Table 1. VOC RACT List and Certification Under the 8‑Hour Ozone 2008 and 2015 NAAQS

| **Item. CTG Source Category or** **Item. Non-CTG Category** | **Pa. Regulation Title 25. Environmental Protection, Chapter 129**  | **RACT Basis Document**  | **SIP Revision Approved by EPA (Date and FR)**  | **RACT Rule Applicability and Requirements**  | **Certification Basis**  | **RACT Evaluation*****See: Appendix A- Support Document* - *Cross Reference Document for Pennsylvania’s Comparison of RACT requirements to RACT in other States*** |
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| 1. Surface Coating of Cans
2. Surface Coating of Coils
3. Surface Coating of Paper
4. Surface Coating of Fabrics,
5. Surface Coating of Automobiles and Light‑Duty Trucks
6. Surface Coating of Metal Furniture
7. Surface Coating for Insulation of Magnet Wire
8. Surface Coating of Large Appliances
9. Surface Coating of Miscellaneous Metal Parts and Products
 | SOURCES OF VOC Section 129.52. ‑ Surface coating processes. | CTG: Control of Volatile Organic Emissions from Existing Stationary Sources, Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light‑Duty Trucks, EPA‑450/2‑77‑008, May 1977. CTG: Control of Volatile Organic Emissions from Existing Stationary Sources, Volume III: Surface Coating of Metal Furniture, EPA‑450/2‑77‑032, December 1977.  CTG: Control of Volatile Organic Emissions from Existing Stationary Sources, Volume IV: Surface Coating for Insulation of Magnet Wire, EPA‑450/2‑77‑033, December 1977. CTG: Control of Volatile Organic Emissions from Existing Stationary Sources, Volume V: Surface Coating of Large Appliances, EPA‑450/2‑77‑034, December 1977. CTG: Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VI: Surface Coating of Miscellaneous Metal Parts and Products, EPA‑450/2‑78‑015, June 1978.  | 7/20/01, 66 FR 37908. 8/24/2011, 76 FR 52870.**Last Update Effective:** 10/22/16EPA Approved 8/10/18, [83 FR 39604](https://www.federalregister.gov/citation/83-FR-39604) | This section applies to coating operations at automobile and light‑duty truck assembly plants, and to any can, coil, paper, fabric, or vinyl coating unit and establishes maximum allowable VOC emissions per unit of coating solids.  This section applies to the coating of metal furniture and establishes max allowable VOC emissions per unit of coating solids. This section applies to the coating of magnetic wire and establishes max allowable VOC emissions per unit of coating solids. This section applies to the coating of large appliances and establishes max allowable VOC emissions per unit of coating solids. This section applies to any miscellaneous metal parts coating line, and establishes max allowable VOC emissions per unit of coating solids.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 1. Pensylvania’s metal can Rule in 129.52 Table 1, Category 1 is in terms of solids but is consistent with and as stringent as Metal Can Coating New Hampshire’s Rule after adjusting for a standard solvent density of 7. 36 Lbs of VOC per gallon of solvent.  2. Pennsylvania expresses its standard on a Lbs. of VOC per gallon of solids basis and back calculated based on standrad solvvent density is as stringent as the the New Hampshire Rule and it has an applicability limit (2.7 tpy) three times lower than New Hampshire applicability limit. 3. See Updated Paper, Film, and Foil Coatings Rule (2006) @ No. Item 12 below.4. Pennsylvania fabric of 4.84 pounds of VOC per gallon of solids converts to 2.9 lbs. of VOC per gallon of coating at standard solvent density of 7.36 which is as stringent as New Hampshire’s Fabric Coating Standard. 5. See Updated Automobile and Light Duty Truck Assembly Coating (2008) @ Item No. 17 below.6. See Updated Metal Furniture Coatings (2007) in Item No. 11 below. 7. Pennsylvania’s Surface Coating for Insulation of Magnet Wire is expressed in a standard on a Lbs. of VOC per gallon of solids basis which is back calculated using standard solvent density to 1.7 pounds of VOC per gallon of coating and is as stringent as the New Hampshire Rule. Pennsylvania also has an applicability limit (2.7 TPY) which is three times lower than New Hampshire applicability limit.8. See Updated Large Appliance Coatings (2007) @ Item No. 10 below.9. See Updated Miscellaneous Metal Products Coating (2008) @ Item No. 15 below. |
| 1. Large Appliance Coatings (2007)
2. Metal Furniture

Coatings (2007)  | SOURCES OF VOCSection 129.52a ‑ Control of VOC emissions from large appliance and metal furniture surface coating processes.  | CTG: Control Techniques Guidelines for Large Appliance Coatings U.S. EPA 453/R‑07‑004 September 2007 CTG: Control Techniques Guidelines for Metal Furniture Coatings, EPA 453/R‑07‑005, September 2007.  | 8/24/2011, 76 FR 52867.  | This section applies to large appliance or metal furniture surface coating processes and establishes max allowable VOC emissions per unit of coating solids.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 10. New Hampshire does not have a Large Appliance rule- Negative declaration. Pennsylvania compared Large Appliance Coatings rule to Ohio’s rule. Pennsylvania’s coating standards in pounds of VOC per gallon of solids is more stringent than Ohio’s standards. Ohio also requires controls to be employed at its higher standard.11. Pennsylvania’s Metal Furniture Surface Coating Rule is as stringent as New Hampshire’s rule with a 10% lower applicability threshold. |
