

For
Public Comment from May 13th, 2024 until June 13th, 2024.
Public Hearing on June 13th, 2024.

Proposed Revision

to

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

§2105.10, Surface Coating Processes;

§2105.18.b, Dry Cleaning Facilities –Petroleum Solvent Dry Cleaning Facilities;

**§2105.19A, Synthetic Organic Chemical Manufacturing Industry – Air Oxidation,
Distillation and Reactor Processes; and**

§2101.20, Definitions

and

ALLEGHENY COUNTY’S portion of the
PENNSYLVANIA STATE IMPLEMENTATION PLAN

For the
Attainment and Maintenance of the
National Ambient Air Quality Standards

Revision Tracking No. 103

{Document Date: 4/15/2024}

Table of Contents

1. Proposed Revision

Changes to Article XXI Rules and Regulations:

§2101.20, Definitions

§2105.10, Surface Coating Processes

§2105.18.b, Dry Cleaning Facilities –Petroleum Solvent Dry Cleaning Facilities

§2105.19A, Synthetic Organic Chemical Manufacturing Industry – Air Oxidation, Distillation and Reactor Processes

2. Technical Support Document

A. General

B. 53 Pa.B. 465, provided in this SIP submittal for information/reference only to provide the text of 25 Pa. Code §§129.52, 129.63b and 129.71a and related definitions at 25 Pa. Code §121.1 all of which are being incorporated into Article XXI either verbatim or by reference.

3. Documentation of Public Hearing and Certifications (all “LATER”)

- a. Public hearing notice
- b. Transmittals of hearing notice to EPA & PA DEP
- c. Proof of publication of notice of hearing
- d. Certification of hearing
- e. Summary of comments and responses
- f. Certification of approval and adoption

1. Proposed Revision

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

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.

"Confined space" means a space that is the following: *{effective July 10, 2003}*

- a. Large enough and so configured that an employee can enter and perform assigned work;
- b. Has limited or restricted means for entry or exit--for example, fuel tanks, fuel vessels, and other spaces that have limited means of entry; and
- c. Not suitable for continuous employee occupancy.

"Consume" means the amount of petroleum solvent purchased less the amount of petroleum solvent sent for disposal or returned for recycling during a calendar year. *{Added by mm/dd/2024 amendment, effective mm/dd/2024.}*

"Container of coating" means the bucket, pot, can or other holder from which the coating is applied. *{Added by mm/dd/2024 amendment, effective mm/dd/2024.}*

"Containers and conveyors of solvent" means piping, ductwork, pumps, storage tanks, and other ancillary equipment that are associated with the installation and operation of **petroleum dry cleaning** washers, dryers, filters, stills, and settling tanks. *{Amended mm/dd/2024, effective mm/dd/2024.}*

"Drum" means any cylindrical metal shipping container which has a capacity between 12 and 110 gallons (45.4 and 416.4 liters).

"Dry cleaning" means a process for the cleaning of textiles and fabric products in which articles are washed in a nonaqueous solution (solvent) and then dried by exposure to a heated air stream. *{Added by mm/dd/2024 amendment, effective mm/dd/2024.}*

"Dry cleaning facility" means a facility engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means of one or more washes in solvent, extraction of excess solvent by spinning, and drying by tumbling in an airstream. The facility includes, but is not limited to, any washer, dryer, filter, and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

"High-silica abrasive" means an abrasive which contains equal to or greater than five percent (5%), by weight, of free silica (silicon dioxide, SiO₂).

"High temperature coating" means **for purposes of §2105.74**, an aerospace vehicle or component coating designed to withstand temperatures of more than 350°F. *{Effective July 10, 2003. Amended mm/dd/2024, effective mm/dd/2024.}*

"HMIWI" or "HMIWI unit" means hospital/medical/infectious waste incinerator. *{added by November 19, 1998 amendment, effective September 1, 1999}*

"Nontraditional source" means a source of air contaminants other than emissions from process equipment, fuel-burning or combustion equipment, air pollution control equipment, incinerators, materials handling, or mobile source exhausts including, but not limited to, exposed earth, roadways, parking lots, construction activities, demolition, and mining.

