

## EXECUTIVE SUMMARY

### **Final-Form Rulemaking for VOC RACT Requirements for Shipbuilding and Ship Repair Surface Coating Operations, Synthetic Organic Chemical Manufacturing Industry Processes and Large Petroleum Dry Cleaners for the 2015 Ozone NAAQS 25 Pa. Code Chapters 121 and 129**

The Department of Environmental Protection (Department) recommends final-form amendments to 25 Pa. Code Chapters 121 and 129 (relating to general provisions; and standards for sources) to establish presumptive volatile organic compound (VOC) emissions reasonably available control technology (RACT) requirements and RACT emission limitations for the following control techniques guidelines (CTG) source categories: shipbuilding and ship repair surface coating operations; synthetic organic chemical manufacturing industry (SOCMI) air oxidation, distillation and reactor processes; and large petroleum solvent dry cleaners. This final-form rulemaking adds definitions to § 121.1 (relating to definitions) and adds shipbuilding and ship repair surface coating operations to § 129.52 (relating to surface coating processes). This final-form rulemaking also adds §§ 129.63b and 129.71a (relating to control of VOC emissions from large petroleum dry cleaning facilities; and control of VOC emissions from the synthetic organic chemical manufacturing industry — air oxidation, distillation and reactor processes).

#### **Purpose of this Final-Form Rulemaking**

This final-form rulemaking implements measures to control VOC emissions from shipbuilding and ship repair facilities with surface coating operations, large petroleum solvent dry cleaning facilities and SOCMI air oxidation, distillation and reactor processes located in this Commonwealth. VOC emissions are precursors to the formation of ground-level ozone, a public health and welfare hazard. Ground-level ozone is not emitted directly to the atmosphere by these sources or processes, but forms from the photochemical reaction between emissions of VOCs and oxides of nitrogen in the presence of sunlight.

The United States Environmental Protection Agency (EPA) is responsible for establishing National Ambient Air Quality Standards (NAAQS), or maximum allowable concentrations in the ambient air, for certain “criteria” pollutants considered harmful to public health and welfare and the environment, including ground-level ozone. Under the Clean Air Act (CAA) and regulations issued thereunder, states have the primary responsibility for attaining and maintaining an applicable NAAQS in an ozone nonattainment area by adopting and submitting ozone precursor emission control measures to the EPA for review and approval as a revision to the State Implementation Plan (SIP). SIP-approved state regulations and operating permit requirements are Federally enforceable elements of the state’s suite of control measures to address CAA requirements to attain and maintain an applicable NAAQS and bring a nonattainment area into attainment and maintain that attainment status.

One of the measures used under the CAA to help states attain and maintain the applicable ground-level ozone NAAQS in an ozone nonattainment area includes the implementation of RACT for a source or group of sources. The CAA requires states with ozone nonattainment areas or that are located in the Ozone Transport Region (OTR), or both, to develop and implement RACT regulations or RACT operating permit requirements based upon the recommendations

included in the applicable EPA CTG constituting RACT for the control of VOC emissions specific source categories. The EPA has developed and issued CTGs pertaining to the three source categories that are subject to this final-form rulemaking. The requirements established in this final-form rulemaking are consistent with the CTG RACT recommendations for these three source categories. The Department has developed this final-form rulemaking to meet the RACT requirements under sections 172, 182 and 184 of the CAA (42 U.S.C.A. §§ 7502, 7511a and 7511c) for the covered source categories. The inclusion of VOC emission RACT measures in the SIP for these source categories is a requirement under the CAA applicable to the Commonwealth to demonstrate that the Commonwealth is implementing measures to control VOC emissions from sources in these covered categories to support the Commonwealth's progress in attaining and maintaining the applicable ground-level ozone standards. Once approved into the SIP, these measures are Federally enforceable in addition to being enforced by the Commonwealth.

While the RACT requirements of this final-form rulemaking are established for the control of VOC emissions from sources in the covered categories, the Department does not anticipate that implementation of this final-form rulemaking will result in additional reductions of VOC emissions from the affected sources in this Commonwealth. This final-form rulemaking is primarily designed to address administrative issues associated with the lack of Federally enforceable presumptive RACT regulations for these source categories in the Commonwealth's SIP. The Department historically has addressed the Federally enforceable RACT status of the owners and operators of the sources covered by this final-form rulemaking by submitting the individual facility operating permits to the EPA as revisions to the SIP. The owner or operator of the facility bears the administrative burden and costs of advertising the change and conducting the required SIP public hearing and public comment period before the Department can submit the changes to the EPA for review and approval as a revision to the Commonwealth's SIP for that individual operating permit to demonstrate that the Commonwealth continues to satisfy its RACT obligations under the CAA for the applicable ground-level ozone standard.

