) No person may permit the pushing of coke from a coke oven unless the pushing operation is enclosed during the removal of coke from a coke oven and pushing emissions are contained, except for such fugitive pushing emissions that are allowed by subsections (c) and (e). A device for the enclosure of pushing operations shall be subject to the requirements of Chapter 127 (relating to construction modification, reactivation and operation of sources) and the grant of plan approval.
- (b) Any application submitted to the Department under Chapter 127 for approval to install an air cleaning device designed to achieve compliance with subsection (a) at an existing coke oven battery shall, in addition to the requirements of 123.13(b) and 127.12(a) (relating to processes; and content of applications) show that the air cleaning device is designed to reduce the fugitive emissions from pushing operations at battery to the minimum attainable through the use of the best available technology following control.
- (c) Visible fugitive air contaminants in excess of 20% opacity from an air cleaning device installed for the control of pushing emissions under a plan approval from the Department shall be published unless the Department finds that:
  - (1) The emissions are of minor significance with respect to causing air pollution.
  - (2) The emissions will not prevent or interfere with the attainment or maintenance of any ambient air quality standard.



- (d) Application for a finding under subsection (c) shall be filed in accordance with 123.1(b) (relating to prohibition of certain fugitive emissions).
- (e) No person may transport hot coke in the open atmosphere during the pushing operation, unless the visible fugitive air contaminants from the coke do not exceed 10% opacity.

# # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.300] Subpart L--National Emission Standards for Coke Oven Batteries Applicability.

- (a) Unless otherwise specified in 63.306, 63.307, and 63.311, the provisions of this subpart apply to existing by-product coke oven batteries at a coke plant and to existing nonrecovery coke oven batteries at a coke plant on and after the following dates:
- (1) December 31, 1995, for existing by-product coke oven batteries subject to emission limitations in 63.302(a)(1) or existing nonrecovery coke oven batteries subject to emission limitations in 63.303(a);
  - (2) January 1, 2003, for existing by-product coke oven batteries subject to emission limitations in 63.302(a)(2);
- (3) November 15, 1993, for existing by-product and nonrecovery coke oven batteries subject to emission limitations in 63.304(b)(1) or 63.304(c);
- (4) January 1, 1998, for existing by-product coke oven batteries subject to emission limitations in 63.304(b)(2) or 63.304(b)(7); and
- (5) January 1, 2010, for existing by-product coke oven batteries subject to emission limitations in 63.304(b)(3) or 63.304(b)(7).
- (b) The provisions for new sources in 63.302(b), 63.302(c), and 63.303(b) apply to each greenfield coke oven battery and to each new or reconstructed coke oven battery at an existing coke plant if the coke oven battery results in an increase in the design capacity of the coke plant as of November 15, 1990, (including any capacity qualifying under 63.304(b)(6), and the capacity of any coke oven battery subject to a construction permit on November 15, 1990, which commenced operation before October 27, 1993.
- (c) The provisions of this subpart apply to each brownfield coke oven battery, each padup rebuild, and each cold-idle coke oven battery that is restarted.
- (d) The provisions of 63.304(b)(2)(i)(A) and 63.304(b)(3)(i) apply to each foundry coke producer as follows:
- (1) A coke oven battery subject to 63.304(b)(2)(i)(A) or 63.304(b)(3)(i) must be a coke oven battery that on January 1, 1992, was owned or operated by a foundry coke producer; and
- (2) (i) A coke oven battery owned or operated by an integrated steel producer on January 1, 1992, and listed in paragraph (d)(2)(ii) of this section, that was sold to a foundry coke producer before November 15, 1993, shall be deemed for the purposes of paragraph (d)(1) of this section to be owned or operated by a foundry coke producer on January 1, 1992.
  - (ii) The coke oven batteries that may qualify under this provision are the following:
    - (A) The coke oven batteries at the Bethlehem Steel Corporation's Lackawanna, New York facility, and
    - (B) The coke oven batteries at the Rouge Steel Company's Dearborn, Michigan facility.
- (e) The emission limitations set forth in this subpart shall apply at all times except during a period of startup, shutdown, or malfunction. The startup period shall be determined by the Administrator and shall not exceed 180 days.
- (f) After October 28, 1992, rules of general applicability promulgated under section 112 of the Act, including the General Provisions, may apply to coke ovens provided that the topic covered by such a rule is not addressed in this subpart.



# # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.301] Subpart L--National Emission Standards for Coke Oven Batteries Definitions.

Terms used in this subpart are defined in the Act or in this section as follows:

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this subpart or its designated agent).

Brownfield coke oven battery means a new coke oven battery that replaces an existing coke oven battery or batteries with no increase in the design capacity of the coke plant as of November 15, 1990 (including capacity qualifying under 63.304(b)(6), and the capacity of any coke oven battery subject to a construction permit on November 15, 1990, which commenced operation before October 27, 1993.

Bypass/bleeder stack means a stack, duct, or offtake system that is opened to the atmosphere and used to relieve excess pressure by venting raw coke oven gas from the collecting main to the atmosphere from a by-product coke oven battery, usually during emergency conditions.

By-product coke oven battery means a source consisting of a group of ovens connected by common walls, where coal undergoes destructive distillation under positive pressure to produce coke and coke oven gas, from which by-products are recovered. Coke oven batteries in operation as of April 1, 1992, are identified in appendix A to this subpart.

Certified observer means a visual emission observer, certified under (if applicable) Method 303 and Method 9 (if applicable) and employed by the Administrator, which includes a delegated enforcement agency or its designated agent. For the purpose of notifying an owner or operator of the results obtained by a certified observer, the person does not have to be certified.

Charge or charging period means, for a by-product coke oven battery, the period of time that commences when coal begins to flow into an oven through a topside port and ends when the last charging port is recapped. For a nonrecovery coke oven battery, charge or charging period means the period of time that commences when coal begins to flow into an oven and ends when the push side door is replaced.

Coke oven battery means either a by-product or nonrecovery coke oven battery.

Coke oven door means each end enclosure on the pusher side and the coking side of an oven. The chuck, or leveler-bar, door is part of the pusher side door. A coke oven door includes the entire area on the vertical face of a coke oven between the bench and the top of the battery between two adjacent buckstays.

Cold-idle coke oven battery means an existing coke oven battery that has been shut down, but is not dismantled.

Collecting main means any apparatus that is connected to one or more offtake systems and that provides a passage for conveying gases under positive pressure from the by-product coke oven battery to the by-product recovery system.

Collecting main repair means any measure to stop a collecting main leak on a long-term basis. A repair measure in general is intended to restore the integrity of the collecting main by returning the main to approximately its design specifications or its condition before the leak occurred. A repair measure may include, but is not limited to, replacing a section of the collecting main or welding the source of the leak.

Consecutive charges means charges observed successively, excluding any charge during which the observer's view of the charging system or topside ports is obscured.

Design capacity means the original design capacity of a coke oven battery, expressed in megagrams per year of furnace coke.

Foundry coke producer means a coke producer that is not and was not on January 1, 1992, owned or operated by an integrated steel producer and had on January 1, 1992, an annual design capacity of less than 1.25 million megagrams per year (not including any capacity satisfying the requirements of 63.300(d)(2) or 63.304(b)(6)).



Greenfield coke oven battery means a coke oven battery for which construction is commenced at a plant site (where no coke oven batteries previously existed) after December 4, 1992.

Integrated steel producer means a company or corporation that produces coke, uses the coke in a blast furnace to make iron, and uses the iron to produce steel. These operations may be performed at different plant sites within the corporation.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions.

New shed means a shed for which construction commenced after September 15, 1992. The shed at Bethlehem Steel Corporation's Bethlehem plant on Battery A is deemed not to be a new shed.

Nonrecovery coke oven battery means a source consisting of a group of ovens connected by common walls and operated as a unit, where coal undergoes destructive distillation under negative pressure to produce coke, and which is designed for the combustion of the coke oven gas from which by-products are not recovered.

Offtake system means any individual oven apparatus that is stationary and provides a passage for gases from an oven to a coke oven battery collecting main or to another oven. Offtake system components include the standpipe and standpipe caps, goosenecks, stationary jumper pipes, mini-standpipes, and standpipe and gooseneck connections.

Oven means a chamber in the coke oven battery in which coal undergoes destructive distillation to produce coke.

