

No. 32-22-OR

AN ORDINANCE

An Ordinance of the Council of the County of Allegheny ratifying amendments that revise Part G, "Methods," including §§2107.01 through 2107.20, and other related sections of the Allegheny County Health Department Rules and Regulations, Article XXI, "Air Pollution Control."

Whereas, Allegheny County, pursuant to the Pennsylvania Local Health Administration Law, 16 P.S. §§ 12001 – 12028, created the Allegheny County Health Department, and the Allegheny County Board of Health; and

Whereas, the Allegheny County Health Department regulates air quality under authority granted to it via the Pennsylvania Air Pollution Control Act, 35 P.S. §§ 4001 – 4106, and its implementing regulations; and

Whereas, Section 12011 of the Local Health Administration Law provides for the Board of Health to adopt regulations and submit such regulations to Allegheny County for approval or rejection; and

Whereas, on September 7, 2022 during its regularly scheduled public meeting, the Allegheny County Board of Health adopted by affirmative vote the attached amendments to Part G, "Methods," including §§2107.01 through 2107.20, and other related sections of the Allegheny County Health Department Rules and Regulations, Article XXI, "Air Pollution Control;" and

Whereas, it is the desire of Council to ratify the Allegheny County Health Department regulation amendments as approved by the Board of Health.

The Council of the County of Allegheny hereby resolves as follows:

SECTION 1. Incorporation of Preamble.

The provisions set forth in the preamble to this Ordinance are incorporated by reference in their entirety herein.

SECTION 2. Ratification of Regulations.

Acting pursuant to the Pennsylvania Local Health Administration Law and the Allegheny County Home Rule Charter, County Council hereby ratifies the amendments to the Allegheny County Health Department Rules and Regulations, Article XXI, "Air Pollution Control," attached hereto as Exhibit "A."

SECTION 3. Severability.

If any provision of this Ordinance shall be determined to be unlawful, invalid, void or unenforceable, then that provision shall be considered severable from the remaining provisions of this Resolution which shall be in full force and effect.

SECTION 4. Repealer.

Any Resolution or Ordinance or part thereof conflicting with the provisions of this Ordinance is hereby repealed so far as the same affects this Ordinance.

SECTION 5 Effective Date.

In accordance with Section 12011(c) of the Local Health Administration Law, this Ordinance shall become effective ten days after it has been approved.

Enacted in Council, this 25th day of October, 2022.

Council Agenda No. 12454-22.



Patrick Catena
President of Council

Attest: 

Jared Barker
Chief Clerk of Council

Chief Executive Office October 28th, 2022

Approved: 

Rich Fitzgerald
Chief Executive

Attest: 

Jennifer Liptak
Chief of Staff

M E M O R A N D U M
OFFICE OF THE COUNTY MANAGER

TO: Jared E. Barker
Allegheny County Council

FROM: William D. McKain CPA
County Manager

DATE: September 15, 2022

RE: Proposed Ordinance

Attached is an Ordinance of the Council of the County of Allegheny ratifying amendments that revise Part G, "Methods," including §§2107.01 through 2107.20, and other related sections of the Allegheny County Health Department Rules and Regulations, Article XXI, "Air Pollution Control."

The Allegheny County Law Department has reviewed this legislation prior to submitting it to Council.

I am requesting that this item be placed on the agenda at the next Regular Meeting of Council.

Proposed revisions to Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control ---

**PART G, "Methods" which includes
§2107.01 through and including §2107.20,
and
Related Sections**

LEGISLATIVE SUMMARY

ACHD is revising Article XXI, Part G, Methods such that the specific named methods and procedures are removed from Sections 2107.02 to 2107.16 and instead established by Article XXI, Section 2107.01, General, as residing in the Allegheny County Source Testing Manual.

The proposed rulemaking will make it possible for ACHD to incorporate changing test requirements more quickly as they are promulgated by state and federal agencies.

Other sections of Article XXI which cite Sections 2107.02 through 2107.16 are also proposed to be updated to simply require that testing be performed in accordance with the methods established by Part G.

The proposed revision was the subject of a public comment period, including a public hearing held on January 20, 2021. The regulation was approved by the Allegheny County Board of Health at its September 7, 2022 meeting.

Finally, the proposed changes to many of the affected Article XXI will be submitted as a revision to the Allegheny County portion of the Pennsylvania State Implementation Plan as delineated on the last pages of Exhibit B.

EXHIBIT “A”

PROPOSED REVISION

**Allegheny County Health Department Rules and Regulations
Article XXI, Air Pollution Control**

**PART G, “Methods” which includes
§2107.01 through and including §2107.20,
and
Related Sections**

(Note: Portions of this proposed revision will also be submitted to the Pennsylvania DEP and U.S. EPA as a revision to Allegheny County’s portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of the National Ambient Air Quality Standards, under Revision Tracking No. 96, as delineated on the final two pages.)

Proposed Article XXI Revision

Deletions are shown with strikethroughs.
Additions are shown in **larger font, bolded, and underlined.**

Article XXI Table of Contents

| <u>Part</u> | <u>Section</u> | <u>Page</u> |
|-------------|---|-------------|
| **** | | |
| G | Methods | |
| §2107.01 | General | G-1 |
| | <u>§2107.02 to §2107.16 {RESERVED}</u> | |
| §2107.02 | Particulate Matter | G-1 |
| §2107.03 | Sulfur Oxides | G-2 |
| §2107.04 | Volatile Organic Compounds | G-2 |
| §2107.05 | Nitrogen Oxides | G-4 |
| §2107.06 | Incinerator Temperatures | G-5 |
| §2107.07 | Coke Oven Emissions | G-5 |
| §2107.08 | Coke Oven Gas | G-5 |
| §2107.09 | Hydrogen Sulfide | G-5 |
| §2107.10 | Sulfur Content of Coke | G-5 |
| §2107.11 | Visible Emissions | G-5 |
| §2107.12 | Waste Derived Liquid Fuel | G-6 |
| §2107.13 | Odor Emissions | G-6 |
| §2107.14 | Lead | G-6 |
| §2107.15 | Gasoline Volatility and RFG | G-6 |
| §2107.16 | Sulfur in Fuel Oil | G-7 |
| §2107.20 | Ambient Measurements | G-7 |

PART A - GENERAL

§2101.20 DEFINITIONS {unless specifically indicated, all definitions effective October 20, 1995}

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

"Flue" means any duct, pipe, stack, chimney, or conduit which conducts air contaminants into the open air and which permits the performance of the test methods and procedures ~~specified in~~ **established by** Part G of this Article.

"Volatile organic compound" means an organic compound which participates in atmospheric photochemical reactions other than those compounds which the Administrator of the EPA designates in the Federal Register as having negligible photochemical reactivity and those compounds excluded from the definition of volatile organic compounds by 40 CFR Part 51 (relating to permit requirements). VOC shall be measured by the test procedures and conditions ~~specified in~~ **established by** Part G of this Article.

PART B - PERMITS GENERALLY

§2102.09 WASTE-DERIVED LIQUID FUEL

The applications for and issuance of Installation Permits that expressly permit the burning of Waste-Derived Liquid Fuel as provided by this Article shall also be governed by the applicable requirements and standards of this Part except as otherwise specified by this Section. In addition to the other requirements of this Part, an application for an Installation Permit under this Section shall include:

- a. A report of the results of the analysis of a representative sample of the fuel to be used in accordance with ~~Subsection 2107.12.a~~ **Part G** of this Article; and
- b. For equipment in which the owner or operator is requesting to burn waste-derived liquid fuel pursuant to paragraph a.4 of §2105.31 of this Article, a report of the results of a diffusion modeling analysis as required by Subparagraph b.6.C.ii. of §2105.31 of this Article.

PART C - OPERATING PERMITS

SUBPART 3 - ADDITIONAL REQUIREMENTS GENERALLY

§2103.30 WASTE-DERIVED LIQUID FUEL

- a. **Operating Permits.** The applications for and issuance of Operating Permits that expressly permit the burning of Waste-Derived Liquid Fuel as provided by this Article shall also be governed by the applicable requirements and standards of this Part except as otherwise specified by this Section.
- b. In addition to the other requirements of this Part, an application for an Operating Permit under this Section shall include:
 1. A report of the results of the analysis of a representative sample of the fuel collected and analyzed in accordance with ~~Subsection 2107.12.a~~ **Part G** of this Article; and
 2. A report of the results of the direct emission reduction test in accordance with ~~Subsection 2107.12.b~~ **Part G** of this Article.
- c. **Annual Operating Permit Application/Administration Fee and Additional Annual Fees.** On the date that an application for an Operating Permit is submitted under this Subpart, and on or before the last day of the month in which such application was submitted in each year thereafter, while such application is being reviewed and then during the term of any permit subsequently issued, the owner or operator of such source shall submit to the Department, in addition to all applicable emission fees, all applicable administration fees in amounts determined under, and in accordance with, the requirements of Subpart 4 of this Part.

PART D - POLLUTANT EMISSION STANDARDS

§2104.01 VISIBLE EMISSIONS

- d. **Measurements.** Measurements of visible emissions shall be performed according to the procedures established by §2107.11 **Part G** of this Article.