In contrast, an owner or operator of a subject source that incorporates presumptive RACT requirements established by regulation into the applicable operating permit does not need to submit an application to the Department to amend the individual operating permit for facility modifications that are covered by the presumptive RACT conditions. This relieves the affected owner and operator of the administrative burden and the costs associated with applying to the Department to modify operating permit RACT requirements. Implementation of regulatory presumptive RACT provisions and approval of the presumptive RACT regulations by the EPA as Federally enforceable components of the SIP likewise relieves the affected owner and operator of the administrative burden and the costs associated with submitting the Department-issued individual operating permits to the Administrator of the EPA as revisions to the Commonwealth's SIP. The exact cost savings to an affected owner and operator in terms of time and resources for avoiding these SIP revision submittals for permitting actions will vary by type of facility and type of permitting action.

Additionally, the Commonwealth is required to submit a SIP revision to the EPA to demonstrate and certify that the Commonwealth's SIP contains RACT measures for attaining and maintaining the 2015 8-hour ground-level ozone NAAQS for all categories of sources in this Commonwealth that are covered by a CTG. The Commonwealth is further required to demonstrate how it will bring the ground-level ozone nonattainment areas into attainment and maintenance of the 2015

8-hour ground-level ozone NAAQS. See 83 FR 62998 (December 6, 2018). The administrative burdens and costs for certification of RACT for the 2015 8-hour ground-level ozone NAAQS for the affected owners and operators subject to this final-form rulemaking are expected to be reduced or eliminated through the implementation of these final-form regulatory presumptive RACT measures and their incorporation into the SIP if approved by the EPA.

Consistent with section 4.2(a) of the Pennsylvania Air Pollution Control Act (35 P.S. § 4004.2(a)), the VOC emission control measures established in this final-form rulemaking are reasonably required to achieve and maintain the health-based and welfare-based 8-hour ground-level ozone NAAQS in this Commonwealth and to satisfy related CAA requirements. This final-form rulemaking, if published as a final-form regulation in the *Pennsylvania Bulletin*, will be submitted to the EPA for review and approval as a revision to the Commonwealth's SIP.

### **Summary of this Final-Form Rulemaking**

This final-form rulemaking amends § 129.52(a) to establish that § 129.52 applies to the owner and operator of 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 final-form rulemaking amends § 129.52(c)(1) to require the owners and operators of subject shipbuilding or ship repair surface coating operations to maintain daily records of volume percent of solids for a Table I, Category 12 surface coating whose VOC content is expressed in units of weight of VOC per volume of coating solids. This final-form rulemaking amends Table I to add Category 12 to establish VOC content emission limitations for surface coatings used at shipbuilding or ship repair coating operations.

This final-form rulemaking adds § 129.63b to establish applicability requirements for the owners and operators of large petroleum dry cleaners, definitions for terms used in this section, VOC emission limitations, compliance monitoring and testing requirements, recordkeeping and reporting requirements, and exemptions. The owners and operators of petroleum solvent dry cleaners with an annual petroleum solvent usage below the applicable petroleum solvent usage threshold of 32,493 gallons (123,000 liters) per year will only be subject to recordkeeping and reporting requirements, which are an existing obligation for the owners and operators of these facilities.

This final-form rulemaking adds § 129.71a to establish the applicability requirements for the owner and operator of a SOCFI facility as well as the standards for process vents, air oxidation unit processes, distillation operations and reactor processes. This section also establishes a list of regulated SOCFI chemicals.

### **Affected Parties**

This final-form rulemaking applies to the owners and operators of the following: (1) a shipbuilding and ship repair surface coating operation; (2) a SOCFI air oxidation, distillation or reactor process; or (3) a petroleum solvent dry cleaning facility.

There are three shipbuilding and ship repair facilities with surface coating operations in the Commonwealth. Two of the facilities are under the Department's jurisdiction and the owners and

operators of these two facilities will be subject to this final-form rulemaking. Although the owners and operators of both facilities are considered small businesses under the Small Business Administration small business-size regulations, these owners and operators meet the final-form applicability threshold for controlling VOC emissions from their surface coating operations and are already subject to and comply with existing operating permit conditions that will ensure compliance with the applicable VOC emission limitations established in this final-form rulemaking. The other facility is in the City of Philadelphia and operates under a City of Philadelphia Air Management Services regulation, which has been approved as a revision to the Commonwealth's SIP.