Padup rebuild means a coke oven battery that is a complete reconstruction of an existing coke oven battery on the same site and pad without an increase in the design capacity of the coke plant as of November 15, 1990 (including any capacity qualifying under 63.304(b)(6), and the capacity of any coke oven battery subject to a construction permit on November 15, 1990, which commenced operation before October 27, 1993. The Administrator may determine that a project is a padup rebuild if it effectively constitutes a replacement of the battery above the pad, even if some portion of the brickwork above the pad is retained.

Pushing, for the purposes of 63.305, means that coke oven operation that commences when the pushing ram starts into the oven to push out coke that has completed the coking cycle and ends when the quench car is clear of the coke side shed.

Run means the observation of visible emissions from topside port lids, offtake systems, coke oven doors, or the charging of a coke oven that is made in accordance with and is valid under Methods 303 or 303A in appendix A to this part.

Shed means a structure for capturing coke oven emissions on the coke side or pusher side of the coke oven battery, which routes the emissions to a control device or system.

Short coke oven battery means a coke oven battery with ovens less than 6 meters in height.

Shutdown means the operation that commences when pushing has occurred on the first oven with the intent of pushing the coke out of all of the ovens in a coke oven battery without adding coal, and ends when all of the ovens of a coke oven battery are empty of coal or coke.

Standpipe cap means an apparatus used to cover the opening in the gooseneck of an offtake system.

Startup means that operation that commences when the coal begins to be added to the first oven of a coke oven battery that either is being started for the first time or that is being restarted and ends when the doors have been adjusted for maximum leak reduction and the collecting main pressure control has been stabilized. Except for the first startup of a coke oven battery, a startup cannot occur unless a shutdown has occurred.

Tall coke oven battery means a coke oven battery with ovens 6 meters or more in height.

Temporary seal means any measure, including but not limited to, application of luting or packing material, to stop a collecting main leak until the leak is repaired.



Topside port lid means a cover, removed during charging or decarbonizing, that is placed over the opening through which coal can be charged into the oven of a by-product coke oven battery.

# # 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.307] Subpart L--National Emission Standards for Coke Oven Batteries Standards for bypass/bleeder stacks.

- (a) (1) Except as otherwise provided in this section, on or before March 31, 1994, the owner or operator of an existing by-product recovery battery for which a notification was not submitted under paragraph (e)(1) of this section shall install a bypass/bleeder stack flare system that is capable of controlling 120 percent of the normal gas flow generated by the battery, which shall thereafter be operated and maintained.
- (2) Coke oven emissions shall not be vented to the atmosphere through bypass/bleeder stacks, except through the flare system or the alternative control device as described in paragraph (d) of this section.
- (3) The owner or operator of a brownfield coke oven battery or a padup rebuild shall install such a flare system before startup, and shall properly operate and maintain the flare system.
- (b) Each flare installed pursuant to this section shall meet the following requirements:
- (1) Each flare shall be designed for a net heating value of 8.9 MJ/scm (240 Btu/scf) if a flare is steam-assisted or air-assisted, or a net value of 7.45 MJ/scm (200 Btu/scf) if the flare is non-assisted.
- (2) Each flare shall have either a continuously operable pilot flame or an electronic igniter that meets the requirements of paragraphs (b)(3) and (b)(4) of this section.
  - (3) Each electronic igniter shall meet the following requirements:
    - (i) Each flare shall be equipped with at least two igniter plugs with redundant igniter transformers;
- (ii) The ignition units shall be designed failsafe with respect to flame detection thermocouples (i.e., any flame detection thermocouples are used only to indicate the presence of a flame, are not interlocked with the ignition unit, and cannot deactivate the ignition system); and
- (iii) Integral battery backup shall be provided to maintain active ignition operation for a minimum of 15 minutes during a power failure.
- (iv) Each electronic igniter shall be operated to initiate ignition when the bleeder valve is not fully closed as indicated by an "OPEN" limit switch.
- (4) Each flare installed to meet the requirements of this paragraph (b) that does not have an electronic igniter shall be operated with a pilot flame present at all times as determined by 63.309(h)(2).
- (c) Each flare installed to meet the requirements of this section shall be operated with no visible emissions, as determined by the methods specified in 63.309(h)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- (d) As an alternative to the installation, operation, and maintenance of a flare system as required in paragraph (a) of this section, the owner or operator may petition the Administrator for approval of an alternative control device or system that achieves at least 98 percent destruction or control of coke oven emissions vented to the alternative control device or system.
- (e) The owner or operator of a by-product coke oven battery is exempt from the requirements of this section if the owner or operator:
- (1) Submits to the Administrator, no later than November 10, 1993, a formal commitment to close the battery permanently; and



- (2) Closes the battery permanently no later than December 31, 1995. In no case may the owner or operator continue to operate a battery for which a closure commitment is submitted, past December 31, 1995.
- (f) Any emissions resulting from the installation of flares (or other pollution control devices or systems approved pursuant to paragraph (d) of this section) shall not be used in making new source review determinations under part C and part D of title I of the Act.