"Nonvolatiles" means a substances that do not evaporate readily. The term: *{Added by mm/dd/2024 amendment, effective mm/dd/2024.}*

- a. Refers to the film-forming material of a coating.**
- b. Is also known as solids.**

"Normally closed" means a container or piping system that remains closed unless an operator is actively engaged in adding or removing material. *{Added by mm/dd/2024 amendment, effective mm/dd/2024.}*

"Normally closed container" means a container that is closed unless an operator is actively engaged in activities such as emptying or filling the container. *{effective July 10, 2003}*

"Petroleum solvents" means organic material solvents produced by petroleum distillation, comprising a hydrocarbon range of mainly eight (8) to 12 carbon atoms per organic molecule

that exist as a liquid under standard conditions, that are used as cleaning agents in the petroleum solvent dry cleaning industry. *{Amended mm/dd/2024, effective mm/dd/2024.}*

"**Petroleum solvent dry cleaning**" means a process for the cleaning of fabrics with a petroleum solvent by means of one or more washings in solvent, extraction of excess solvent, and drying by exposure to a heated air stream. A petroleum solvent dry cleaning facility includes, but is not limited to, washers, dryers, solvent filters and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

"Petroleum solvent recovery dryer" means a class of dry-cleaning dryers that employs a condenser to liquify and recover petroleum solvent vapors evaporated in a closed-loop, recirculating stream of heated air. *{Added by mm/dd/2024 amendment, effective mm/dd/2024.}*

"**Pharmaceutical tablet coating**" means a process for the application of an essentially non-medicinal, protective coating to a pharmaceutical product.

"**Specialized function coating**" means a coating applied to aerospace vehicles or components that fulfills extremely specific engineering requirements that are limited in application and are characterized by low volume usage. This category excludes coatings included in other specialty coating categories. *{effective July 10, 2003}*

"**Specialty coating**" means:

- a. For purposes of §2105.74**, a coating applied to aerospace vehicles or components that, even though it meets the definition of a primer, topcoat, or self-priming topcoat, has additional performance criteria beyond those of primers, topcoats, and self-priming topcoats for specific applications. These performance criteria ~~may include, but are not limited to,~~ **include** temperature or fire resistance, substrate compatibility, antireflection, temporary protection or marking, sealing, adhesively joining substrates, or enhanced corrosion protection. *{effective July 10, 2003. Amended mm/dd/2024, effective mm/dd/2024.}*
- b. For purposes of shipbuilding and ship repair coatings under § 129.52, a coating that is manufactured or used for one of the specialized shipbuilding and ship repair coating applications listed in Table I, coating categories 12(ii)(a)—(v).** *{Added by mm/dd/2024 amendment, effective mm/dd/2024.}*

"**Specification fuel**" means any waste-derived liquid fuel that meets the specifications in Part E of this Article.

"**Thermal control coating**" means a coating formulated with specific thermal conductive or radiative properties to permit temperature control of the aerospace vehicle or component substrate. *{effective July 10, 2003}*

"**Thinner**" means: *{effective July 10, 2003. Amended mm/dd/2024, effective mm/dd/2024.}*

...a. a volatile liquid that is used to dilute coatings (to reduce viscosity, color strength or solids content or to modify drying conditions).

b. For purposes of shipbuilding and ship repair coatings under § 129.52, a liquid that is used to reduce the viscosity of a coating and that evaporates before or during the cure of a film.

c. The term includes diluent, makeup solvent, **thinning solvent** or reducer.

"Thinning ratio" means the volumetric ratio of thinner to coating, as supplied.

{Added by mm/dd/2024 amendment, effective mm/dd/2024.}

"**Tileboard**" means a premium interior wall paneling product made of hardboard that is used in high moisture areas of the home including kitchens and bathrooms. Tileboard meets the specifications for Class I hardboard approved by the American National Standards Institute. *{effective January 1, 2011}*

PART E - SOURCE EMISSION AND OPERATING STANDARDS

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. Subsection b amended October 26, 2022, effective November 5, 2022. Subsections a and c, and Table 2105.10 amended mm/dd/2024, effective mm/dd/2024.}*