§2104.02 PARTICULATE MASS EMISSIONS

{effective February 1, 1994, as §2104.6; renumbered and amended effective October 20, 1995. 2104.02.a, e, g, and h amended effective August 15, 1997; Subsection f. amended March 13, 2008, effective April 15, 2008.}

- a. **Fuel-Burning or Combustion Equipment.** No person shall operate, or allow to be operated, any fuel-burning or combustion equipment, where the actual heat input to such equipment is greater than 0.50 million BTUs per hour, in such manner that emissions of particulate matter exceed the following rates at any time:

- h. No person shall operate, or allow to be operated, any of the Water Cooling Tower processes at the USX Corporation facility in Clairton, PA, unless the water used for such cooling is equivalent to, or better than, the water quality standards established for the Monongahela River by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. 691.1 et seq., except that water from the Monongahela River may be used for such cooling.

No person shall operate, or allow to be operated, the Keystone cooling tower at the USX Corporation facility at Clairton, PA unless there is installed a mist eliminator.

- i. **Measurements.** Measurements of particulate mass emissions shall be performed according to the applicable procedures established by §2107.02 **Part G** of this Article. **Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.**

§2104.03 SULFUR OXIDE EMISSIONS *{Subsections a, c & d modified July 10, 2003}*

- a. **Fuel-Burning or Combustion Equipment.** No person shall operate, or allow to be operated, any fuel-burning or combustion equipment in such manner that emissions of sulfur oxides, expressed as sulfur dioxide, exceed the following rates at any time:

- e. **Measurements.** Measurements of sulfur oxide emissions shall be performed according to the applicable procedures established by §2107.03 **Part G** of this Article.

§2104.04 ODOR EMISSIONS

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

- c. **Measurements.** Measurements of odor emissions shall be performed according to the procedures established by ~~§2107.13~~ **Part G** of this Article. Measurements of incinerator temperature shall be performed according to the procedures established by ~~§2107.06~~ **Part G** of this Article. Measurements pertaining to an equivalent emissions control system installed pursuant to Subsection b above shall be performed according to the applicable procedures established by Part G of this Article, or if no such procedures are applicable, pursuant to other procedures specified by the Department.

§2104.10 COMMERCIAL FUEL OIL *{Added by 11/28/2017 amendment., effective 12/8/2017, Subsections a and d amended July 16, 2020, effective July 26, 2020.}*

Fuel-burning or combustion equipment must conform with the following:

- a. **Commercial Fuel Oil.** Except as specified in Paragraphs 1 and 2, a person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in Allegheny County, if the commercial fuel oil contains sulfur in excess of the applicable maximum allowable sulfur content set forth in the following table:

- c. **Sampling and testing.**

1. For the purpose of determining compliance with the requirements of this section, the actual sulfur content of commercial fuel oil shall be determined by one of the following:
 - A. In accordance with the sample collection, test methods and procedures ~~specified under §2107.16, "Sulfur in Fuel Oil."~~ **established by Part G of this Article.**
 - B. Other methods developed or approved by the Department, PA DEP or the Administrator of the EPA.
1. A refinery owner or operator who produces commercial fuel oil intended for use or used in Allegheny County is required to sample, test and calculate the actual sulfur content of each batch of the commercial fuel oil as specified in Paragraph 1.
2. Prior to offering for sale, delivering for use, exchanging in trade or permitting the use of commercial fuel oil in Allegheny County, a person other than the ultimate consumer that accepts a shipment of commercial fuel oil from a refinery or other transferor, shall sample, test and calculate the actual sulfur content of the commercial fuel oil in accordance with Paragraph 1 if the shipment lacks the record required under Subsection d that enables the transferee to determine if the sulfur content of the shipment of commercial fuel oil meets the applicable maximum allowable sulfur content.

PART E - SOURCE EMISSION AND OPERATING STANDARDS

§2105.01 EQUIVALENT COMPLIANCE TECHNIQUES *{Subsections a, c & e modified July 10, 2003}*

Compliance with the requirements of this Part relating to sources of volatile organic compounds may be achieved by alternative methods provided:

- a. The alternative method is approved by the Department in an applicable installation permit or operating permit;

- f. The test methods and procedures used to monitor compliance with the requirements of this Section are either those ~~specified in~~ **established by** Part G of this Article or approved by the EPA.

SUBPART 1 - VOC SOURCES

§2105.10 SURFACE COATING PROCESSES *{modified July 10, 2003. Paragraphs a.1 & 2 added May 14, 2010 effective May 24, 2010. Paragraphs a.3 & 4 added May 29, 2013 effective June 8, 2013.}*

- a. **Applicability.** This section applies to a surface coating process category, regardless of the size of the facility, which emits or has emitted VOCs into the outdoor atmosphere in quantities greater than 3 pounds (1.4 kilograms) per hour, 15 pounds (7 kilograms) per day, or 2.7 tons (2,455 kilograms) per year during any calendar year since January 1, 1987.

- b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a surface coating process category listed in Table 2105.10, unless one of the following limitations is met:

1. The VOC content of each as applied coating is equal to or less than the standard specified in Table 2105.10.

- A. The VOC content of the as applied coating, expressed in units of weight of VOC per volume of coating solids, shall be calculated as follows:

- D. Sampling and testing shall be done in accordance with the procedures and test methods ~~specified in~~ **established by** Part G (Methods).

2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than the equivalent overall efficiency calculated by the following equation:

$$O = (1 - E/V) \times 100$$

§2105.11 GRAPHIC ARTS SYSTEMS *{Subsection f added May 29, 2013 effective June 8, 2013.}*

- a. This Section applies to sources whose rotogravure and flexographic printing presses in themselves, or in combination with any surface coating operations subject to the provisions of Section 2105.10 of this Article (relating to Surface Coating Processes), have a potential uncontrolled emission rate of 1000 pounds or more per day or 100 tons or more per year of volatile organic compounds, including emissions from solvents used for clean-up and purging. No person shall operate, or allow to be operated, any source to which this Section applies, unless one of the following emission limitations is met:

e. **Measurements.**

Measurements of the volatile fraction of inks and of volatile organic compound emissions shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

f. **Exempt Other.**

The owner or operator of a flexible package printing press subject to §2105.81, Control Of VOC Emissions From Flexible Package Printing, is no longer subject to all subparagraphs of §2105.11 Graphic Arts Systems, and shall be subject to all subparagraphs of §2105.81 as of January 1, 2012.

§2105.12 VOLATILE ORGANIC COMPOUND STORAGE TANKS

- b. **Capacity Greater Than 40,000 Gallons.** No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure greater than 1.5 psia under actual storage conditions in any stationary tank, reservoir, or other container with a capacity greater than 40,000 gallons, unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressure sufficient to at all times prevent vapor or gas loss to the atmosphere or is equipped with:

1. An external or internal floating roof, except that this control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 11.0 psia or greater under actual storage conditions; or
2. A vapor recovery and disposal system reducing uncontrolled emissions of volatile organic compounds by at least 90% by weight. Compliance testing shall be done in accordance with the provisions of ~~§2107.04~~ **Part G** of this Article.

This Subsection does not apply to petroleum liquid storage tanks used to store waxy, heavy-pour crude oil or to tanks having a capacity less than 420,000 gallons used to store produced crude oil and condensate prior to lease custody transfer.

§2105.13 GASOLINE LOADING FACILITIES

- a. **Handling.** No person shall handle, or allow to be handled, gasoline in any bulk gasoline terminal, bulk gasoline plant, or other source subject to this Section in such manner that it is spilled, discarded in sewers, stored in open containers, or otherwise handled so as to result in uncontrolled evaporation into the open air.
- b. **Transfers.** No person shall transfer, or allow the transfer of, gasoline between any tank truck or trailer and any stationary storage tank located in a bulk gasoline terminal or bulk gasoline plant, or any small gasoline storage tank to which Subsection e below applies, unless:
 1. A vapor balance system is in good working order and is designed and operated during the transfer in such manner that:
 - A. Gauge pressure does not exceed 18 inches of water and vacuum does not exceed six inches of water in the gasoline tank truck;
 - B. Readings do not equal or exceed 100 percent of the lower explosive limit (LEL, measured as propane) at one inch from all points on the perimeter of a potential leak source when measured by the method ~~referenced in §2107.04~~ **established by Part G** of this Article during transfer operations; and
 - C. There are no avoidable visible liquid leaks during trans operations;
 2. Any truck, vapor balance system, or vapor disposal system, where applicable, that exceeds the limits in Paragraph b.1 above is repaired and retested according to the method ~~referenced in §2107.04~~ **established by Part G** of this Article within 15 days;

- c. **Bulk Gasoline Terminals.** No person shall load, or allow to be loaded, gasoline from a bulk gasoline terminal into a vehicular tank unless:
 1. There is in operation on the gasoline loading racks a vapor collection and disposal system reducing uncontrolled emissions by at least 90% by weight or emitting no more than 0.0668 pounds of gasoline for every 100 gallons of gasoline loaded;
 2. There is in operation on the gasoline loading racks a loading arm with a vapor collection adaptor and pneumatic, hydraulic or other mechanical means to force a vapor-tight seal between the adaptor and the hatch of the vehicular tank. A means shall also be provided to prevent gasoline drainage from the loading device when it is not connected to the hatch, and to accomplish complete drainage before disconnection. When loading is done by means other than hatches, all loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which are closed when disconnected; and
 3. Any person who operates, or allows to be operated, a bulk gasoline terminal shall maintain records of daily throughput. Such records shall be retained for not less than two years and shall be made available for inspection and copying by the Department upon request.

