



Bureau of Air Quality

Proposed Rulemaking: Control of VOC Emissions from Large Petroleum Dry Cleaners, Shipbuilding and Repair Coating Operations, and SOCFI Reactors, Distillation, and Air Oxidation Processes

(25 Pa. Code Chapters 121 and 129)

Environmental Quality Board Meeting
September 21, 2021

Tom Wolf, Governor

Patrick McDonnell, Secretary

Overview

Purpose

- Control VOC emissions from certain existing sources
- Assist in certifying Control Techniques Guidelines (CTG) Reasonably Available Control Technology (RACT)

CTGs addressed by this rulemaking include:

- Large Petroleum Drycleaners
- Shipbuilding and Ship Repair Coatings
- Air Oxidation Processes for Synthetic Organic Chemical Manufacturing Industry (SOCMI)
- Reactor & Distillation Processes for SOCMI

Background

Clean Air Act (CAA) RACT Requirements for VOC and NOx

- Include State Implementation Plans (SIPs) for nonattainment areas and Ozone Transport areas
- Require SIPs to include:
 - Reasonably Available Control Measures (RACM)
 - Reasonably Available Control Technology (RACT)
- Require SIP revisions to implement RACT which must include VOC source categories covered by CTGs

Background

CAA RACT requirements for CTGs

- EPA issues and updates CTGs in accordance with Section 183(a). Draft CTGs are subject to public comment.
- CTGs provide EPA's recommendations of what constitutes RACT.
- EPA requires the implementation of RACT in Section 184(b)(1)(B).
- The CTG "informs" state regulators of EPA's analysis and recommendations.
- CTG is presumed to meet RACT requirements by EPA.

Affected Facilities

New CTG rules will help DEP meet and certify CTG RACT requirements in the CAA.

Affected facilities in PA:

- Two Existing Shipbuilders already required to meet CTG requirements in permits.
- There are no large Petroleum Drycleaners in PA, but this rule will provide existing small petroleum dry cleaners with a RACT exemption limit.
- SOCFI facilities already meet CTG requirements.

Large Petroleum Dry Cleaners

Background

- In September 1982, EPA issued a CTG with RACT recommendations for large petroleum dry cleaners.
- The proposed rulemaking adds new PA Code Section for “Control of VOC emissions from large petroleum solvent dry cleaners.”
- The proposed rulemaking is consistent with the CTG’s model rule.

Large Petroleum Dry Cleaners

Applicability Provisions

The proposed rulemaking would apply to the owners and operators of Large Petroleum Dry Cleaners.

- Statewide for the owner and operator using petroleum solvent at their dry-cleaning facility and consumes 32,493 gallons or more of petroleum solvent annually.
- “Consume” - the amount of petroleum solvent purchased, less the amount of petroleum solvent sent for disposal or returned for recycling during a calendar year.

Large Petroleum Dry Cleaners

Emission Limitations

Additional requirements for affected unit

- A petroleum solvent vapor or liquid leak must be repaired within 3 working days after identifying the source of a leak.
 - If a repair part is not on hand to perform the repair, the owner or operator shall order the part within 3 working days.
 - The identified leak will be repaired within 3 working days following the arrival of the repair part.
- Rule includes compliance monitoring and testing requirements.
- Rule includes recordkeeping and reporting requirements.
- Rule would require the owner or operator of an exempt petroleum solvent dry cleaning facility to maintain records of annual solvent consumption onsite for 5 years.

SOCMI Facilities

Background

SOCMI Air Oxidation Distillation and Reactors

- August 1993 - EPA issued a CTG for the “Control of VOC Emissions from Reactors and Distillation Operations Processes SOCMI”
- “Air Oxidation Processes SOCMI” CTG issued in December 1984
- Proposed Rulemaking is similar to Philadelphia’s SIP approved CTG RACT rule
- Proposed rulemaking adopts existing NSPS by reference and applies NSPS requirements to all applicable sources in the CTG

SOCMI Facilities

Applicability Provisions

The proposed SOCMI rulemaking adds:

- Definitions
- New section titled “Control of VOC from the synthetic organic chemical manufacturing industry — Air oxidation, distillation and reactor processes.”
- A table listing the regulated SOCMI chemicals from the CTGs and NSPS rules.

SOCMI Facilities

Applicability Provisions

- Affected sources producing one or more of the chemicals listed in Table 1 as a product, coproduct, byproduct or intermediate.
- Owner and operator of a SOCMI facility that has a vent stream originating from a process unit in which an air oxidation unit process, distillation operation or reactor process produces one or more of the chemicals in Table 1.
- Reference to total organic compounds or TOC in EPA NSPS rules shall be considered equivalent to VOC defined by DEP.
- Must meet the requirements of this section unless more stringent requirements exist in an applicable permit or plan approval issued by the Department.

Shipbuilding Facilities

Background

In August 1996, EPA issued a CTG for surface coating operations at shipbuilding and ship repair facilities.

The proposed rulemaking:

- Adds definitions.
- Modifies the applicability in existing coating rule, § 129.52, to accommodate shipbuilding.
- Adds a 12th coating category into Table I in § 129.52 and adds coating types with standards taken from the Shipbuilding CTG.

Shipbuilding Facilities

Applicability & Recordkeeping Provisions

- Applies to the owners and operators of shipbuilding and repair coatings where a facility uses or applies more than 264 gallons of coatings annually.
- Recordkeeping includes the volume percent of solids whose VOC content is expressed in units of weight of VOC per volume of coating solids.
- Other requirements in § 129.52 remain unchanged and apply to the shipbuilding coating category.

Advisory Committee Review

The following advisory committees concurred with DEP's recommendation to present this proposed rulemaking to the EQB for consideration:

- Air Quality Technical Advisory Committee on October 15, 2020
- Small Business Compliance Advisory Committee on October 28, 2020
- Citizens Advisory Council on November 17, 2020

Recommendation

- DEP recommends the adoption of this proposed rulemaking.
- A 60-day public comment period with at least three public hearings is recommended.



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DEPARTMENT OF ENVIRONMENTAL PROTECTION



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