| 1. Paper, Film, and Foil Coatings (2007)
 | SOURCES OF VOCSection 129.52b ‑ Control of VOC emissions from paper, film and foil surface coating processes.  | CTG: Control Techniques Guidelines for Paper, Film, and Foil Coatings EPA 453/R‑07‑003 September 2007.  | **3**/4/2011, 76 FR 11983.  5/23/11, 76 FR 29649**.**  | This section applies to paper, film or foil surface coating processes and establishes max allowable VOC emissions per unit of coating solids.   | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 12. PA and New Hampshire are consistent even though there are some differences in applicability and timing and the representation of the coating limits. For example: Pennsylvania’s new limits took effect in 2012 and New Hampshire new limits took place in 2016.  |
| 1. Surface Coating of Flat Wood Paneling
2. Flat Wood Paneling Coating (2006)
 | SOURCES OF VOCSection 129.52c ‑ Control of VOC emissions from flat wood paneling surface coating processes.  | CTG: Control of Volatile Organic Emissions from Existing Stationary Sources‑ Volume VII: Factory Surface Coating of Flat Wood Paneling. CTG: Control Techniques Guidelines for Flat Wood Paneling Coatings, EPA 453/R‑06‑004 September 2006.  | 6/2/11, 76 FR 31856.  | This section applies to flat wood paneling surface coating processes and establishes max allowable VOC emissions per unit of coating solids.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | (13. & 14.) Pennsylvania’s Flat Wood Paneling and Wood Paneling Surface Coating Rule is as stringent as the New Hampshire rule with a stricter applicability limit. |
| 1. Miscellaneous Metal

Products Coating (2008) 1. Plastic Parts Coating (2008)
 | SOURCES OF VOCSection 129.52d. ‑ Control of VOC emissions from miscellaneous metal parts surface coating processes, miscellaneous plastic parts surface coating processes, business machine coatings and pleasure craft surface coatings. | CTG: Control Techniques Guidelines for Miscellaneous Metal Products and Plastic Parts Coatings EPA‑453/R‑08‑003 September 2008.Alternative Control Techniques Document – Surface Coating of Automotive/Transportation and Business Machine Plastic Parts (PDF 207 pp, 6.3MB)EPA-453/R-94-0171994/02 | Final Rule published in the Pa. Bulletin on October 22, 2016, 46 Pa.B. 6743 and 46 Pa.B. 6758.  Final Rule submitted to EPA for SIP approval on November 18, 2016.EPA approved:  8/10/18, [83 FR 39604](https://www.federalregister.gov/citation/83-FR-39604) | This section applies to miscellaneous metal part surface coating process or miscellaneous plastic part surface coating process, business machines, pleasure crafts or all and establishes max allowable VOC emissions per unit of coating solids or pounds of VOC per gallon of coating.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 15. For the Miscellaneous Metal Products source category Pennsylvania’s Surface Coating rules are consistent with, equal to and more stringent than the New Hampshire rules.16. For the Plastic Parts, Business Machines, and pleasure craft source categories Pennsylvania’s Surface Coating rules are consistent with, equal to and more stringent than the New Hampshire rules. |
| 1. Automobile and Light‑Duty Truck Assembly Coating (2008)
 | SOURCES OF VOC Section 129.52e. - Control of VOC emissions from automobile and light‑duty truck assembly coating operations and heavier vehicle coating operations.  | CTG: Control Techniques Guidelines for Automobile and Light‑Duty Truck Assembly Coatings EPA‑453/R‑08‑006 September 2008.  | 3/23/18, 57 FR 12673.   | This section applies to the owner and operator of an automobile and light‑duty truck assembly coating operation that applies an automobile assembly coating or a light‑duty truck assembly coating, or both.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 17. New Hampshire does not have an equivalent regulation. negative declarationPennsylvania – compared its rule to Michigan and Ohio’s rules. Pennsylvania’s 25 PA Code § 129.52e Control of VOC emissions from automobile and light-duty truck assembly coating operations and heavier vehicle coating operations is as stringent, more stringent and more comprehensive than Michigan’s automobile, light-duty truck rule. Pennsylvania’s rule is consistent with and as stringent as Ohio’s Rule.   |
| 1. Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds
 | SOURCES OF VOCSection 129.55. ‑ Petroleum refineries—specific sources. | CTG: Control of Refinery Vacuum Producing Systems, Wastewater Separators, and Process Unit Turnarounds, EPA‑450/2‑77‑025, October 1977.  | EPA SIP Approved as RACT 01/19/83, 48 FR 2319.  | This section applies to vacuum‑producing systems, wastewater separators and process unit turnaround at petroleum refineries.Requirements include (1) no uncompressed VOC emission from vacuum producing systems, (2) covers, lids or seals for wastewater separators, and (3) depressurization of process unit or vessel to reduce its internal pressure to 136 kPa or less and then venting to vapor recovery system, flare or firebox. | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 18. New Hampshire does not have this type of rule. -Negative declaration.Pennsylvania made a comparison to Michigan’s Rule.Pennsylvania’s 25 PA Code § 129.55 Control of VOC emissions from Petroleum refineries—specific sources rule is consistent with Michigan’s 3 rules covering the same sources.  |
| 1. Petroleum Liquid Storage in External Floating Roof Tanks
2. Petroleum Liquids in Fixed Roof Tanks
 | SOURCES OF VOCSection 129.56. ‑ Storage tanks greater than 40,000 gallons capacity containing VOCs. | CTG: Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks, EPA‑450/2‑78‑047, December 1978. CTG: Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks, EPA‑450/2‑77‑036,December 1977.  | 07/26/00, 65 FR 45920.  | This section applies to petroleum liquid storage tanks with external floating or fixed roofs and with a capacity of greater than 40,000 gal. The rule establishes sealing standards for storage tanks, including a vapor collection and recovery system. | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 19. Pennsylvania’s Storage tanks greater than 40,000 gallons capacity containing VOCs rule applies standards and requirements consistent with and as stringent as than the New Hampshire rule. The inspections and maintenance requirements are also consistent with the New Hampshire requirements. 20. In Pennsylvania’s rule Internal floating roof tanks have a fixed roof. External floating roof tanks do not have a fixed roof.  |
| 1. Petroleum Liquid Storage in External Floating Roof Tanks
2. Petroleum Liquids in Fixed Roof Tanks
 | SOURCES OF VOCSection 129.57. ‑ Storage tanks less than or equal to 40,000 gallons capacity containing VOCs. | CTG: Control of Volatile Organic Emissions from Storage of Petroleum Liquids in Fixed Roof Tanks, EPA‑450/2‑77‑036, December 1977. CTG: Control of Volatile Organic Emissions from Petroleum Liquid Storage in External Floating Roof Tanks, EPA‑450/2‑78‑047, December 1978.  | 01/19/83, 48 FR 2319.  |  Storage tanks covered under this section shall have pressure relief valves which are maintained in good operating condition and which are set to release at no less than .7 psig (4.8 kilopascals) of pressure or .3 psig (2.1 kilopascals) of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department. Section 129.56(g) (relating to storage tanks greater than 40,000 gallons capacity containing VOCs) applies to this section. Petroleum liquid storage vessels which are used to store produced crude oil and condensate prior to lease custody transfer shall be exempt from the requirements of this section. | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 21. and 22. Need to discuss with attorneys….. |
| 1. Leaks from Petroleum Refinery Equipment
 | SOURCES OF VOCSection 129.58. ‑ Petroleum refineries—fugitive sources. | CTG: Control of Volatile Organic Compound Leaks from Petroleum Refinery Equipment, EPA‑450/2‑78‑036, June 1978. | 07/27/84, 49 FR 30183.  | This section applies to equipment in VOC service in any process unit at petroleum refineries. The rule establishes standards for proper valve operations under various scenarios to prevent VOC leak emissions. | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 23. New Hampshire did not have a comparable rule.(Negative Declaration) DEP will compare the Department’s rule with that of Michigan.Pennsylvania’s Petroleum refineries—fugitive sources rule has the same leak threshold and is consistent with Michigan’s Rule. |
| 1. Tank Truck Gasoline Loading Terminals
 | SOURCES OF VOCSection 129.59. ‑ Bulk gasoline terminals. | CTG: Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals, EPA‑450/2‑77‑026, December 1977. | 5/13/93, 58 FR 28362.  | This section applies to the total of all the loading racks at any bulk gasoline terminal that delivers liquid product into gasoline tank trucks. Requirements include control using a vapor collection and control system designed to collect and destroy the organic compound liquids or vapors displaced from gasoline tank trucks during product loading; and various other equipment and operational requirements.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 24. The combination of the Pennsylvania rules “Pennsylvania 25 PA Code § 129.59” Bulk gasoline terminals and “Pennsylvania 25 P Code § 129.81. Organic liquid cargo vessel loading and ballasting” provide requirements consistent with and as stringent as the New Hampshire rules. Pennsylvania’s rule 129.62 appears to address leaks from Gasoline Tank Trucks and Vapor Collection Systems more thoroughly than the New Hampshire Rules do.  |