Compliance testing shall be done according to the provisions of §2107.04 **Part G** of this Article.

f. **Gasoline Tank Trucks.** No person shall transfer, or allow the transfer of, gasoline into or from a gasoline tank truck subject to Subsections c, d, or e above unless such tank truck:

1. Has been tested within the prior 12-month period in accordance with the procedure ~~referenced in §2107.04~~ **established by Part G** of this Article;

§2105.18 DRY CLEANING FACILITIES

a. **Perchloroethylene Dry Cleaning Facilities.**

1. Emissions of perchloroethylene from any dry cleaning facility shall be vented through a properly functioning condenser or carbon adsorption system.
2. In addition, such dry cleaning facilities shall comply with the following:
 - A. Diatomaceous earth filters shall be cooked or otherwise treated so that the residue contains no more than 25 percent by weight of volatile organic compounds;
 - B. Wet waste material from all solvents stills shall be reduced to no more than 60 percent by weight of volatile organic compounds;
 - C. All filtration cartridges shall be drained in the filter housing for a minimum of 24 hours before being discarded; and
 - D. Any component, including hose connections, valves, machine door gaskets, pumps, storage containers, water separators, filter sludge recovery units, distillation units, cartridge filters, and lint depositories found to be leaking volatile organic compounds shall be replaced or repaired within 24 hours of discovery of the leak.
3. **Measurements.** Measurements relating to this Section shall be performed according to the applicable procedures established by ~~§2107.04~~ **Part G** of this Article.

b. **Petroleum Solvent Dry Cleaning Facilities.** This Subsection applies to all petroleum solvent dry cleaning facilities, as defined in §2101.20 of this Article, that consume 100 gallons or more of petroleum solvent on a daily basis.

5. Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning facility shall demonstrate compliance as follows:
 - A. For any dryer:
 - i. Calculate, record, and report to the Department the weight of VOCs vented from the dryer emission control device calculated by using the appropriate method ~~under §2107.04~~ **established by Part G** of this Article;

C. Where employing a petroleum solvent filtration system, but not employing cartridge filters:

i. Calculate, record, and report to the Department the weight of VOCs contained in each of at least five 3-pound samples of filtration waste material taken at intervals of at least one week by employing the appropriate method ~~under §2107.04~~ **established by Part G** of this Article;

ii. Calculate, record, and report to the Department the total dry weight of articles dry cleaned during the intervals between removal of filtration waste samples, as well as the total mass of filtration waste produced in the same period; and

iii. Calculate, record, and report to the Department the weight of VOCs contained in filtration waste material per 100 pounds dry weight of articles dry cleaned.

§2105.19 SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING - FUGITIVE SOURCES

a. This Section applies to sources with synthetic organic chemical and polymer manufacturing sources, other than equipment exempt under Subsection b below, having a design capacity to manufacture a total of 4,000 tons per year or more of any one or a combination of the following:

- c. Any person who operates, or allows to be operated, a source subject to this Section shall, as a condition to any Installation Permit for such source:
1. Install a second valve, blind flange, plug, cap, or other equivalent sealing system on all open ended lines, except those equipped with safety pressure relief valves; and
 2. Develop and initiate a leak detection and repair program for all pumps, valves, compressors, and safety pressure relief valves collectively referred to as components. The leak detection and repair program shall include, at a minimum, the following:
 - A. Attachment of an identification tag to or placement of any other permanent identification marking on each component. The identification shall be waterproof, be readily visible, and bear an identification number;
 - B. A leak check every three (3) months of all components and at any time of any component with a leak that is detected by sight, sound, or smell, by methods ~~referenced in §2107.04~~ **established by Part G** of this Article;

E. A leak check of each safety/relief valve within 24 hours after such valve has been vented to the atmosphere, by methods ~~referenced in §2107.04~~ **established by Part G** of this Article; and

SUBPART 2 - SLAG, COKE, AND MISCELLANEOUS SULFUR SOURCES

Editor's Note: the following section is the subject of another regulation revision which may affect the same or more language of the section.

§2105.21 COKE OVENS AND COKE OVEN GAS

{portions effective August 15, 1997, the remainder effective February 1, 1994; Paragraph e.6 added June 22, 1995, effective July 11, 1995 and amended May 14, 2010 effective May 24, 2010; §2105.21.b, e, and h amended effective August 15, 1997; Subsection f amended February 12, 2007 effective April 1, 2007. Subsection i added August 29, 2013, effective September 23, 2013. Paragraph e.6 amended November 13, 2014, effective January 1, 2015.}

- f. **Combustion Stacks.** No person shall operate, or allow to be operated, any battery of coke ovens in such manner that, at any time, emissions from the combustion stack serving such battery:
1. For any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was made on or after January 1, 1978, exceed a particulate concentration of 0.015 grains per dry standard cubic foot;
 2. For any battery other than those subject to Paragraph f.1 of this Section, exceed a particulate concentration of 0.030 grains per dry standard cubic foot;
 3. Equal or exceed an opacity of 20% for a period or periods aggregating in excess of three (3) minutes in any 60 minute period; or
 4. Equal or exceed an opacity of 60% at any time.

Measurements of opacity shall be performed according to the methods for visible emissions established by ~~§2107.11~~ **Part G** of this Article.

- g. **Quenching.** No person shall quench, or allow the quenching of, coke unless the emissions from such quenching are vented through a baffled quench tower and the water used for such quenching is equivalent to, or better than, the water quality standards established for the nearest stream or river by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, PL. 1987, as amended, 35 P.S. 691.1 et seq., except that water from the nearest stream or river may be used for the quenching of coke. The nearest stream or river to the USX Corporation facility in Clairton, PA, shall be the Monongahela River. **Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.**

§2105.22 MISCELLANEOUS SULFUR-EMITTING PROCESSES

- a. **Silicon Carbide Manufacturing.** No person shall operate, or allow to be operated, any silicon carbide manufacturing process unless there is in operation on such process air pollution control equipment which reduces uncontrolled emissions of sulfur oxides, expressed as sulfur dioxide, by at least:
1. Eighty-five percent (85%), if such process uses coke with a sulfur content of two percent (2%) by weight;
or

2. A control efficiency which achieves equivalent emissions per ton of product to Paragraph a.1 above, if such process uses coke with a sulfur content other than two percent (2%) by weight.
- b. **Measurements.** To determine compliance with Subsection a above, measurements of sulfur oxide emissions and measurements of the sulfur content of coke shall be performed according to the applicable procedures established by ~~§2107.03~~ **Part G** of this Article.

SUBPART 3 - INCINERATION AND COMBUSTION SOURCES

§2105.30 INCINERATORS

- g. **Measurements.** Measurements of afterburner temperatures, particulate emissions, and visible emissions shall be conducted according to the procedures set forth in established by Part G of this Article.

§2105.31 WASTE-DERIVED LIQUID FUEL

{Paragraphs b.7 & e.6 restored May 7, 1998, effective May 15, 1998}

- b. **General.** Except as provided for in Subsection c of this Section, no person shall burn or allow to be burned waste-derived liquid fuel in any fuel-burning or combustion equipment, process equipment, or incinerator, regardless of size or rated capacity and irrespective of exceptions listed in Parts B or C of this Article, unless:

5. A representative sample of the fuel being used, is taken and analyzed pursuant to ~~Subsection a of §2107.12 of this Article~~ **Chapter 14 of the Source Testing Manual**, and a written report of the results of the analysis is submitted to the Department as part of the application for any Installation Permit required by this Section, as part of the Operating Permit application, and every 12 months after approval of the initial Operating Permit; and
6. **Size of equipment.**
- A. For small equipment: The equipment has a direct emission reduction of at least 99.0 percent to be determined in accordance with ~~Subsection b of §2107.12 of this Article~~ **Chapter 14 of the Source Testing Manual**.
- B. For large equipment: The equipment has a direct emission reduction of at least 99.9 percent to be determined in accordance with ~~Subsection b of §2107.12 of this Article~~ **Chapter 14 of the Source Testing Manual**.
- C. For industrial boilers, utility boilers, or industrial furnaces or processes with a rated heat input of 5,000,000 BTU per hour or greater:
- i. The equipment complies with Subparagraph 6.B of this Subsection; OR
- ii. In order to invoke Paragraph 4 of Subsection a of this Section:
- (a) The equipment has a direct emission reduction of at least:
- (1) 99.9% to be determined in accordance with Subparagraphs ~~2.Aa~~ or ~~2.Bb~~ of Subsection ~~bB~~ of §2107.12 of this Article **Chapter 14 of the Source Testing Manual** OR

- (2) ~~99.5%~~ **99.95%** to be determined in accordance with Paragraph 1 of Subsection ~~bB~~ of §2107.12 of this Article **Chapter 14 of the Source Testing Manual**;

7. The analysis of the representative samples of waste-derived liquid fuel required by the Section shall be conducted using the methods specified in ~~Section 2107.12~~ **Chapter 14 of the Source Testing Manual**.

e. **Alternative Standards and Procedures.**

1. The Department may, on a case-by-case basis, approve an alternative standard or procedure to be followed by the owner or operator of specific waste-derived liquid fuel-burning equipment in lieu of a requirement of this Section, provided that:

6. The Department may, upon receiving a written request from the owner or operator setting forth all necessary information, approve in writing an analysis method other than those specified in ~~Section 2107.12~~ **Chapter 14 of the Source Testing Manual** if it finds that, under the circumstances:
- A. Such alternative analysis method is equivalent to or better than the method specified in ~~Section 2107.12~~ **Chapter 14 of the Source Testing Manual** in terms of reliability, availability, feasibility, and enforceability; and
- B. Such alternative analysis method is consistent with accepted testing practices for obtaining accurate results which are representative of the conditions evaluated.
- f. **Violations.** Failure to comply with any requirement of this Section shall be a violation of this Article giving rise to the remedies provided by §2109.02 of this Article.

