



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 12<sup>th</sup> 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.



Bureau of Air Quality

## **Krishnan Ramamurthy, Deputy Secretary**

Office of Waste, Air, Radiation and Remediation

[kramamurth@pa.gov](mailto:kramamurth@pa.gov)

## **Mark Hammond, Director**

Bureau of Air Quality

[mahammond@pa.gov](mailto:mahammond@pa.gov)

## **Jesse Walker, Assistant Counsel**

Bureau of Regulatory Counsel

[jeswalker@pa.gov](mailto:jeswalker@pa.gov)