| 1. Equipment Leaks from Natural Gas/Gasoline Processing Plants
 | Control of VOC Emissions from Unconventional Oil and Natural Gas SourcesSections 129,121 – 129.130Control of VOC Emissions from Conventional Oiland Natural Gas Sources Sections 129.131 – 129.140New Source Performance Standards (NSPS) ‑ Subparts KKK, OOOO, OOOOa, VV, and VVa (as incorporated by reference in 25 Pa. Code Chapter 122) | CTG: [Control of Volatile Organic Compound Equipment Leaks from Natural Gas/Gasoline Processing Plants,](https://www3.epa.gov/airquality/ctg_act/198312_voc_epa450_3-83-007_leaks_naturalgas_processing.pdf) EPA‑450/3‑83‑007 1983/12Control Techniques Guidelines for the Oil and Natural Gas Industry EPA -453/B-16-0012016/10 | Unconventional Natural Gas Rules added December 9, 2022, effective December 10, 2022. 52 Pa.B. 7587Conventional Natural Gas Rules added December 9, 2022, effective December 2, 2022, 52 Pa.B. 7635Included as part of this SIP revision. The Department PADEP is requesting that EPA approves and incorporates 25 Pa. Code Chapter 122 as part of the Commonwealth’s SIP.  | Applies to an owner or operator of one or more of the following unconventional/conventional oil and natural gas sources of VOC emissions installed at an unconventional/conventional well site, a gathering and boosting station or a natural gas processing plant in this Commonwealth which were constructed on or before December 10, 2022:(1) Storage vessels at: (i) An unconventional/conventional well site. (ii) A gathering and boosting station. (iii) A natural gas processing plant. (iv) The natural gas transmission and storage segment. (2) Natural gas-driven continuous bleed pneumatic controllers.(3) Natural gas-driven diaphragm pumps.(4) Reciprocating compressors and centrifugal compressors.(5) Fugitive emissions components. |  This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 25. See: Support Document write up. Pennsylvania’s rules and regulations are as stringent or more stringent than other states evaluated in the Regulatory Analysis Form. Pennsylvania also included requirements that were more stringent than the EPA CTG recommendations.  |
| 1. Bulk Gasoline Plants
 | SOURCES OF VOCSection 129.60. ‑ Bulk gasoline plants. | CTG: Control of Volatile Organic Emissions from Bulk Gasoline Plants, EPA‑450/2‑77‑ 035, December 1977.  | 5/13/93, 58 FR 28362.  | This section applies to all unloading, loading, and storage operations at bulk gasoline plants and to any gasoline tank truck delivering or receiving gasoline at a bulk gasoline plant. Requirements include the use of vapor balance, and various equipment and work practice standards.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 26. The combination of the Pennsylvania rules 129.60, 129.61 and 129.61a provide for requirements consistent with and as stringent as the New Hampshire rules mentioned above for bulk gasoline plants. |
| 1. Stage I Vapor Control System
 | SOURCES OF VOCSection 129.61. ‑ Small gasoline storage tank control (Stage I control). | CTG: Design Criteria for Stage I Vapor Control Systems ‑ Gasoline Service Stations, November 1975. | 5/13/93, 58 FR 28362.  | This section applies to stationary gasoline storage tanks at gasoline dispensing facilities. The requirements include (1) loading with submerged fill method, and (2) installing vapor recovery system that returns the displaced vapors to the delivery vessels and then to the bulk plant or terminal.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 27. The combination of the Pennsylvania rules 129.60, 129.61 and 129.61a provide for requirements consistent with and as stringent as the New Hampshire rules mentioned above for bulk gasoline plants. |
| 1. Leaks from Gasoline Tank Trucks and Vapor Collection Systems
 | SOURCES OF VOCSection 129.62. ‑ General standards for bulk gasoline terminals, bulk gasoline plants and small gasoline storage tanks. | CTG: Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals, EPA‑450/2‑77‑026, December 1977.  CTG: Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems, EPA‑450/2‑78‑051, December 1978.  | 12/22/94, 59 FR 65971.  | This section applies to gasoline tank trucks equipped for gasoline vapor collection. The rule requires that the affected gasoline tank trucks must be vapor‑tight.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 28. The combination of the Pennsylvania rules “Pennsylvania 25 PA Code § 129.59” Bulk gasoline terminals and “Pennsylvania 25 P Code § 129.81. Organic liquid cargo vessel loading and ballasting” provide requirements consistent with and as stringent as the New Hampshire rules mentioned above. Also, Pennsylvania’s rule 129.62 addresses leaks from Gasoline Tank Trucks and Vapor Collection Systems more thoroughly than the New Hampshire Rules do.  |
| 1. Solvent Metal Cleaning