§2105.32 HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS

{This section added by November 19, 1998 amendment, effective September 1, 1999}

- a. **Applicability.** Except as provided for by paragraphs (e)(1) and (e)(2), this section applies to all hospital/medical/infectious waste incinerators for which construction was commenced on or before June 20, 1996.

- f. **Emission Limitations.**

- 1. On and after the date on which compliance is required under paragraph g of this section, no owner or operator of a HMIWI facility shall discharge, or allow to be discharged, to the atmosphere from that HMIWI facility any gases that contain stack emissions in excess of the limits presented in Table 1 of this subsection:

TABLE 1 of §2105.32

- 2. On and after the date on which compliance is required under paragraph (g) of this section no owner or operator of a HMIWI facility shall discharge, or allow to be discharged, to the atmosphere from that HMIWI facility any gases that exhibit greater than 10 percent opacity(6-minute block average) as defined by ~~§2107.11 of this Article~~ **Chapter 13 of the Source Testing Manual.**

SUBPART 7 - MISCELLANEOUS VOC SOURCES

§2105.70 PETROLEUM REFINERIES

b. Fugitive Sources.

4. Any person operating, or allowing the operation of, a petroleum refinery shall conduct a monitoring program consistent with the following requirements:
 - A. Check yearly, by methods ~~referenced in~~ **established by** Part G of this Article, pump seals and pipeline valves in liquid service.
 - B. Check quarterly by methods ~~referenced in~~ **established by** Part G of this Article, compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service.
 - C. Check monthly, by visual methods, all pump seals.
 - D. Check within 24 hours, by methods ~~referenced in~~ **established by** Part G of this Article, pump seal from which VOC liquids are observed to be dripping.
 - E. Check, by methods ~~referenced in~~ **established by** Part G of this Article, relief valve within 24 hours after it has vented to the atmosphere.
 - F. Check within 24 hours after repair, by methods ~~referenced in~~ **established by** Part G of this Article, refinery component that was found leaking.

§2105.76 WOOD FURNITURE MANUFACTURING OPERATIONS *{effective July 10, 2003}*

- a. **General Provisions and Applicability.** This section applies to each wood furniture manufacturing facility located in the county that emits or has the potential to emit 25 tons or more per year of VOCs from wood furniture manufacturing operations.

d. **Compliance procedures and monitoring requirements.**

1. Compliance methods. An owner or operator of a facility subject to the emission standards in Subsection b shall demonstrate compliance with those provisions by using one or more of the following methods:

- A. To support that each sealer, topcoat and strippable spray booth coating meets the requirements of Paragraph b.1 of this section:

- iii. Perform sampling and testing in accordance with the procedures and test methods ~~in~~ **established by** Part G.

- B. To comply through the use of a control system as described in Paragraph b.3:

- iii. Determine the overall control efficiency of the control system using the procedures and test methods ~~in~~ **established by** Part G and demonstrate that the value of O calculated by the following equation is equal to or greater than the value of O calculated by the equation Subparagraph d.1.B.i above:

$$O = (F \times N) (100)$$

Where:

- F = the control device efficiency, expressed as a fraction
N = the capture device efficiency, expressed as a fraction

2. Initial compliance.

- C. Control systems. An owner or operator of a facility using a control system to comply with this section shall demonstrate initial compliance by submitting a report to the Department that:

- i. Identifies the operating parameter value to be monitored for the capture device and discusses why the parameter is appropriate for demonstrating ongoing compliance.
ii. Includes the results of the initial performance testing using the procedures and test methods ~~specified in~~ **established by** Part G.

- v. An owner or operator of a facility complying with this subparagraph shall

calculate the site-specific operating parameter value as the arithmetic average of the maximum or minimum operating parameter values, as appropriate, that demonstrate compliance with the standards, using the procedures ~~in~~ **established by** Part G.

g. **Special provisions for facilities using an emissions averaging approach.**

6. Quantification procedures. The emissions averaging program shall specify methods and procedures for quantifying emissions. Quantification procedures for VOC content are ~~included in~~ **established by** Part G (relating to sampling and testing). The quantification procedures shall also include methods to determine the usage of each coating and shall be accurate enough to ensure that the facility's actual emissions are less than the allowable emissions.

§2105.77 CONTROL OF VOC EMISSIONS FROM LARGE APPLIANCE AND METAL FURNITURE SURFACE COATING PROCESSES *{Added May 14, 2010, effective May 24, 2010.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a large appliance or metal furniture surface coating process unless one of the following limitations is met:

1. The VOC content of each as applied coating is equal to or less than the standard specified in Table 2105.77.

D. Sampling and testing shall be done in accordance with the procedures and test methods ~~specified in~~ **established by** Part G (Methods).

2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 90% as calculated by the following equation:

$$90\% = (1 - E/V) \times 100$$

Where:

V = The VOC content of the as applied coating, in lb VOC/gal of coating solids

E = The Table 2105.77 limit for large appliances and metal furniture surface coatings in lbs VOC per gallon of coating solids

3. A combination of the methods listed in paragraphs 1 and 2.

**§2105.78 CONTROL OF VOC EMISSIONS FROM FLAT WOOD PANELING
COATING PROCESSES** *{Added May 14, 2010, effective May 24, 2010.}*

b. Limitations. A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a flat wood paneling coating process, unless one of the following limitations is met:

1. The VOC content of each as applied coating is equal to or less than 2.9 lbs VOC per gallon of coating solids (0.35 kg VOC per liter of coating solids).

D. Sampling and testing shall be done in accordance with the procedures and test methods specified in **established by** Part G (Methods).

2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 90% as calculated by the following equation:

$$90\% = (1 - E/V) \times 100$$

Where:

V = The VOC content of the as applied coating, in lb VOC/gal of coating solids

E = Limit of 2.9 lbs VOC per gallon of coating solids (0.35 kg VOC per liter of coating solids)

3. A combination of the methods listed in paragraphs 1 and 2.

§2105.79 CONTROL OF VOC EMISSIONS FROM PAPER, FILM, AND FOIL SURFACE COATING PROCESSES *{Added May 14, 2010, effective May 24, 2010.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a paper, film, and foil surface coating process unless one of the following limitations is met:

1. The VOC content of each as applied coating is equal to or less than the standard specified in Table 2105.79.

D. Sampling and testing shall be done in accordance with the procedures and test methods specified in **established by** Part G (Methods).

2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures specified in **established by** Part G, shall be no less than 90% as calculated by the following equation:

$$90\% = (1 - E/V) \times 100$$

Where:

V = The VOC content of the as applied coating, in lb VOC/lb of coating solids

E = The Table 2105.79 limit for paper, film, and foil surface coating in lbs VOC per lbs of coating solids

3. A combination of the methods listed in paragraphs 1 and 2.

§2105.80 CONTROL OF VOC EMISSIONS FROM OFFSET LITHOGRAPHIC PRINTING AND LETTERPRESS PRINTING *{Added May 29, 2013, effective June 8, 2013.}*

a. **Applicability.** Beginning January 1, 2012, this section applies to the owner or operator of an offset lithographic printing and/or letterpress printing operation, where the total actual VOC emissions from all offset lithographic printing and letterpress printing operations, with two exceptions, including related cleaning activities, at that facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period. These exceptions include heatset web offset lithographic printing operations and heatset web letterpress printing operations, for which this section only applies to those presses with potential to emit from the dryer, prior to controls, of at least 25 tons (22,680 kilograms) of VOC (petroleum ink oil) from heatset inks per twelve month rolling period.

g. **Measurements.** Measurements of the volatile fraction of inks and fountain solution, and of volatile organic compound emissions shall be performed according to the applicable procedures established in § 2107.04 **by Part G** of this Article.

§2105.81 CONTROL OF VOC EMISSIONS FROM FLEXIBLE PACKAGE PRINTING

{Added May 29, 2013, effective June 8, 2013.}

- a. **Applicability.** Beginning January 1, 2012, this section applies to the owner or operator of a flexible packaging printing press, including rotogravure printing and flexographic printing, where the total actual VOC emissions from all flexible package printing press operations, including related cleaning activities, at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period.

1. The limits from §2105.11 Graphic Arts System no longer apply to flexible package printing presses, as of January 1, 2012.

- f. **Measurements.** Measurements of the volatile fraction of inks, and of volatile organic compound emissions shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

§2105.82 CONTROL OF VOC EMISSIONS FROM INDUSTRIAL SOLVENT CLEANING OPERATIONS

{Added May 29, 2013, effective June 8, 2013.}

- a. **Applicability.** Beginning January 1, 2012, this section applies to the owner or operator of a facility, where the total actual VOC emissions from all of the industrial solvent cleaning operations at that facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period. This regulation applies to any facility that employs solvent materials in industrial solvent cleaning operations during the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas, and stores and/or disposes of these solvent materials.