- a. **Applicability.** This section applies **as follows** to **the owner and operator of a:**
- 1.** **S**surface coating process category **listed in Table 2105.10, categories 1-4, 8, and 11**, 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.
 - 2.** **Shipbuilding or ship repair facility that has a surface coating operation that uses or applies more than 264 gallons of one or a combination of coatings listed in Table 2105.10, category 12, beginning (blank)(Editor's Note: The blank refers to the effective date of this rulemaking, when published as a final-form rulemaking.)**
 - A.** **All terms defined in 25 Pa. Code §121.1 as, "For purposes of shipbuilding and ship repair coatings under §129.52, Table I, Category 12," are hereby incorporated by reference, except as explicitly set forth herein. Additions, revisions, or deletions to such regulation by the Commonwealth are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.**
 - 3**~~1.~~ The limits from §2105.10 and Table 2105.10, number 7 for Metal furniture coating and number 9 for Large appliance coating, no longer apply to the large appliance and metal furniture surface coating process as of January 1, 2011.
 - 4**~~2.~~ The limits from §2105.10 and Table 2105.10, number 5 for Paper coating, no longer apply to the paper, film, and foil surface coating process as of January 1, 2011.

- 53.** The limits from §2105.10 and Table §2105.10, number 10 for Miscellaneous metal parts and products, no longer apply to miscellaneous metal and/or plastic parts surface coating processes as of January 1, 2014.
- 64.** The limits from §2105.10 and Table §2105.10, number 6 for Automobile and light duty truck coating, no longer apply to automobile and light-duty truck assembly coatings as of January 1, 2014.

c. **Records.** A **The owner or operator of a** facility, regardless of the facility's annual emission rate, which contains surface coating processes shall maintain records sufficient to demonstrate compliance with this section. At a minimum, a facility shall maintain daily records of:

1. The following parameters for each coating, thinner, and other component as supplied:
 - A. The coating, thinner, or component name and identification number;
 - B. The volume used;
 - C. The mix ratio;
 - D. The density or specific gravity;
 - E. The weight percent of total volatiles, water, solids, and exempt solvents; and
 - F. The volume percent of solids for Table 2105.10 surface coating process categories 1-10.

G. The volume percent of solids for a Table 2105.10 surface coating process category 12 coating whose VOC content is expressed in units of weight of VOC per volume of coating solids.

2. The VOC content of each coating, thinner, and other component as supplied.
3. The VOC content of each as applied coating.

The records shall be maintained for 2 years and shall be submitted to the Department on a schedule reasonably prescribed by the Department.

g. **Exempt Other.** The VOC standards in Table 2105.10 do not apply to a coating used exclusively for determining product quality and commercial acceptance, touch-up and repair, and other small quantity coatings if the coating meets the following criteria:

1. The quantity of coating used does not exceed 50 gallons per year for a single coating and a total of 200 gallons per year for all coatings combined for the facility.
2. The owner or operator of the facility requests, in writing, and the Department approves, in writing, the exemption prior to use of the coating.

Table 2105.10
Emission Limits of VOCs in Surface Coatings by Process Category

<u>Weight of VOC per Volume of Coating Solids</u>		
<u>Surface Coating Process Category</u>	lbs VOC per gal coating <u>solids</u>	kg VOC per liter coating <u>solids</u>
1. Can Coating		
(a) sheet basecoat	4.62	0.55
(b) can exterior	4.62	0.55
(c) interior body spray	10.05	1.20
(d) two piece can end exterior	10.05	1.20
(e) side-seam spray	21.92	2.63
(f) end sealing compound	7.32	0.88
2. Coil coating	4.02	0.48
3. Fabric coating	4.84	0.58
4. Vinyl coating	7.69	0.92
5. Paper coating	4.84	0.58
6. Automobile and light duty truck coating		
(a) prime coat	2.60	0.31
(b) topcoat	4.62	0.55
(c) repair	14.14	1.69
7. Metal furniture coating	5.06	0.61
8. Magnet wire coating	2.16	0.26
9. Large appliance coating	4.62	0.55
10. Miscellaneous metal parts and products		
(a) topcoats for locomotives and heavy-duty trucks	6.67	0.80
(b) hopper car and tank car interiors	6.67	0.80
(c) pail and drum interiors	10.34	1.24
(d) clear coatings	10.34	1.24
(e) air-dried coatings	6.67	0.80
(f) extreme performance coatings	6.67	0.80
(g) all other coatings	5.06	0.61
<u>Weight of VOC per Weight of Coating Solids</u>		
<u>Surface Coating Process Category</u>	lbs VOC per lb coating <u>solids</u>	kg VOC per kg coating <u>solids</u>
11. Wood furniture manufacturing operations		
(a) topcoats and enamels	3.0	3.0
(b) washcoat	14.3	14.3
(c) final repair coat	3.3	3.3
(d) basecoats	2.2	2.2
(e) cosmetic specialty coatings	14.3	14.3
(f) sealers	3.9	3.9