 | SOURCES OF VOCSection 129.63. ‑ Degreasing operations. | CTG: Control of Volatile Organic Emissions from Solvent Metal Cleaning, EPA‑450/2‑77‑022, November 1977.  ACT Document – Halogenated Solvent Cleaners, EPA‑450/3‑89‑030, August 1989.  | 1/16/03, 68 FR 2208.   | This section applies to solvent cleaning machine that contains solvent in which VOC is more than 5% by weight. This rule establishes standards for (1) batch cold cleaning machines, (2) batch vapor cleaning machines, (3) inline cleaning machines, (4) and cleaning machines without a solvent‑air interface. It also specifies an alternative standard for (2) and (3) above. | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 29. Pennsylvania’s degreasing operations rule appears more comprehensive than the New Hampshire Rule, when the two rules are compared for source categories that align, Pennsylvania’s rule is consistent with, as stringent as or more stringent than the New Hampshire Rule.  |
| 1. Industrial Cleaning Solvents (2006)
 | SOURCES OF VOC Section 129.63a. ‑ Industrial cleaning solvents.  | CTG: Control of Volatile Organic Compounds from the use of Industrial Cleaning Solvents, EPA 453/R‑06‑001**,** September 2006. | Final Rule submitted to EPA for SIP approval on August 13, 2018. | This section establishes requirements related to the use of industrial cleaning solvents and establishes VOC content or vapor pressure limit. | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 30. Pennsylvania’s Industrial Cleaning Solvents Rule is consistent with and as stringent as the New Hampshire rule. When Pennsylvania developed and evaluated its Industrial Cleaning Solvents rule, it reviewed the New Hampshire rule as one of its RACT evaluation sources. |
| 1. Cutback Asphalt
 | SOURCES OF VOCSection 129.64. ‑ Cutback asphalt paving. | CTG: Control of Volatile Organic Compounds from Use of Cutback Asphalt, EPA‑450/2‑77‑037, December 1977.  | 7/27/84, 49 FR 30183   | This section establishes requirements related to the use of cutback asphalt and establishes VOC content limits for emulsified asphalt.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 31. Pennsylvania’s Cutback Asphalt paving rule 25 Pa Code section 129.64 provides for requirements consistent with and as stringent as the New Hampshire Asphalt rule. Ohio also has similar standards. Although the names of applications are different in each state, the % Solvent contents for the various asphalt types are consistent. |
| 1. Graphic Arts - Rotogravure and Flexography
 | SOURCES OF VOCSection 129.67. ‑ Graphic arts systems.**Additional RACT Requirements For Major Sources of Nox and VOCs (RACT II or Major Source RACT -** Section 129.96 Applicability  | CTG: Control of Volatile Organic Emissions from Existing Stationary Sources, Volume VIII: Graphic Arts - Rotogravure and Flexography, EPA‑450/2‑78‑033, December 1978.DEP Case-By-Case Analysis if and as Appropriate. | 6/25/2015, 80 FR 36482. 12/14/20, [85 FR 80624](https://www.federalregister.gov/citation/85-FR-80624) | This section applies to any rotogravure or flexographic printing process at a facility with potential uncontrolled VOC emission greater than 100 tons per year. The rule establishes the limits of VOC contents in coatings and inks used in the covered facilities, and specifies standards for control devices for various printing processes.  | Section 129.67 and section 129.96 (RACT II) fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 32. Pennsylvania’s requirements for Roto gravure and Flexographic printing presses are consistent with and as stringent as New Hampshire’s Flexible packaging printing press rule. Pennsylvania’s applicability VOC threshold is 100 tons of PTE vs. New Hampshire’s s 50 ton per year VOC threshold, but Pennsylvania also has a daily applicability threshold of 1000 lbs. /day and has a case by case major Source RACT requirement for sources that have the potential to emit 50 tons per year or more. The VOC limits on the standards volatile fractions for the products used in the printing presses in both states is consistent. The state of Ohio appears to have an applicability limit of 100 tons of VOC per year that is consistent with Pennsylvania’s applicability limit threshold. Pennsylvania’s control measures are consistent with or more stringent than New Hampshire’s rule.  |
| 1. Flexible Package Printing (2006)
 | SOURCES OF VOC Section 129.67a ‑ Control of VOC emissions from flexible packaging printing presses.  | Updated: Control Techniques Guidelines for Flexible Package Printing, EPA 453/R‑06‑003, September 2006. | 6/25/2015, 80 FR 36482.  | This section applies to any rotogravure or flexible packaging printing presses The final‑form rulemaking adds § 129.67a to regulate VOC emissions from flexible packaging printing presses. Section 129.67a supersedes the requirements of a RACT permit already issued under Sections 129.91‑129.95 (relating to stationary sources of NOx and VOCs) to the owner or operator for VOC emissions from a flexible packaging printing press subject to Section 129.67a, except to the extent the RACT permit contains more stringent requirements.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 33. Pennsylvania flexible packaging printing presses rule is as stringent and consistent with the New Hampshire Flexible packaging printing press rule. |