The provisions of this rule shall not apply to cleaning operations in the following source categories listed for regulation under Section 183(e) of the Clean Air Act:

1. Aerospace coatings;
2. Wood furniture coatings;
3. Shipbuilding and repair coatings;
4. Flexible package printing materials;
5. Lithographic printing materials;
6. Letterpress printing materials;
7. Flat wood paneling coatings;
8. Large appliance coatings;
9. Metal furniture coatings;
10. Paper, film, and foil coatings;
11. Plastic parts coatings;
12. Miscellaneous metal parts coatings;
13. Fiberglass boat manufacturing materials;
14. Miscellaneous industrial adhesives; or
15. Auto and light-duty truck assembly coatings.

- g. **Measurements.** Measurements of the volatile fraction of industrial solvent cleaners, and of volatile organic compound emissions shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

§2105.83 CONTROL OF VOC EMISSIONS FROM MISCELLANEOUS METAL AND/OR PLASTIC PARTS SURFACE COATING PROCESSES *{Added May 29, 2013, effective June 8, 2013.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a miscellaneous metal parts and/or plastic parts surface coating processes, unless one of the following limitations is met:

1. The VOC content of each applied coating is equal to or less than the standard specified in Table 2105.83.1.

C. Sampling and testing shall be done in accordance with the procedures and test methods specified in **established by** Part G (Methods).

2. The VOC content limitations based on low-VOC coatings as specified in Table 2105.83.2 of this rule, the use of add-on pollution control equipment to meet the VOC content limitations, and the use of an application method specified in Subsection e of this rule.

C. Sampling and testing shall be done in accordance with the procedures and test methods specified in **established by** Part G (Methods).

3. The overall weight of VOC emitted to the atmosphere is reduced through the use of an oxidizer, adsorber, absorber, concentrator, or another add-on control which is acceptable under § 2105.01 (Equivalent Compliance Techniques). The overall control system, as determined by the test methods and procedures specified in **established by** Part G, shall be no less than 90%.

i. **Measurements.** Measurements of the volatile fraction of coatings, other than reactive coatings, used at facilities operating miscellaneous metal parts and/or plastic parts surface coating processes shall be performed according to the applicable procedures established in §2107.04 **by Part G** of this Article.

§2105.84 CONTROL OF VOC EMISSIONS FROM AUTOMOBILE AND LIGHT-DUTY TRUCK ASSEMBLY COATINGS {Added May 29, 2013, effective June 8, 2013.}

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from an automobile and/or light-duty truck assembly coating operation, unless one of the following limitations is met:

1. The VOC content of each assembly coating process and applied material coating is equal to or less than the standard specified in Table 2105.84.

A. The VOC content, minus exempt compounds, of the applied coating, expressed in units of weight of VOC per volume of total nonexempt material, shall be calculated as follows:

$$\text{VOC} = \frac{W_s - W_w - W_{cs}}{V_m - V_w - V_{cs}}$$

Where:

VOC = VOC content, minus exempt compounds, in lb (g) VOC / gal (l) of materials, minus exempt compounds

W_s = Weight of all volatile material in pounds (g), including VOC, water, non-precursor organic compounds and dissolved vapors

W_w = Weight of water in pounds (g)

W_{cs} = Weight of all non-precursor compounds in pounds (g)

V_m = Volume of total material, as applied in gallons (l)

V_w = Volume of water in gallons (l)

V_{cs} = Volume of all non-precursor compounds in gallons (l)

2. The overall weight of VOC emitted to the atmosphere is reduced through the use of an oxidizer, adsorber, or another add-on control which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall control system, as determined by the test methods and procedures specified in established by Part G, shall be no less than 85%.

c. **Records.** A facility, regardless of the facility's annual emission rate, which contains an automobile and/or light-duty truck assembly coating operation, shall maintain records sufficient to demonstrate compliance with this section. At a minimum, a facility shall maintain daily records of:

f. **Measurements.** Measurements of the volatile fraction of coatings, other than reactive coatings, used at automobile and/or light-duty truck assembly coating facilities shall be performed according to the applicable procedures established in ~~§2107.04~~ by Part G of this Article.

§2105.85 CONTROL OF VOC EMISSIONS FROM MISCELLANEOUS INDUSTRIAL ADHESIVES *{Added May 29, 2013, effective June 8, 2013.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a miscellaneous industrial adhesive process, unless one of the following limitations is met:

1. The VOC content of each applied adhesive is equal to or less than the standard specified in Table 2105.85.

A. The VOC content, minus exempt compounds, of the applied adhesive, expressed in units of weight of VOC per volume of total nonexempt material, shall be calculated as follows:

$$\text{VOC} = \frac{W_s - W_w - W_{cs}}{V_m - V_w - V_{cs}}$$

Where:

VOC = VOC content, minus exempt compounds, in lb (g) VOC / gal (l) of materials, minus exempt compounds

W_s = Weight of all volatile material in pounds (g), including VOC, water, non-precursor organic compounds and dissolved vapors

W_w = Weight of water in pounds (g)

W_{cs} = Weight of all non-precursor compounds in pounds (g)

V_m = Volume of total material, as applied in gallons (l)

V_w = Volume of water in gallons (l)

V_{cs} = Volume of all non-precursor compounds in gallons (l)

B. The VOC content limits of subparagraph A may be met by averaging the VOC content of materials used on a single application unit for each day (i.e., daily within-application unit averaging).

2. The overall weight of VOC emitted to the atmosphere is reduced through the use of an oxidizer, adsorber, absorber or another add-on control which is acceptable under § 2105.01 (Equivalent Compliance Techniques). The overall control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 85%.

3. A combination of the methods listed in paragraphs 1 and 2.

i. **Measurements.** Measurements of the volatile fraction of adhesives, other than reactive adhesives, used at facilities operating miscellaneous industrial adhesive application processes shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

**§2105.86 CONTROL OF VOC EMISSIONS FROM FIBERGLASS BOAT
MANUFACTURING MATERIALS**

{Added May 29, 2013, effective June 8, 2013. Table 2105.86 added May 8, 2015, effective June 19, 2015.}

- a. **Applicability.** Beginning January 1, 2014, this section applies to the owner or operator of a fiberglass boat manufacturing facility, where the total actual VOC emissions from fiberglass boat manufacturing materials, including related cleaning activities, at that facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period, before controls. This regulation applies to facilities that manufacture hulls or decks of boats from fiberglass, or build molds to make fiberglass boat hulls or decks. This regulation does not apply to facilities that manufacture solely fiberglass parts of boats such as hatches, seats, lockers, or boat trailers.

- g. **Measurements.** Measurements of the volatile fraction of resin and gels, used at fiberglass boat manufacturing facilities shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

SUBPART 9 - TRANSPORTATION RELATED SOURCES

{Editor's Note: Another regulation revision is deleting Section 2105.90.}

§2105.90 GASOLINE VOLATILITY

{This section added by May 7, 1998 amendment, effective May 15, 1998; Paragraph e renumbered, paragraphs c & d renumbered and amended August 12, 1999, effective September 1, 1999; Paragraph b.3 added February 21, 2019, effective March 3, 2019}

- b. **Compliant Fuel Requirements.**

3. This Section will no longer be applicable upon the effective date of approval by the EPA of the removal, suspension or replacement of this Section as part of Allegheny County's portion of the Pennsylvania SIP.

- e. **Sampling and test methods.** Sampling and testing for the volatility of gasoline shall be performed according to the applicable procedures established ~~§2107.15~~ **by Part G of this Article.**

PART G - METHODS

§2107.01 GENERAL

{effective February 1, 1994; amended effective October 20, 1995. Amended Month/Date/Year; effective Month/Date/Year}

- a. The methods **and procedures** ~~specified in this Part shall be~~ used to determine compliance with the emission standards; **and** source standards ~~and ambient air quality standards~~ established by this Article, **shall be equivalent to those specified in the Allegheny County Source Testing Manual including future revisions as made under Subsection d below.** For purposes of determining compliance with NSPS's, NESHAP's, MACT's, and all other state and federal standards incorporated by reference into this Article, the methods **and procedures** specified in the applicable standard shall be used, or where no such methods **and/or procedures** are specified, methods **and/or procedures** approved by the Department shall be used.
- b. All sampling and analytical procedures promulgated by the Administrator under the Clean Air Act and by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act as set forth, or referenced, in 25 Pa. Code Chapter 139 Subchapter A, are hereby incorporated, by reference, as part of the methods **and procedures** ~~specified in~~ **established by** this Part. Additions, revisions, and deletions to such procedures adopted by the EPA and the DEP are incorporated into this Article and are effective on the date established by the Federal regulations, unless otherwise established by regulation under this Article.
- ~~c.~~ The Department may, upon written application setting forth all necessary information, approve in writing a method other than those specified by this Part if it finds that, for the particular source or air pollution control equipment involved, such method is equivalent to the methods specified by this Part and that such methods are consistent with accepted air pollution testing practices and with obtaining accurate results which are representative of the conditions evaluated.
- ~~cd.~~ The methods specified in this Part and approved under Subsection c of this Section shall be compiled in the Source Testing Manual of the Allegheny County Bureau of Environmental Quality Division of Air Quality. ~~Such~~ **The Allegheny County Source Testing Manual** shall be open to public inspection during business hours at the headquarters of the Division of Air Quality and at the Allegheny County Health Department Library **and available on the Department's Air Quality Program website**. In addition, any person shall, upon request and upon payment of the reasonable costs of furnishing such material, be furnished with copies of the Manual or parts thereof.
- d. Revisions to the Source Testing Manual. The Department shall follow the following procedures to update and revise the "Source Testing Manual:"**
 - 1. The Department will provide notice of proposed revisions to the Source Testing Manual by posting the public notice and the proposed revisions on the Department's Air Quality Program website for the duration of the public comment period. The notice will describe the proposed revisions. The Department will also provide notice using e-mail or regular U.S. postal service mailing to persons on a mailing list developed by the Department.**