12. Shipbuilding and ship repair coatings

Weight of VOC per Volume of Coating Less Water and Exempt Compounds ^{a b}

	<u>lbs VOC per gallon coating less water and exempt compounds</u>	<u>grams VOC per liter coating less water and exempt compounds</u>
<u>(i) General use, including coal tar epoxy coatings</u>	<u>2.83</u>	<u>340</u>
<u>(ii) Specialty coating</u>		
<u>(a) Air flask</u>	<u>2.83</u>	<u>340</u>
<u>(b) Antenna</u>	<u>4.42</u>	<u>530</u>
<u>(c) Antifoulant</u>	<u>3.33</u>	<u>400</u>
<u>(d) Heat resistant</u>	<u>3.50</u>	<u>420</u>
<u>(e) High-gloss</u>	<u>3.50</u>	<u>420</u>
<u>(f) High-temperature</u>	<u>4.17</u>	<u>500</u>
<u>(g) Inorganic zinc high build primer</u>	<u>2.83</u>	<u>340</u>
<u>(h) Military exterior</u>	<u>2.83</u>	<u>340</u>
<u>(i) Mist</u>	<u>5.08</u>	<u>610</u>
<u>(j) Navigational aids</u>	<u>4.58</u>	<u>550</u>
<u>(k) Nonskid</u>	<u>2.83</u>	<u>340</u>
<u>(l) Nuclear</u>	<u>3.50</u>	<u>420</u>
<u>(m) Organic zinc</u>	<u>3.00</u>	<u>360</u>
<u>(n) Pretreatment wash primer</u>	<u>6.50</u>	<u>780</u>
<u>(o) Repair and maintenance of thermoplastic coating of commercial vessels</u>	<u>4.58</u>	<u>550</u>
<u>(p) Rubber camouflage</u>	<u>2.83</u>	<u>340</u>
<u>(q) Sealant for thermal spray aluminum</u>	<u>5.08</u>	<u>610</u>
<u>(r) Special marking</u>	<u>4.08</u>	<u>490</u>
<u>(s) Specialty interior</u>	<u>2.83</u>	<u>340</u>
<u>(t) Tack</u>	<u>5.08</u>	<u>610</u>
<u>(u) Undersea weapons systems</u>	<u>2.83</u>	<u>340</u>
<u>(v) Weld-through preconstruction primer</u>	<u>5.42</u>	<u>650</u>