# # 014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.310] Subpart L--National Emission Standards for Coke Oven Batteries Requirements for startups, shutdowns, and malfunctions.

- (a) At all times including periods of startup, shutdown, and malfunction, the owner or operator shall operate and maintain the coke oven battery and its pollution control equipment required under this subpart, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under this subpart. Failure to adhere to the requirement of this paragraph shall not constitute a separate violation if a violation of an applicable performance or work practice standard has also occurred.
- (b) Each owner or operator of a coke oven battery shall develop and implement according to paragraph (c) of this section, a written startup, shutdown, and malfunction plan that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable.
- (c) Malfunctions shall be corrected as soon as practicable after their occurrence, in accordance with the plan.
- (d) In order for the provisions of paragraph (i) of this section to apply with respect to the observation (or set of observations) for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the owner or operator:
  - (1) If practicable, to the certified observer if the observer is at the facility during the occurrence; or
- (2) To the enforcement agency, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the notification under paragraph (d)(1) of this section was not made, an explanation of why no such notification was made.
- (e) Within 14 days of the notification made under paragraph (d) of this section, or after a startup or shutdown, the owner or operator shall submit a written report to the applicable permitting authority that:
  - (1) Describes the time and circumstances of the startup, shutdown, or malfunction; and
  - (2) Describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.
- (f) The owner or operator shall maintain a record of internal reports which form the basis of each malfunction notification under paragraph (d) of this section.
- (g) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the standard operating procedures manual for the battery, provided the manual meets all the requirements for this section and is made available for inspection at reasonable times when requested by the Administrator.
- (h) The Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:
  - (1) Does not address a startup, shutdown, or malfunction event that has occurred;
- (2) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or





- (3) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.
- (i) If the owner or operator demonstrates to the satisfaction of the Administrator that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not:
  - (1) Constitute a violation of relevant requirements of this subpart;
  - (2) Be used in any compliance determination under 63.309; or
- (3) Be considered for purposes of 63.306, until the Administrator has resolved the claim that a startup, shutdown, or malfunction has occurred. If the Administrator determines that a startup, shutdown, or malfunction has not occurred, such observations may be used for purposes of 63.306, regardless of whether the owner or operator further contests such determination. The owner's or operator's receipt of written notification from the Administrator that a startup, shutdown, or malfunction has not occurred will serve, where applicable under 63.306, as written notification from the certified observer that an exceedance has occurred.

# # 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.312] Subpart L--National Emission Standards for Coke Oven Batteries Existing regulations and requirements.

- (a) The owner or operator shall comply with all applicable State implementation plan emission limits and (subject to any expiration date) all federally enforceable emission limitations which are contained in an order, decree, permit, or settlement agreement for the control of emissions from offtake systems, topside port lids, coke oven doors, and charging operations in effect on September 15, 1992, or which have been modified according to the provisions of paragraph (c) of this section.
- (b) Nothing in this subpart shall affect the enforcement of such State implementation plan emission limitations (or, subject to any expiration date, such federally enforceable emission limitations contained in an order, decree, permit, or settlement agreement) in effect on September 15, 1992, or which have been modified according to the provisions in paragraph (c) of this section.
- (c) No such State implementation plan emission limitation (or, subject to any expiration date, such federally enforceable emission limitation contained in an order, decree, permit, or settlement agreement) in effect on September 15, 1992, may be modified under the Act unless:
  - (1) Such modification is consistent with all requirements of section 110 of the Act; and either
- (i) Such modification ensures that the applicable emission limitations and format (e.g., single pass v. multiday average) in effect on September 15, 1992, will continue in effect; or
- (ii) Such modification includes a change in the method of monitoring (except frequency unless frequency was indicated in the State implementation plan, or subject to any expiration date, other federally enforceable requirements contained in an order, decree, permit, or settlement agreement) that is more stringent than the method of monitoring in effect on September 15, 1992, and that ensures coke oven emission reductions greater than the emission reductions required on September 15, 1992. The burden of proof in demonstrating the stringency of the methods of monitoring is borne by the party requesting the modification and must be made to the satisfaction of the Administrator; or
- (iii) Such modification makes the emission limitations more stringent while holding the format unchanged, makes the format more stringent while holding the emission limitations unchanged, or makes both more stringent.
- (2) Any industry application to make a State implementation plan revision or other adjustment to account for differences between Method 303 in appendix A to this part and the State's method based on paragraph (c)(1)(ii) of this section shall be submitted within 12 months after October 27, 1993.
- (d) Except as specified in 63.307(f), nothing in this subpart shall limit or affect any authority or obligation of Federal, State, or local agencies to establish emission limitations or other requirements more stringent than those specified in this subpart.