2. The Department will provide an opportunity for comments on the proposed revisions. The comment period will be at least 30 days from the date of the posting of the notice required by Paragraph 1 above.
3. After the public comment period, the Department will evaluate the comments and finalize the changes to the Source Testing Manual.
4. The revisions to the Source Testing Manual shall be approved by the Director of the Allegheny County Health Department.
5. The Department will provide notice of the revisions to the Source Testing Manual on the Department's Air Quality Program website. The notice will describe the revisions and provide the name, address and telephone number of the person from whom a written copy of the revised manual can be obtained.
6. A person proposing a test method and/or procedure other than those specified by the Source Testing Manual shall submit a written application, subject to Department approval, setting forth all necessary information. Such methods and/or procedures shall be consistent with accepted air pollution testing practices and shall obtain accurate results which are representative of the condition evaluated.
7. A person proposing test methods, procedures and guidance for the reporting of emissions different from those contained in the Source Testing Manual shall have the burden of proof to demonstrate that test methods, procedures and guidance accurately characterize the emissions from the source.

§2107.02 to §2107.16 {RESERVED}

§2107.02 PARTICULATE MATTER *— [effective February 1, 1994; amended effective October 20, 1995]*

a. Test Methods:

1. Except as provided below in this Section, the following methods shall be used to determine particulate matter emissions from stationary sources, as specified in Chapters 1 through 5 inclusive of the Allegheny County Source Testing Manual:
 - A. Method 1 through 5F inclusive—"Determination of Particulate Emissions from Stationary Sources," United States Environmental Protection Agency, 40 CFR 60 Appendix A.
2. Determination of compliance with the pushing emission standard for coke ovens set forth in §2105.21 of this Article shall be performed as specified in Chapter 54 of the Allegheny County Source Testing Manual, entitled "Determination of Particulate Emissions for Coke Oven Pushing Sources."
3. Determination of compliance with particulate matter standards for sources equipped with pressurized baghouses shall be performed as specified in Chapter 45 of the Allegheny County Source Testing Manual, entitled "Determination of Particulate Matter from Pressurized Baggouses."

4. Determination of compliance with particulate matter standards for sources equipped with modular baghouses shall be performed as specified in Chapter 47 of the Allegheny County Source Testing Manual, entitled "Determination of Particulate Matter from Modular Baghouses."
5. The following methods shall be used to determine PM-10 emissions from stationary sources, as specified in Chapter 201 of the Allegheny County Source Testing Manual:
 - A. Method 201—"Determination of PM-10 Emissions (Exhaust Gas Recycle Procedure)," United States Environmental Protection Agency, 40 CFR 51 Appendix M; or
 - B. Method 201A—"Determination of PM-10 Emissions (Constant Sampling Rate Procedure)," United States Environmental Protection Agency, 40 CFR 51 Appendix M.
6. The following method shall be used to determine condensible particulate emissions from stationary sources, as specified in Chapter 202 of the Allegheny County Source Testing Manual:
 - A. Method 202—"Determination of Condensible Particulate Emissions from Stationary Sources," United States Environmental Protection Agency, 40 CFR 51 Appendix M.
7. Determination of compliance with PM-10 standards for fugitive emissions from sources located within a structure shall be performed as specified in Chapter 53 of the Allegheny County Source Testing Manual, entitled "Determination of Inhalable Fugitive Particulate Emissions from Air Pollution Sources Within a Structure."
- b. Calibration. Calibration of test instruments shall be performed as specified in Chapter 50 of the Allegheny County Source Testing Manual relating to Calibration and Maintenance.

§2107.03 SULFUR OXIDES

The following methods shall be used to determine sulfur oxide emissions from stationary sources, as specified in Chapters 6 and 8 of the Allegheny County Source Testing Manual:

- a. Methods 6 through 6C—"Determination of Sulfur Dioxide Emissions from Stationary Sources," and
- b. Method 8—"Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources," United States Environmental Protection Agency, 40 CFR 60 Appendix A.

§2107.04 VOLATILE ORGANIC COMPOUNDS

- a. **General.** The following method shall be used to determine volatile organic compound emissions from stationary sources, as specified in Chapter 25 of the Allegheny County Source Testing Manual:
 1. Method 25—Determination of Total Gaseous Non-Methane Organic Emissions as Carbon, "Standards for Performance for New Stationary Sources; Addition of Reference Methods 24 and 25 to Appendix A," *Federal Register*, Part VII, Volume 45, Number 194, Pages 65956–65973, October 3, 1980, Washington, D.C.
 2. Method 25A—Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, U.S. EPA Appendix A—Reference Methods (as amended at *Fed. Reg.*, V. 55, No. 220, Pg. 47471, Nov. 14, 1990, Washington, D.C.), 40 CFR Chapter I Part 60 Appendix A Method 25A, Washington, D.C., "Measurement of Volatile Organic Compounds—Guideline Series," U.S. EPA, Research Triangle Park, NC, Publ. No. EPA-450/2-78-041, June, 1978, pp. 46-54.

3. Method 25B—Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer, U.S. EPA Appendix A—Reference Methods (as amended at Fed. Reg., V. 55, No. 220, Pg. 47471, Nov. 14, 1990, Washington, D.C.), 40 CFR Chapter I Part 60 Appendix A Method 25B, Washington, D.C., "Measurement of Volatile Organic Compounds—Guideline Series," U.S. EPA, Research Triangle Park, NC, Publ. No. EPA-450/2-78-041, June, 1978, pp. 46-54.
- b. **Gasoline Vapor Recovery Systems.** The following methods shall be used to determine volatile organic compound emissions from vapor recovery systems for gasoline loading operations:
 1. Emission Test Procedures for Tank Truck Gasoline Loading Terminals (Appendix A), "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals", EPA-450/2-77-026, United States Environmental Protection Agency, October, 1977, as specified in Chapter 55 of the Allegheny County Source Testing Manual, entitled "Determination of Volatile Organic Compound Emissions from Vapor Recovery Systems for Gasoline Loading Operations."
 2. "Sampling and Testing Procedure for Gasoline Facilities", Allegheny County Source Testing Manual, Chapters 25 and 27.
- c. **Surface Coatings.** The following methods shall be used to determine the volatile organic compound content, water content, and density of surface coatings and inks, as specified in Chapter 24 of the Allegheny County Source Testing Manual:
 1. Method 24—Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, "Standards for Performance for New Stationary Sources; Addition of Reference Methods 24 and 25 to Appendix A," Federal Register, Part VII, Volume 45, Number 194, Pages 65956—65973, October 3, 1980, Washington, D.C.
- d. **Effluent Water.** The following method shall be used to determine the volatile organic compound content of effluent water:
 1. Standard Methods for the Examination of Water and Wastewater, 14th Edition, "Organic Carbon (total), Combustion—Infrared Method", American Public Health Association, Washington, D.C., as specified in Chapter 46 of the Allegheny County Source Testing Manual, entitled "Determination of Volatile Organic Compound Content of Effluent H₂O."
- e. **Control System Effectiveness.** The following methods shall be used to determine the effectiveness of vapor recovery systems and similar control equipment for volatile organic compound emissions:
 1. "Sampling and Testing Procedure for Gasoline Facilities", Allegheny County Source Testing Manual, Chapter 25.
- f. **Tank Trucks.** The following method shall be used to determine the leak tightness of gasoline tank trucks and vapor recovery systems pursuant to §2105.13 of this Article:
 1. Pressure—Vacuum Test Procedures for Leak Tightness of Truck Tanks (Appendix A), "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", EPA-450/2-78-051, U.S. Environmental Protection Agency, December, 1978, as specified in Chapter 56 of the Allegheny County Source Testing Manual, entitled "Determination of the Leak Tightness of Gasoline Tank Trucks and Vapor Recovery Systems".
- g. **Tank Trucks and Vapor Collection Systems.** The following method shall be used to determine the magnitude of leaks of volatile organic compounds from gasoline tank trucks and vapor collection systems and shall be used in the annual tests required of gasoline tank trucks:

- 1. Gasoline Vapor Leak Detection Procedure by Combustible Gas Detector (Appendix B), "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", EPA 450/2-78-051, U.S. Environmental Protection Agency, December, 1978, as specified in Chapter 57 of the Allegheny County Source Testing Manual, entitled "Determination of the Magnitude of Leaks of Volatile Organic Compounds from Gasoline Tank Trucks and Vapor Recovery Systems".
- h. **Perchloroethylene Dry Cleaning Facilities.** The following method shall be used to determine compliance with the requirements of §2105.18 of this Article, relating to perchloroethylene dry cleaning facilities:
 - 1. Appendix B, "Compliance Test Method and Leak Detection Equipment for Perchloroethylene Dry Cleaners", Measurement of Volatile Organic Compounds, U.S. Environmental Protection Agency, EPA 450/2-78-041, Washington, D.C., as specified in Chapter 58 of the Allegheny County Source Testing Manual, entitled "Determination of Compliance of Perchloroethylene Dry Cleaning Facilities".
- i. **Synthetic Organic Chemical and Polymer Manufacturing and Petroleum Refinery Equipment.** The following method shall be used to determine the magnitude of volatile organic compound leaks from synthetic organic chemical and polymer manufacturing and petroleum refinery equipment, as specified in Chapter 21 of the Allegheny County Source Testing Manual:
 - 1. Method 21—Determination of Volatile Organic Compounds Leaks, 40 C.F.R. Part 60, Appendix A, 48 FR 37600, August 18, 1983, Washington, D.C.
- j. **Petroleum Solvent Dry Cleaning Facilities.**
 - 1. Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning dryer shall calculate the weight of VOCs vented from the dryer emission control device by using EPA Reference Test (40 CFR Part 60) Methods 1, 2, and 25A as specified in Chapters 1, 2, and 25 of the Allegheny County Source Testing Manual.
 - 2. Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning facility demonstrating compliance, where employing a petroleum solvent filtration system but not employing cartridge filters, shall calculate, record, and report to the Department the weight of VOCs contained in each of at least five 3-pound samples of filtration waste material taken at intervals of at least one week by employing ASTM Method D322-80 (Standard Test Method for Gasoline Diluent in used Gasoline Engine Oils by Distillation), as specified in Chapter 59 of the Allegheny County Source Testing Manual, entitled "Determination of Compliance of Petroleum Solvent Dry Cleaning Facilities Employing a Petroleum Solvent Filtration System But Not Employing Cartridge Filters".

§2107.05 NITROGEN OXIDES

The following method shall be used to determine nitrogen oxide emissions from stationary sources, as specified in Chapter 7 of the Allegheny County Source Testing Manual:

- a. Methods 7, 7A, 7C, 7D, & 7E "Determination of Nitrogen Oxide Emissions from Stationary Sources", United States Environmental Protection Agency, 40 CFR 60 Appendix A.

§2107.06 INCINERATOR TEMPERATURES

Measurement of incinerator temperatures shall be performed as specified in Chapter 40 of the Allegheny County Source Testing Manual, entitled "Determination of Incineration Temperatures".

~~§2107.07 COKE OVEN EMISSIONS~~

Unless otherwise specified in the applicable regulation, measurements of emissions from coke ovens and coke oven batteries shall be performed as specified in Chapter 109 of the Allegheny County Source Testing Manual, entitled "Determination of Emissions from Coke Ovens". Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.

~~§2107.08 COKE OVEN GAS~~

Measurements of the hydrogen sulfide concentration of coke oven gas shall be performed as specified in Chapter 44 of the Allegheny County Source Testing Manual, entitled "Determination of Hydrogen Sulfide from Coke Oven Gas".

~~§2107.09 HYDROGEN SULFIDE~~

The following method shall be used to determine hydrogen sulfide emissions from stationary sources, as specified in Chapter 15 of the Allegheny County Source Testing Manual:

Method 15—"Determination of Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide Emissions from Stationary Sources", United States Environmental Protection Agency, 40 CFR 60 Appendix A.

~~§2107.10 SULFUR CONTENT OF COKE~~

The following method shall be used to determine the sulfur content of coke, as specified in Chapter 49 of the Allegheny County Source Testing Manual:

"Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke", American Society for Testing Materials, D 3177, 1916 Race Street, Philadelphia, PA.

~~§2107.11 VISIBLE EMISSIONS~~ *{Amended February 12, 2007, effective April 1, 2007.}*

Measurements of visible emissions shall be performed in either of the following two ways:

- ~~a. As specified in Chapter 9 of the Allegheny County Source Testing Manual, entitled "Visible Determination of the Opacity of Emissions from Stationary Sources;" or~~
- ~~b. Using any continuous opacity monitoring system (COMS) required by regulation, permit, consent agreement, consent decree, or enforcement order.~~

~~§2107.12 WASTE-DERIVED LIQUID FUEL~~

~~Sampling and analysis and equipment testing to determine compliance with the waste-derived liquid fuel burning regulations under this Article shall be performed as specified in Chapter 52 of the Allegheny County Source Testing Manual.~~

~~§2107.13 ODOR EMISSIONS~~

~~Measurements of odor emissions beyond source boundary lines shall be performed as specified in Chapter 48 of the Allegheny County Source Testing Manual, entitled "Measurement of Odor Emissions Beyond Source Boundary Lines".~~

~~§2107.14 LEAD~~

- ~~a. The following methods shall be used to determine the lead content of paint, as specified in the Allegheny County Source Testing Manual:~~
- ~~1. "Field Sampling of Coating Films for Laboratory Analysis of Toxic Metal Content (KTA/SET Method LD2)", Steel Structures Painting Council Publ. No. 94-18.~~
 - ~~2. ASTM E 1645, Practice for the Preparation of Dried Paint Samples for Subsequent Analysis by Atomic Spectrometry.~~
 - ~~3. ASTM D 3335, Standard Test Method for Low Concentrations of Lead, Cadmium, and Cobalt in Paint by Atomic Absorption Spectroscopy.~~
 - ~~4. EPA Method 6010, Inductively Coupled Plasma Atomic Emission Spectroscopy.~~
 - ~~5. ASTM E 1613, Standard Method for the Analysis of Digested Samples for Lead by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES), Flame Atomic Absorption (FAAS), or Graphite Furnace.~~

~~§2107.15 GASOLINE VOLATILITY and RFG~~

~~(This section added by May 7, 1998 amendment, effective May 15, 1998; Subsection e added February 21, 2019, effective March 3, 2019)~~

- ~~a. **Volatility.** Any sampling or testing of gasoline required by Section 2105.90 shall be performed according to the following methods as specified in Chapter 61 of the Allegheny County Source Testing Manual:~~
- ~~1. Sampling of gasoline for the purpose of determining compliance with §2105.90 shall be conducted in accordance with 40 CFR Part 80, Appendix D (relating to sampling procedures for fuel volatility).~~
 - ~~2. Testing of gasoline for purposes of determining compliance with §2105.90 shall be conducted in accordance with 40 CFR Part 80, Appendix E (relating to test for determining the RVP of gasoline and gasoline-oxygenate blend).~~
- ~~b. **RFG.** RFG shall be certified and tested in accordance with the requirements listed in 40 CFR Part 80 Subpart D (relating to reformulated gasoline) as specified in Chapter 61 of the Allegheny County Source Testing Manual.~~
- ~~c. This Section will no longer be applicable upon the effective date of approval by the EPA of the removal, suspension or replacement of this Section as part of Allegheny County's portion of the Pennsylvania SIP.~~

§2107.16 SULFUR IN FUEL OIL

~~{Added by 11/28/2017 amendment, effective 12/8/2017}~~

The following apply to tests for the analysis of commercial fuel oil:

- a. ~~The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in:
 1. ~~ASTM D 4057, Practice for Manual Sampling of Petroleum and Petroleum Products, including updates and revisions; or~~
 2. ~~ASTM D 4177, Practice for Automatic Sampling of Petroleum and Petroleum Products, including updates and revisions.~~~~
- b. ~~Test methods and procedures for the determination of viscosity and sulfur shall be those specified in ASTM D 396, Standard Specification for Fuel Oils, including updates and revisions. The viscosity shall be determined at 100°F.~~
- c. ~~Results shall be reported in accordance with the units specified in §2104.10, Commercial Fuel Oil.~~

§2107.20 AMBIENT MEASUREMENTS

The following methods shall be used to determine concentrations in the ambient air of the air contaminants listed below:

- a. ~~{RESERVED}Asbestos~~ — The "aggressive sampling" procedures and the procedures for the measuring of fiber content of a known volume of air collected during a specific period of time in accordance with either, in the sole discretion of the Department:
 1. ~~NIOSH Standard Analytical Method for Asbestos in Air - P&CAM 239;~~
 2. ~~EPA Method 7400; or~~
 3. ~~Transmission Electron Microscopy (TEM).~~
- b. **Beryllium** - "Air Pollution Measurements of the National Air Sampling Network: Analysis of Suspended Particulates in 1957 - 1961", Public Health Service Pub. No. 978, Washington, D.C., 1962.
- c. **Carbon Monoxide** - "Measurement Principle and Calibration Procedure for the Continuous Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Spectrometry)", United States Environmental Protection Agency pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- d. **Fluorides** - "Standard Method of Test for Inorganic Fluoride in the Atmosphere", ASTM Standards on Methods of Atmospheric Sampling and Analysis, Philadelphia, PA 1962, p.67.
- e. **Hydrocarbons** - "Reference Method for Determination of Hydrocarbons Corrected for Methane", United States Environmental Protection Agency, 40 CFR 50 Appendix E, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- f. **Hydrogen Sulfide** - Jacobs, M.D., et al., "Ultramicrodetermination of Sulfides in the Air", Anal. Chem., 29:1349 (1957).