Weight of VOC per Volume of Coating Solids ^c

	<u>At temperature less than 4.5°C (40°F) ^d</u>		<u>At temperature equal to or greater than 4.5°C (40°F)</u>	
	<u>lbs VOC per gallon coating solids</u>	<u>grams VOC per liter coating solids</u>	<u>lbs VOC per gallon coating solids</u>	<u>grams VOC per liter coating solids</u>
<u>(i) General use, including coal tar epoxy coatings</u>	<u>6.07</u>	<u>728</u>	<u>4.76</u>	<u>571</u>
<u>(ii) Specialty coating</u>				
<u>(a) Air flask</u>	<u>6.07</u>	<u>728</u>	<u>4.76</u>	<u>571</u>
<u>(b) Antenna</u>	<u>12.01</u>	<u>1,439</u>	<u>12.01</u>	<u>1,439</u>
<u>(c) Antifoulant</u>	<u>8.10</u>	<u>971</u>	<u>6.38</u>	<u>765</u>
<u>(d) Heat resistant</u>	<u>8.92</u>	<u>1,069</u>	<u>7.02</u>	<u>841</u>
<u>(e) High-gloss</u>	<u>8.92</u>	<u>1,069</u>	<u>7.02</u>	<u>841</u>
<u>(f) High-temperature</u>	<u>13.33</u>	<u>1,597</u>	<u>10.32</u>	<u>1,237</u>
<u>(g) Inorganic zinc high build primer</u>	<u>6.07</u>	<u>728</u>	<u>4.76</u>	<u>571</u>
<u>(h) Military exterior</u>	<u>6.07</u>	<u>728</u>	<u>4.76</u>	<u>571</u>
<u>(i) Mist</u>	<u>18.64</u>	<u>2,235</u>	<u>18.64</u>	<u>2,235</u>
<u>(j) Navigational aids</u>	<u>13.33</u>	<u>1,597</u>	<u>13.33</u>	<u>1,597</u>
<u>(k) Nonskid</u>	<u>6.07</u>	<u>728</u>	<u>4.76</u>	<u>571</u>
<u>(l) Nuclear</u>	<u>8.92</u>	<u>1,069</u>	<u>7.02</u>	<u>841</u>
<u>(m) Organic zinc</u>	<u>6.69</u>	<u>802</u>	<u>5.26</u>	<u>630</u>
<u>(n) Pretreatment wash primer</u>	<u>92.58</u>	<u>11,095</u>	<u>92.58</u>	<u>11,095</u>
<u>(o) Repair and maintenance of thermoplastic coating of commercial vessels</u>	<u>13.33</u>	<u>1,597</u>	<u>13.32</u>	<u>1,597</u>
<u>(p) Rubber camouflage</u>	<u>6.07</u>	<u>728</u>	<u>4.76</u>	<u>571</u>
<u>(q) Sealant for thermal spray aluminum</u>	<u>18.65</u>	<u>2,235</u>	<u>18.65</u>	<u>2,235</u>
<u>(r) Special marking</u>	<u>9.83</u>	<u>1,178</u>	<u>9.83</u>	<u>1,178</u>
<u>(s) Specialty interior</u>	<u>6.07</u>	<u>728</u>	<u>4.76</u>	<u>571</u>
<u>(t) Tack</u>	<u>18.65</u>	<u>2,235</u>	<u>18.65</u>	<u>2,235</u>
<u>(u) Undersea weapons systems</u>	<u>6.07</u>	<u>728</u>	<u>4.76</u>	<u>571</u>
<u>(v) Weld-through preconstruction primer</u>	<u>24.07</u>	<u>2,885</u>	<u>24.07</u>	<u>2,885</u>

^a The limits are expressed in two sets of equivalent units: pounds (lbs) per gallon and grams per liter. Either set of limits may be used to demonstrate compliance.

^b To convert from grams per liter to pounds (lbs) per gallon, multiply the limit by (3.785 liter/gallon) (3.785 LITER/GALLON) (1/453.6 pound/gram) or 1/120. For compliance purposes, metric units define the standards.

^c VOC limits expressed in units of mass of VOC per volume of solids were derived from the VOC limits expressed in units of mass of VOC per volume of coating less water and exempt compounds by assuming the coating contains no water or exempt compounds and that the volumes of all components within the coating are additive.

^d These limits apply during cold weather time periods, that is, temperatures below 4.5°C (40°F). Cold weather allowances are not given to coatings in categories that allow less than 40% solids (nonvolatiles) content by volume. These coatings are subject to the single limit regardless of weather conditions and temperatures.

Category 12 was adopted on _____ (Editor's Note: The blank refers to the effective date of this rulemaking, when published as a final-form rulemaking.)

§2105.18 DRY CLEANING FACILITIES

*{Subsections a, b & c amended October 26, 2022, effective November 5, 2022. **Paragraph b.10 added mm/dd/2024, effective mm/dd/2024.**}*

- a. **Perchloroethylene Dry Cleaning Facilities.**

- 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.
1. Any person who operates, or allows to be operated, any petroleum solvent dry cleaning dryer subject to this Section shall at all times limit daily VOC emissions to the atmosphere to an average of 3.5 pounds of VOCs per 100 pounds dry weight of articles dry cleaned; or shall install, maintain, and operate a solvent recovery dryer in a manner such that the dryer remains closed and the recovery phase continues until a final recovered solvent flow rate of no more than 50 milliliters per minute is attained and maintained.
 2. Any person who operates, or allows to be operated, any petroleum solvent filtration system subject to this Section shall at all times reduce the VOC content in all filtration wastes to one (1) pound or less per 100 pounds dry weight of article dry cleaned, before disposal and possible exposure to the atmosphere; or shall install, maintain, and operate a cartridge filtration system, and drain the filter cartridges in their sealed housings for eight (8) hours or more before their removal.
 3. Any person who operates, or allows to be operated, any petroleum solvent dry cleaning facility subject to this Section shall repair all petroleum solvent vapor and liquid leaks within three (3)

working days after identifying the sources of the leaks. If necessary repair parts are not in hand, such parts shall be ordered within three (3) working days, and repair the leaks no later than three (3) working days following the arrival of the necessary parts.