| 1. Offset Lithographic Printing and Letterpress Printing Materials (2006)
 | SOURCES OF VOC Section 129.67b ‑ Control of VOC emissions from offset lithographic printing presses and letterpress printing presses. | CTG: Control of Volatile Organic Emissions from Offset Lithographic Printing and Letterpress Printing, EPA 453/R‑06‑002, September 2006. | 6/25/16, 80 FR 36481.  | This section applies to any offset lithographic printing press and letterpress printing press. The final‑form rulemaking adds Section 129.67b to regulate VOC emissions from offset lithographic printing presses and letterpress printing presses. Section 129.67b supersedes the requirements of a RACT permit already issued under Sections 129.91‑129.95 to the owner or operator for VOC emissions from an offset lithographic printing press or a letterpress printing press, or both, subject to Section 129.67b, except to the extent the RACT permit contains more stringent requirements.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 34.Pennsylvania’s offset lithographic printing presses and letterpress printing presses rule applies standards and requirements consistent with, as stringent as, and more stringent than due to a 10 % lower annual applicability threshold than the New Hampshire rule.  |
| 1. Manufacture of Synthesized Pharmaceutical Products
 | SOURCES OF VOC Section 129.68, ‑ Manufacture of synthesized pharmaceutical products.  | CTG: Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products, 450/2‑78‑029, December 1978.  | 5/13/1993, 58 FR 28362.  | This section applies to VOC sources at synthesized pharmaceutical manufacturing facilities, including reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers. The rule establishes standards for controlling and reducing VOC emissions from all covered sources.  | This section fully implements RACT for the CTG source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS. | 35. New Hampshire does not appear to have a similar rule for comparison. (Negative Declaration) DEP will compare its rule with Michigan’s Rule.Pennsylvania’s manufacture of synthesized pharmaceutical products rule is consistent with and as stringent as the standards found in Michigan’s emissions of volatile organic compound from existing equipment utilized in manufacturing synthesized pharmaceutical products Rule. |
| 1. Pneumatic Rubber Tires
 | SOURCES OF VOC Section 129.69. ‑ Manufacture of pneumatic rubber tires. | CTG: Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires, EPA‑450/2‑78‑030, December 1978.  | 12/22/94, 59 FR 65971.  | This section establishes VOC emission limits for pneumatic rubber tire manufacturing operations.  | This section fully implements RACT for the CTG‑source category and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8‑hour ozone NAAQS.  | 36. Pennsylvania’s Manufacture of Pneumatic rubber tires rule is consistent with and as stringent as Ohio’s Rubber tire manufacturing rule. |
| 1. Manufacture of High‑Density Polyethylene, Polypropylene, and Polystyrene Resins

 1. Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment
 | SOURCES OF VOC Section 129.71. ‑ Synthetic organic chemical and polymer manufacturing— fugitive sources. | CTG: Control of Volatile Organic Compound Emissions from Manufacture of High‑Density Polyethylene, Polypropylene, and Polystyrene Resins, EPA‑450/3‑83‑008, November 1983. CTG: Control of Volatile Organic Compound Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment, EPA‑450/3‑83‑006, March 1984.  | 12/22/94, 59 FR 65971.  | This section establishes provisions for minimizing leaks and establishes a leak detection and repair program for process equipment. | This section fully implements RACT for the CTG‑source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8‑hour ozone NAAQS.  | (37. and 38.) Pennsylvania and Michigan have the same leak detection thresholds of 10,000 ppm. Pennsylvania’s rule is consistent with Michigan’s RACT rule for this CTG source category. |
| 1. Aerospace
 | SOURCES OF VOC Section 129.73. ‑ Aerospace manufacturing and rework. | CTG: Aerospace (CTG & MACT) (see 59 FR 29216, June 6, 1994); CTG (Final), EPA‑453/R‑97‑004, December 1997. | 6/25/01, 66 FR 33645.  | This section applies to any aerospace manufacturing and rework facility. In brief, the rule establishes vapor pressure limits, VOC content limits, emission limits and/or work practice standards for: (a) handwipe, spray gun, or flush cleaning operations, (b) primer, topcoat, self‑priming topcoat, and specialty coating operations, (c) chemical milling maskant application, (d) depainting of aerospace vehicles, and (e) handling and storing of VOC.  | This section fully implements RACT for the CTG‑source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8‑hour ozone NAAQS. | 39. New Hampshire does not have an Aerospace Surface coating rule. (Negative Declaration) Pennsylvania will compare its rule to Ohio’s rule. Pennsylvania’s Aerospace manufacturing and rework rule is consistent with, as stringent as or more stringent than Ohio’s Aerospace and rework rule.  |