(e) Except as provided in 63.302(c), section 112(g) of the Act shall not apply to sources subject to this subpart.

#### #016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.313] Subpart L--National Emission Standards for Coke Oven Batteries

#### Delegation of authority.

- (a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (d) of this section are retained by the Administrator and cannot be transferred to the State, local, or Tribal agency.
- (c) Withdrawal of authority:
- (1) Whenever the Administrator learns that a delegated agency has not fully carried out the inspections and performance tests required under 63.309 for each applicable emission point of each battery each day, the Administrator shall immediately notify the agency. Unless the delegated agency demonstrates to the Administrator's satisfaction within 15 days of notification that the agency is consistently carrying out the inspections and performance tests required under 63.309 in the manner specified in the preceding sentence, the Administrator shall notify the coke oven battery owner or operator that inspections and performance tests shall be carried out according to 63.309(a)(5). When the Administrator determines that the delegated agency is prepared to consistently perform all required inspections and performance tests each day, the Administrator shall give the coke oven battery owner or operator at least 15 days notice that implementation will revert back to the previously delegated agency.
- (2) In addition to the provisions in paragraph (c)(1) of this section, the Administrator may also withdraw delegation of authority pursuant to the provisions of §63.96 of subpart E of this part.
- (d) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (d)(1) through (5) of this section.
- (1) Approval of alternatives to the requirements in §§63.300 and 63.302 through 63.308 (except the authorities in 63.306(a)(2) and (d)).
- (2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.
  - (3) Approval of any changes to section 2 of Method 303 in appendix A of this part.
  - (4) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.
- (5) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

# \*\*\* Permit Shield in Effect. \*\*\*





# **SECTION F.** Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.





# **SECTION G.** Emission Restriction Summary.

No emission restrictions listed in this section of the permit.





#### SECTION H. Miscellaneous.

The Monessen Coke Plant includes the following insignificant emissions sources:

#### Fuel Storage Tanks:

- Two (2) 4,200-gallon #2 fuel oil tanks
- One (1) 2,000-gallon capacity off-road #2 fuel oil tank
- One (1) 950-gallon off-road #2 fuel oil tank
- One (1) 500-gallon on-road (ultra-low sulfur) #2 fuel oil tank

Boiler house emergency compressed air system:

- One (1) 25-bhp spark ignition natural gas-fired engine manufactured in 2010.

Pursuant to 40 CFR Part 63 Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, this engine is classified as new stationary RICE since the engine is located at an area source and construction (as defined in 40 CFR §63.2) of the stationary RICE commenced after June 12, 2006. Since this affected source meets the criterion specified in §63.6590(c)(1)—a new stationary RICE located at an area source—the source must meet the requirements of Subpart ZZZZ by meeting the applicable requirements of 40 CFR Part 60 Subpart JJJJ for spark ignition (SI) engines. No further requirements apply to this engine under Part 63.

According to 40 CFR §60.4230(a)(4)(i), the provisions of 40 CFR Part 60 Subpart JJJJ—Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE) apply to owners or operators of SI ICE of which construction (the date the engine is ordered by the owner or operator pursuant to 40 CFR §60.4230(a)) commenced after June 12, 2006, and specifically to stationary emergency engines manufactured on or after January 1, 2009, with a maximum engine power greater than 19 KW (25 HP). Although this engine was manufactured in 2010, since this engine does not have maximum power greater than 25 HP, the provisions of Subpart JJJJ do not apply.





\*\*\*\*\* End of Report \*\*\*\*\*