The owners and operators of the five affected SOCFI facilities in this Commonwealth are subject to either the applicable new source performance standard (NSPS) requirements at 40 CFR Part 60, Subparts III, NNN and RRR, which provide control measures at least as stringent as the SOCFI CTG RACT recommendations for the affected sources or alternatively have operating permit conditions that are Federally SIP-approved for purposes of meeting the CTG RACT recommendations. Four of the five affected SOCFI facilities are considered small businesses. The Department is not aware of a facility owner or operator that will be adversely affected by the VOC RACT requirements for SOCFI processes in this final-form rulemaking. These final-form obligations are consistent with the owners and operators' current obligations under their existing operating permits.

The owner and operator of a petroleum solvent dry cleaning facility that uses 32,493 gallons (123,000 liters) or more of petroleum solvent annually will be subject to the petroleum dry cleaning VOC RACT requirements established in this final-form rulemaking. While there are no known petroleum dry cleaning facilities in this Commonwealth that use 32,493 gallons or more of petroleum solvent annually, there are about 20 petroleum dry cleaning facilities that use less than 32,493 gallons of petroleum solvent per year. While the VOC emission control requirements of this final-form rulemaking will not impact the owners and operators of these smaller petroleum dry cleaning facilities, these owners and operators will be subject to the final-form recordkeeping and reporting requirements to demonstrate that their petroleum solvent usage is below the 32,493 gallon annual threshold for implementing the VOC emission control measures. The owners and operators of these smaller petroleum dry cleaning facilities will not be affected beyond their current obligations in operating permits, Department-issued general permits or existing NSPS requirements.

### **Advisory Groups**

The Department consulted with the Air Quality Technical Advisory Committee (AQTAC) and the Small Business Compliance Advisory Committee (SBCAC) on the proposed rulemaking on October 15, 2020, and October 28, 2020, respectively. Other than two abstentions in the AQTAC vote, both committees voted unanimously to concur with the Department's recommendation to move the proposed rulemaking forward to the Board for consideration. The proposed rulemaking was discussed with the Citizens Advisory Council (CAC) Policy and Regulatory Oversight (PRO) Committee on November 9, 2020. On the recommendation of the PRO Committee, on November 17, 2020, the CAC concurred with the Department's recommendation to move the proposed rulemaking forward to the Board. The AQTAC, SBCAC and CAC meetings are advertised and open to the public.

The Department presented the draft final-form Annex A to AQTAC and the SBCAC August 18, 2022, and August 24, 2022, respectively. Both committees concurred with the Department's recommendation to move this final-form rulemaking forward to the Board for consideration. This final-form rulemaking was discussed with the CAC PRO on June 27, 2022. On the recommendation of the PRO Committee, on July 19, 2022, the CAC concurred with the Department's recommendation to move this final-form rulemaking forward to the Board.

### **Public Comments and Board Hearings**

The proposed rulemaking was adopted by the Board at its September 21, 2021, meeting and published in the *Pennsylvania Bulletin* on January 29, 2022. See 52 Pa.B. 689 (January 29, 2022). Three public hearings were held on March 1, 3 and 4, 2022, in Harrisburg, Pittsburgh and Norristown, respectively. The 66-day public comment period closed on April 4, 2022. The Department received one public comment. No one testified during the public hearings. The Independent Regulatory Review Commission (IRRC) separately submitted three comments on the proposed rulemaking to the Board on May 4, 2022.

A commentator suggested a correction to footnote "b" associated with the proposed amendments to § 129.52, Table I, Category 12, Shipbuilding and Ship Repair Coatings. The commentator suggested that footnote "b" be corrected as follows: "... multiply the limit by (3.785 liter/gallon)." The conversion constant had a comma instead of a decimal point, which would cause the regulated community to perform an improper calculation when converting from metric units to English/Imperial units. The Department agreed with the commentator and made the requested change.

IRRC requested the Board add a reference to "ASTM 4256-89 or 94" to the definition of "nuclear specialty coating" in this final-form rulemaking. The Department added the requested ASTM reference to the definition of "nuclear specialty coating."

IRRC asked that a definition of the term "as supplied" be added to this final-form rulemaking to support the definition of "thinning ratio." The Department responds that the term "as supplied" is already defined in § 121.1.

IRRC suggested that the correction be made to the typographical error in footnote "b" as specified by the commentator. The Department has made this change.

No comments were received from the House and Senate Environmental Resources and Energy Committees.

### **Recommendation**

The Department recommends adoption of this final-form rulemaking.