| 1. Fiberglass Boat Manufacturing Materials (2008)
 | SOURCES OF VOC Section 129.74. ‑ Control of VOC emissions from fiberglass boat manufacturing materials. | CTG: Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials, EPA‑453/R‑08‑004, September 2008. | 8/17/16, 81 FR 54744.  | This section applies to facilities that manufacture hulls or decks of boats from fiberglass or build molds to make fiberglass boat hulls or decks. The rule establishes standards and VOC emission limits for molding resins and gel coats; work practices for resin and gel coat mixing containers; and VOC content and vapor pressure limits for cleaning materials.  | This section fully implements RACT for the CTG‑source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8‑hour ozone NAAQS.  | 40. Pennsylvania’s Fiberglass boat manufacturing rule is consistent with and as stringent as the New Hampshire Rule. Also, Pennsylvania has not had a fiberglass boat manufacturing operation operating in Pennsylvania for many years. |
| 1. Miscellaneous Industrial Adhesives (2008)
 | SOURCES OF VOC Section 129.77 ‑ Control of emissions from the use or application of adhesives, sealants, primers and solvents.  | CTG: Miscellaneous Industrial Adhesives, EPA‑453/R‑08‑005 September 2008.  | 6/25/2015, 80 FR 36482.  | VOC limits for Control of emissions from the use or application of adhesives, sealants, primers or solvent including for reducing VOC emissions from miscellaneous industrial adhesives and adhesive primer application processes.  | This section fully implements RACT for the CTG source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS.  | 41. Pennsylvania Adhesives rule 25 Pa Code section 129.77 provides for requirements consistent with and as stringent as the New Hampshire Adhesives rule. Similar Applications have consistent standards Pennsylvania’s rule has many more categories of regulated products.  |
| 1. Wood Furniture
 | WOOD FURNITURE MANUFACTURING OPERATIONS Sections 129.101-129.107. | CTG: Wood Furniture (CTG‑MACT) ‑ draft MACT out 5‑94; Final CTG, EPA‑453/R‑96‑007, April 1996; see also61 FR 25223, and, 61 FR 50823, September 27, 1996. | 7/20/01, 66 FR 37908.  | This section establishes VOC emission limitations and work practice standards for wood furniture manufacturing operations with the potential to emit 25 tpy or greater of VOC. | This section fully implements RACT for the CTG‑source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8‑hour ozone NAAQS.  | 42. Pennsylvania’s Wood Furniture Manufacturing Operations Coating Rule is as stringent or more stringent than the New Hampshire rule. |
| 1. SOCMI -Distillation and Reactor Processes
 | Added 25 Pa. Code Chapter 129.71a.New Source Performance Standards (NSPS) ‑ Subparts NNN and RRR (as incorporated by reference in 25 Pa. Code Chapter 122) | CTG: Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry, EPA‑450/4‑91‑031, August 1993. | Included as part of this SIP revision. The Department PADEP is requesting that EPA approves and incorporates 25 Pa. Code Chapter 122 as part of the Commonwealth’s SIP submitted to EPA by a letter dated May 10, 2023. |  | This section fully implements RACT for the CTG source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS.  | 43. Pennsylvania’s rule is more stringent than the CTG and Ohio rules for Air Oxidation, Distillation and Reactor processes Using a TRE of 4 for all its processes rather than a TRE of 1. This rule and provides for the correct RACT standards for Pennsylvania sources. |
| 1. Large petroleum dry cleaners
 | Added new section to 25 Pa. Code Chapter 129.63b. | CTG: Control of VOC emissions from large petroleum dry cleaners | Included as part of this SIP revision. PADEP is requesting that EPA approves and incorporates 25 Pa. Code Chapter 129.63b as part of the Commonwealth’s SIP submitted to EPA by a letter dated May 10, 2023. | These requirements apply to large petroleum dry cleaners.This section implements the requirements for the owner and operator of apetroleum solvent washer, dryer, solvent filter, settlingtank, vacuum still, and other containers and conveyors ofpetroleum solvent used in petroleum dry cleaning facilitieswhich consume 123,000 liters (32,493 gallons) ormore of petroleum solvent annually to control their VOCemissions. | This section fully implements RACT for the CTG source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS.  | 44. New Hampshire does not appear to have a Petroleum Dry Cleaning Rule. (Negative Declaration) DEP will compare its rule to Ohio’s rule.Pennsylvania’s Rule for the Control of VOC emissions from large petroleum dry cleaning facilities has a higher applicability threshold than Ohio’s, but the standards are consistent with and are as stringent as Ohio’s rule. Since Pennsylvania has no existing facilities that meet its applicability threshold, nor does it have any existing facility that meets or exceeds Ohio’s current applicability threshold. Having no existing sources that currently need more than a general permit which also requires very small sources to meet current New Sources Performance standards in 40 CFR 60 Subpart JJJ, any future petroleum dry cleaning facility that requires a full permit will go through a permit Best Available Technology review if emissions exceed 2.7 tons of VOC per year. Such an analysis would inform DEP of the latest technology that needs to apply to be applied to this CTG category and would be used to determine if an update to DEP’s RACT rule to include a new applicability limits is needed. |
| 1. SOCMI Air Oxidation
 | Added 25 Pa. Code Chapter 129.71a. | CTG: [Control of Volatile Organic Compound Emissions from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry](https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=91010LU8.txt) EPA-450/3-84-0151984/12 | Included as part of this SIP revision. PADEP is requesting that EPA approves and incorporates 25 Pa. Code Chapter 129.71a as part of the Commonwealth’s SIP submitted to EPA by a letter dated May 10, 2023. | These requirements apply to SOCMI facility that has a vent stream originating from a process unit in which an air oxidation unit process, Table 1 of the requirements as a product, coproduct, by product or intermediate  | This section fully implements RACT for the CTG source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8-hour ozone NAAQS.  | 45. Pennsylvania’s rule is more stringent than the CTG and Ohio rules for Air Oxidation, Distillation and Reactor processes Using a TRE of 4 for all its processes rather than a TRE of 1. This rule and provides for the correct RACT standards for Pennsylvania sources. IPA’s rule applying NSPS at a minimum to all CTG chemical processes is consistent with New York’s Rule which indicates that implementation of comparable Federal requirement for all SOCMI processes meet the requirements of New York’s regulation. .  |
| 1. Shipbuilding and ship repair facilities with surface coating operations
 | Amended 25 Pa. Code Chapter 129.52 | CTG: Control of VOC emissions from the shipbuildingand ship repair facilities with surface coatingoperations | Included as part of this SIP revision. PADEP is requesting that EPA approves and incorporates amendments made to 25 Pa. Code Chapter 129.52 as part of the Commonwealth’s SIP.Submitted to EPA with a letter dated May 10, 2023. | 25 Pa. Code Chapter 129.52 (a) is amended to establish applicability to a shipbuilding or ship repair facility with a surface coating operation that uses or applies more than 264 gallons of one or a combination of coatings listed in Table I, category 12. | This section fully implements RACT for the CTG‑source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8‑hour ozone NAAQS.  | 46. Pennsylvania’s Rule in 129.52 is as stringent as and is consistent with Ohio’s Shipbuilding and Ship Repair Rule 3745-21-20. |
| 47. Gasoline Station Stage 1. | 25 Pa. Code Chapter 129.61. Small gasoline storage tank control (Stage 1 control). | Design Criteria for Stage I Vapor Control Systems – Gasoline Service Stations (PDF 15 pp, 766KB)EPA-450/R-75-1021975/11 |  |  | This section fully implements RACT for the CTG‑source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8‑hour ozone NAAQS.  | 47. The combination of the Pennsylvania rules 129.60, 129.61 and 129.61a provide for requirements consistent with and as stringent as the New Hampshire rules mentioned above for bulk gasoline plants and with this Stage 1 requirement.  |
| 1. Non-CTG VOC RACT Limit. Vinyl Coating | 25 Pa. Code Chapter 129.52 Table 1 Category 4. Vinyl Coating  | NSPS40 CFR Part 60 Subpart FFF 49 FR 26892, June 29, 1984.Subpart FFF—Standards of Performance for Flexible Vinyl and Urethane Coating and Printing | Pennsylvania Subpart NNN7/20/01, 66 FR 37908. 8/24/2011, 76 FR 52870.**Last Update Effective:** 10/22/16EPA Approved 8/10/18, [83 FR 39604](https://www.federalregister.gov/citation/83-FR-39604) | Regulates the VOC content of Flexible Vinyl Coatings | This section fully implements RACT for the CTG‑source category or categories and represents current Pennsylvania RACT control level over the affected sources under the 2008 and 2015 8‑hour ozone NAAQS.  | Pennsylvania’s applicability threshold is more than three times lower than New Hampshire’s and applies to all sources emitting 2.7 tons or higher. Pennsylvania uses the solids by volume standard, which adjusts to the same standard as New Hampshire’s rule after adjusting to standard solvent density.  |