4. Any person who operates, or allows to be operated, any petroleum solvent dry cleaning facility subject to this Section shall install, maintain, and operate equipment consistent with manufacturer's specifications and recommendations in order to minimize VOC emissions. In addition, all fugitive VOC emissions from the storage, handling, and transfer of petroleum solvent and petroleum solvent containing materials shall be minimized through employment of appropriate operating practice or procedures to reduce solvent loss and evaporation to the atmosphere.
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 established by Part G of this Article;
 - ii. Calculate, record, and report to the Department the dry weight of articles dry cleaned; and
 - iii. Repeat Subparagraphs 5.A.i and 5.A.ii above for normal operating conditions that encompass at least 30 dryer loads, which total not less than 4,000 lbs. dry weight, and represent a normal range of variations in fabric, solvents, load weights, temperatures, flow rates, and process deviations;
 - B. When a solvent recovery dryer is used, verify that the flow rate of recovered solvent from the solvent recovery dryer at the termination of the recovery phase is no greater than 50 milliliters per minute. This one-time procedure shall be conducted for a duration of no less than two weeks during which no less than 50 percent of the dryer loads shall be monitored for their final recovered solvent rate. The flow rate of recovered solvent shall be measured from the solvent-water separator unless otherwise approved in writing by the Department. Near the end of the recovery cycle, the flow of recovered solvent shall be diverted to a graduated cylinder. The cycle shall continue until the maximum flow of solvent is no more than 50 milliliters per minute. The dry weight and type of article cleaned and the total length of the cycle shall be recorded and reported to the Department; and
 - 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 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.

6. Inspection and maintenance.
 - A. Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning facility shall submit for approval to the Department an inspection and maintenance protocol including daily inspections of washers, dryers, solvent filters, settling tanks, vacuum stills, and all containers and conveyors of petroleum solvent to identify perceptible vapor or liquid leaks. A daily log shall be maintained to record the inspection and maintenance activities conducted under the approved protocol. The log shall be prepared and maintained in a format to be approved by the Department as part of the approved protocol.
 - B. Dry cleaning system components found leaking liquid solvent shall be repaired immediately. Pipes, hoses, and fittings shall be examined for active dripping or dampness. Pumps and filters shall be closely inspected for leaks around seals and access covers. There shall be no visible signs of liquid solvent.
 - C. Solvent vapor leaks shall be controlled by reducing the number of sources where solvent is exposed to the atmosphere. Under no circumstances shall there be any open containers (cans, buckets, barrels) of solvent or solvent-containing material. Equipment containing solvent (washers, dryers, extractors, and filters) shall remain closed at all times other than during maintenance or load transfer. Lint filter and button trap covers shall remain closed except when solvent-laden lint and debris are removed. Gaskets and seals should be inspected and replaced when found weak and defective. Solvent-laden clothes shall never be allowed to set exposed to the atmosphere for longer periods than are necessary for load transfers. Vents on solvent-containing waste and new solvent storage tanks shall be constructed and maintained in a manner that minimizes solvent vapor emissions.
7. Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning facility shall install, operate, and maintain equipment consistent with manufacturer's specifications and recommendations.
8. Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning facility shall maintain copies of all manufacturer's specifications and recommendations for dry cleaning equipment operated at the facility and records of operations, inspections, and maintenance such that the Department can determine compliance. These records shall be retained at the facility for a period of at least two (2) years, shall be made available to the Department for inspection and copying upon request, and shall, at a minimum, include:
 - A. Information on purchases, inventory, and daily consumption of petroleum solvents;
 - B. Operational information on washers, dryers, and solvent filtration systems, including daily hours of operation, cycle times, and dry weight of articles cleaned; and
 - C. Information on leak inspections and repairs for all equipment and components handling petroleum solvents.
9. Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning facility shall submit reports to the Department summarizing information on daily operations, inspections, and maintenance activities, and such other information as is required by the Department to determine compliance, on a schedule and in a form and manner as is prescribed by the Department.