- g. **Lead** - "Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air", United States Environmental Protection Agency, 40 CFR 50 Appendix G, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- h. **Nitrogen Oxides** - "Measurement Principle and Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas Phase Chemiluminescence)", United States Environmental Protection Agency, 40 CFR 50, Appendix F, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- i. **Ozone** - "Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere", United States Environmental Protection Agency, 40 CFR 50 Appendix D, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- j. **PM-10** - "Reference Method for the Determination of Particulate Matter as PM-10 in the Atmosphere," United States Environmental Protection Agency, 40 CFR 50, Appendix J, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods," 40 CFR 53.
- k. **Settled Particulates** - "Recommended Standard Method for Continuing Dust Fall Survey (APM- 1 Revision 1)," TR-2 Air Pollution Measurements Committee, J. Air. Poll. Control Assoc., 16:372 (1966).
- l. **Sulfates:**
 - 1. Sampling Method - "Air Pollution Measurements of the National Air Sampling Network: Analysis of Suspended Particulates 1957 - 1961", Public Health Service Pub. 978, Washington, D.C. 1962.
 - 2. Analytical Method - Interbranch Chemical Advisory Committee, "Selected Methods for the Measurement of Air Pollutants", PHS Pub. No. 999-AP-11, Cincinnati, Ohio, 1965, p.I.I.
- m. **Sulfur Oxides** - "Reference Method for the Determination of Suspended Particulates in the Atmosphere (Pararosaniline Method)", United States Environmental Protection Agency, 40 CFR 50 Appendix A, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- n. **Suspended Particulate Matter** - "Reference Method for the Determination of Suspended Particulates in the Atmosphere (High Volume Method)", United States Environmental Protection Agency, 40 CFR 50, Appendix B, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Method", 40 CFR 53.

PART H - REPORTING, TESTING, & MONITORING

§2108.02 EMISSIONS TESTING

{Subsection g added September 6, 1995, effective October 20, 1995}

- a. **New and Modified Sources.** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the person responsible for any new, modified, reconstructed or reactivated source for which a permit is required by Part B of this Article shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with all applicable requirements of this Article and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup, but shall not extend the time beyond 60 days after achieving full production. Additional tests shall be conducted at such intervals as are specified in any applicable permit condition, order, or as required by any other Section of this Article. Emissions testing conducted pursuant to this Subsection shall comply with all applicable requirements of Subsection e below.
- b. **Existing Sources.** On or before December 31, 1981, and at two-year intervals thereafter, any person who operates, or allows to be operated, any piece of equipment or process which has an allowable emission rate, as defined in §2101.20 of this Article, of 100 or more tons per year of particulate matter, sulfur oxides or volatile organic compounds shall conduct, or cause to be conducted, for such equipment or process such emissions tests as are necessary to demonstrate compliance with the applicable emission limitation(s) of this Article and shall submit the results of such tests to the Department in writing. Emissions testing conducted pursuant to this Subsection shall comply with all applicable requirements of Subsection e below.
- c. **Orders.** In addition to meeting the requirements of Subsections a and b above, the person responsible for any source shall, upon order by the Department, conduct, or cause to be conducted, such emissions tests as specified by the Department within such reasonable time as is specified by the Department. Test results shall be submitted in writing to the Department within 20 days after completion of the tests, unless a different period is specified in the Department's order. Emissions testing conducted pursuant to this Subsection shall comply with all applicable requirements of Subsection e below.
- d. **Tests by the Department.** Notwithstanding any tests conducted pursuant to Subsection a through c above, inclusive, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the person responsible for such source or equipment shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- e. **Testing Requirements.**
 1. No later than 45 days prior to conducting any tests required by this Section, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this Article.

2. Test methods and procedures shall conform to the applicable reference method **and/or procedure** ~~set forth in~~ **established by** Part G of this Article, or where those methods **and/or procedures** are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with the following:

A. **General.** All tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions as are specified by the Department. Test results shall include sufficient information to verify the conditions existing at the time of the test and the manner in which the test was conducted, including at a minimum:

- i. A thorough description of the source, any air pollution control equipment and the flue;
- ii. Source operating conditions during the test, such as the charging rate of raw materials, production rate, combustion rate, boiler pressure, oven temperature, or any other conditions which may affect emissions;
- iii. The location of the sampling ports;
- iv. Emission characteristics, including velocity, temperature, moisture content, density, and gas composition (expressed as percent CO, CO₂, N₂ and the like) and static and barometric pressures at pertinent points in the system;
- v. Sample collection techniques used, including procedures, equipment descriptions, data to verify that isokinetic sampling techniques were used where applicable, and data to verify that test conditions are acceptable under this Article;
- vi. Laboratory procedures and results; and,
- vii. Calculated results.

B. **Fugitive Particulate Matter.** Test methods and procedures for fugitive particulate matter may include ambient test procedures approved by the Department which are in accordance with, or equivalent to, the test procedures ~~set forth in~~ **established by** Part G of this Article.

C. **Other Air Contaminants.** Test methods and procedures for air contaminants other than those for which a test method **and/or a test procedure** is ~~specified in~~ **established by** Part G of this Article shall be consistent with accepted air pollution testing practices and with obtaining accurate results which are representative of the conditions evaluated. Such methods and procedures shall be clearly described in the report of test results.

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

- g. Except as specifically otherwise provided under this Article, regulations promulgated by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act as set forth, or referenced, in 25 Pa. Code Chapter 139 Subchapters B & C, are hereby incorporated, by reference, as part of this Article. Additions, revisions, and deletions to such regulations adopted by the DEP are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.

End of Regulation Changes

SECTIONS OF THIS ARTICLE XXI AMENDMENT TO BE SUBMITTED AS A SIP CHANGE
Changes to the following sections will be submitted to the U.S. EPA as changes to the Allegheny County Portion of the Pennsylvania State Implementation Plan

- §2101.20 Definitions
- §2104.01.d, Visible Emissions – Measurements
- §2104.02.i, Particulate Mass Emissions – Measurements
- §2104.03.e, Sulfur Oxide Emissions- Measurements
- §2104.10.c.1.A, Commercial Fuel Oil – Sampling and testing
- §2105.01.f, Equivalent Compliance Techniques
- §2105.10.b.1 & 2, Surface Coating Processes – Limitations
- §2105.11.e, Graphic Arts Systems – Measurements
- §2105.12.b.2, Volatile Organic Compound Storage Tanks – Capacity Greater than 40,000 Gallons
- §2105.13.b, c & f, Gasoline Loading Facilities
- §2105.19.c, Synthetic Organic Chemical and Polymer Manufacturing - Fugitive Sources
- §2105.21.f & g, Coke Ovens and Coke Oven Gas
- §2105.22.b, Miscellaneous Sulfur-Emitting Processes – Measurements
- §2105.30.g, Incinerators – Measurements
- §2105.70.b, Petroleum Refineries – Fugitive Sources
- §2105.76.d & g, Wood Furniture Manufacturing Operations
- §2105.77.b, Control of VOC Emissions from Large Appliance and Metal Furniture Surface Coating Processes - Limitations
- §2105.78.b Control of VOC Emissions from Flat Wood Paneling Coating Processes – Limitations
- §2105.79.b, Control of VOC Emissions from Paper, Film, And Foil Surface Coating Processes - Limitations
- §2105.80.g, Control of VOC Emissions from Offset Lithographic Printing and Letterpress Printing – Measurements
- §2105.81.f, Control of VOC Emissions from Flexible Package Printing – Measurements
- §2105.82.g, Control of VOC Emissions from Industrial Solvent Cleaning Operations – Measurements
- §2105.83.b & i, Control of VOC Emissions from Miscellaneous Metal and/or Plastic Parts Surface Coating Processes – Limitations & Measurements
- §2105.84.b and f, Control of VOC Emissions from Automobile and Light-Duty Truck Assembly Coatings – Limitations & Measurements
- §2105.85.b and i, Control of VOC Emissions from Miscellaneous Industrial Adhesives – Limitations & Measurements
- §2105.86.g, Control of VOC Emissions from Fiberglass Boat Manufacturing Materials - Measurements
- §2107.01 General
- §2107.02 Particulate Matter
- §2107.03 Sulfur Oxides
- §2107.04 Volatile Organic Compounds (Except “h” Perchloroethylene Dry Cleaning Facilities)
- §2107.05 Nitrogen Oxides
- §2107.06 Incinerator Temperatures
- §2107.07 Coke Oven Emissions
- §2107.08 Coke Oven Gas
- §2107.10 Sulfur Content of Coke
- §2107.11 Visible Emissions
- §2107.16 Sulfur in Fuel Oil
- §2108.02.e, Emissions Testing – Testing Requirements

SECTIONS OF THIS ARTICLE XXI AMENDMENT NOT TO BE SUBMITTED AS A SIP CHANGE

Changes to the following sections will NOT be submitted to the U.S. EPA as changes to the Allegheny County Portion of the Pennsylvania State Implementation Plan

- §2102.09.A Waste-Derived Liquid Fuel
- §2103.30.B Waste-Derived Liquid Fuel
- §2104.04.C, Odor Emissions – Measurements
- §2105.18 Dry Cleaning Facilities
- §2105.31 Waste-Derived Liquid Fuel
- §2105.32, Hospital/Medical/Infectious Waste Incinerators
- §2105.90 Gasoline Volatility
- §2107.04.h, Volatile Organic Compounds – Perchloroethylene Dry Cleaning Facilities
- §2107.09 Hydrogen Sulfide
- §2107.12 Waste-Derived Liquid Fuel
- §2107.13 Odor Emissions
- §2107.14 Lead
- §2107.15 Gasoline Volatility and RFG
- §2107.20.a, Ambient Measurements - Asbestos