10. Exemption. The owner or operator of a petroleum solvent dry cleaning facility subject to Subsection b claiming exemption from the requirements of Paragraphs b.1 to b.9 shall maintain records

of annual solvent consumption onsite for five (5) years to demonstrate that the applicability threshold of Subsection b has not been exceeded.

{Editor's Note: The following Section 2105.19 is included for context only.}

§2105.19 SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING - FUGITIVE SOURCES

{Subsection c amended October 26, 2022, effective November 5, 2022.}

- 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:
 1. Synthetic organic chemicals listed in 40 CFR 60.489, as amended;
 2. Methyl tert-butyl ether (MTBE);
 3. Polyethylene;
 4. Polypropylene; and
 5. Polystyrene.

- b. This Section shall not apply to:
 1. Equipment operated entirely under a vacuum;
 2. Equipment processing only fluids containing less than ten percent (10%) by weight of volatile organic compounds; nor
 3. Equipment processing only fluids having a vapor pressure of less than 0.044 pounds per square inch absolute under standard conditions.

- 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 established by Part G of this Article;
 - C. Attachment of a leak detection tag to each leaking component having a volatile organic compound leak equal to or greater than 10,000 ppm. The leak detection tag shall be waterproof, be readily visible, be a color that contrasts with the permanent identification, bear a leak detection number and the date on which the leak was detected, and indicate if the component cannot be repaired until a process shutdown and a shutdown is not

scheduled to occur within 15 days from the date of detection. The leak detection tag shall not be removed from the component until the component has been repaired and retested, and the test indicates that the component does not have a volatile organic compound leak equal to or greater than 10,000 ppm;

- D. Repair and retest of each leaking component within 15 days of detection or as soon as possible if a shutdown is required to make the repair;
- E. A leak check of each safety/relief valve within 24 hours after such valve has been vented to the atmosphere, by methods established by Part G of this Article; and
- F. Initiation and maintenance of a log of all components subject to leak inspection and maintenance. The log shall contain, at a minimum, the following:
 - i. The identification number of each component;
 - ii. The date on which each component was checked;
 - iii. The total number of components checked;
 - iv. The identification and leak detection number of each component found leaking;
 - v. The location of each leaking component;
 - vi. The type of each leaking component (for example: valve, seal, etc.);
 - vii. The date on which each leaking component was discovered to be leaking;
 - viii. The date of each repair;
 - ix. The total number of components found leaking;
 - x. The leak detection instrument readings before and after each repair;
 - xi. Each component that can not be repaired until a process shutdown that will not occur within 15 days of detection; and
 - xii. A record of the calibration of the leak detection monitoring instrument.

The monitoring log shall be retained for two (2) years after the date on which any leak check was made. The log shall be made available to the Department for inspection and copying at any time upon oral or written request.

- d. Any person who operates, or allows to be operated, a source subject to this Section may submit to the Department for approval an alternative plan for the control of leaks from components, including a plan with less frequent testing based on superior past performance. The Department shall approve any plan that is equivalent to or better than the requirements of this Section in terms of leak control efficiency and enforceability. A plan approved by the Department under this Subsection shall not be effective until it is either approved by the EPA as a revision to the County's portion of the applicable SIP or becomes a part of a federally enforceable permit or order, whichever is first.
- e. Any person who operates, or allows to be operated, a source subject to this Section may submit to the Department for approval a list of components the inspection of which would involve a significant element of danger. The Department shall exempt the components on the list from the requirements of this Section if such person can demonstrate to the satisfaction of the Department that a significant element of danger exists which cannot be reasonably eliminated, and that the exemptions will not result in a significant reduction of the volatile organic compound emission control effectiveness.

{Editor's Note: The use of the "A" in the Section nomenclature is a departure from the Article XXI, nomenclature, but is consistent with the PA DEP approach and useful in this instance.}

**§2105.19A SYNTHETIC ORGANIC CHEMICAL MANUFACTURING
INDUSTRY – AIR OXIDATION, DISTILLATION AND
REACTOR PROCESSES**

{Section 2105.19A added mm/dd/2024, effective mm/dd/2024.}

- a. Incorporation by Reference. Except as otherwise specifically provided under this Section, this Section shall be applied consistent with the provisions of the state regulation for *Control of VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry – Air Oxidation, Distillation and Reactor Processes* promulgated under the Air Pollution Control Act at 25 Pa. Code §129.71a and the related definitions at 25 Pa. Code §121.1 which are hereby incorporated by reference into this Article. Additions, revisions, or deletions to such regulation by the Commonwealth are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.**
- b. For the purposes of this subsection, references in 25 Pa. Code §129.71a to:**
- A. “Department” shall mean Department as defined under this Article;**
- B. “Facility located in this Commonwealth, shall mean “facility located in Allegheny County;” and**
- C. “Plan approval” shall mean Installation Permit.**

End of Regulation Changes

2. Technical Support Document

A. General

This regulation revision will revise Article XXI with regard to three United States Environmental Protection Agency (EPA) Control Techniques Guidelines (CTG) source categories:

1. Shipbuilding and Ship Repair surface coating operations;
2. Synthetic Organic Chemical Manufacturing Industry (SOCMI) air oxidation, distillation and reactor processes; and
3. Large Petroleum Solvent Dry Cleaners

These changes are being undertaken so that Article XXI will remain consistent with the Pennsylvania Department of Environment's (PA DEP) recently published regulation revisions for existing 25 Pa. Code Sections 129.52, and newly added 129.63b, and 129.71a.

By virtue of its Program Plan Approval, the Allegheny County Health Department (ACHD) is required to promulgate the regulations that PA DEP promulgates. This enables ACHD to enforce the new Pennsylvania regulations within Allegheny County and allows for statewide consistency.

Regulations addressing shipbuilding and ship repair surface coating operations will be added to Article XXI Section 2105.10 and Table 2105.10 so as to incorporate regulatory language similar to the changes made to 25 Pa. Code §129.52 and Table 1, dealing with Shipbuilding and Ship Repair Coatings. Several changes will also be made to Article XXI §2101.20, "Definitions," to cover definitions added for Shipbuilding and Ship Repair Coatings, and Petroleum Dry Cleaning related definitions.

Article XXI, §2105.18, already includes the regulatory requirements of the newly promulgated 25 Pa. Code §129.63b, "Control of VOC Emissions from Large Petroleum Dry Cleaning Facilities," and only requires revision to add a new paragraph at 2105.18.b.10, "Exemption," which will require recordkeeping by Petroleum Solvent Dry Cleaning facilities in Allegheny County which are not large enough to be covered by 2105.18. Keeping records will allow such sources to be able to demonstrate their basis for being exempt.

And, finally, this regulation revision adds a new section, with a new nomenclature, Section 2105.19A, to address SOCMI air oxidation, distillation and reactor processes (as existing Section 2105.19 already addresses SOCMI – fugitives). This new Section 2105.19A will incorporate by reference the PA DEP's new requirements for SOCMI Air Oxidation, Distillation and Reactor Processes found at 25 Pa. Code §129.71a.

These changes are being submitted as SIP changes as part of the effort for the 2015 Ozone NAAQS.

Section 2.B of the Technical Support Document, below, is being provided for information only so as to illustrate the new Sections 129.63b and 129.71a that are being incorporated by reference into Article XXI.

B. Technical Support Document

A link to 53 Pa.B. 465 is provided below for information/reference only for purposes of providing the text of 25 Pa. Code §§129.52, 129.63b and 129.71a and related definitions at 25 Pa. Code §121.1 all of which are being incorporated into Article XXI either verbatim or by reference with this proposed SIP revision.

<https://www.pacodeandbulletin.gov/Display/pabull?file=/secure/pabulletin/data/vol53/53-3/73.html>

3. Documentation of Public Hearing and Certifications (all “Later”)

- a. Public hearing notice
- b. Transmittals of hearing notice to EPA & PA DEP
- c. Proof of publication of notice of hearing
- d. Certification of hearing
- e. Summary of comments and responses
- f. Certification of approval and adoption