



Bureau of Air Quality

Final Rulemaking

25 Pa. Code Chapters 121 and 129

Control of VOC Emissions from Industrial Cleaning Solvents;
General Provisions; Aerospace Manufacturing and Rework; and
Additional RACT Requirements for Major Sources of NO_x and VOCs

Environmental Quality Board Meeting
April 17, 2018

Tom Wolf, Governor

Patrick McDonnell, Secretary

Summary of Final Rulemaking

- Implements control measures to reduce volatile organic compound (VOC) emissions from industrial cleaning solvents.
 - Adds § 129.63a.
- Clarifies amendments to other sections of Chapter 129.
 - §§ 121.1 and 129.51 to support the addition of § 129.63a.
 - § 129.73 to correct a numbering error in the table of VOC content limits.
 - §§ 129.96, 129.97, 129.99, and 129.100 to clarify applicability.
- VOC emissions are precursors to the formation of ground-level ozone, a public health and welfare threat.

Purpose of Final Rulemaking

- § 129.63a establishes Reasonably Available Control Technology (RACT) requirements and RACT emission limitations for VOC emissions from the use of organic industrial cleaning solvents at cleaning unit operations not regulated elsewhere in Chapter 129 or Chapter 130.
- The RACT requirements are consistent with the Control Techniques Guidelines (CTG) for Industrial Cleaning Solvents (ICS) issued by the EPA in 2006.
- RACT for these sources is required statewide, and not just in designated ozone nonattainment areas, because PA is included in the Ozone Transport Region.

Basis of the Final Rulemaking

- VOC RACT emission reduction measures for these sources are reasonably required to achieve and maintain the 8-hour ground-level ozone National Ambient Air Quality Standards and to satisfy related Clean Air Act requirements for this Commonwealth.
 - Reduce local formation of ground-level ozone.
 - Reduce transport of VOC emissions and ground-level ozone to downwind states.
- EPA made a finding of failure to submit RACT for industrial cleaning solvents on February 3, 2017.
- The 18-month EPA sanction clock deadline is September 6, 2018.

Elements of § 129.63a

Final-form § 129.63a includes:

- Applicability
- Definitions
- Exceptions and exemptions
- Emission limitations
- Work practice requirements
- Compliance demonstration
- Recordkeeping and reporting requirements

Applicability of § 129.63a

- Applies to the owner or operator of a facility with cleaning operations emitting VOCs of 2.7 tons or more during any 12-month rolling period.
 - Equivalent to the evaporation of approximately 2 gallons of industrial cleaning solvent per day.
- As many as 576 facility owners and operators may emit 2.7 tons or more of VOC emissions per 12-month rolling period.
 - Required to implement VOC emission control measures, work practice standards, and recordkeeping requirements.
 - As many as 253 may be small businesses.
- The owner or operator of a facility that emits less than 2.7 tons of VOC emissions for any 12-month rolling period is required to keep records to demonstrate they are remaining below the 2.7 ton applicability threshold.

Compliance Options for § 129.63a

- Three compliance options:
 - Use of low VOC content industrial cleaning solvents.
 - Use of low vapor pressure VOC industrial cleaning solvents.
 - Operation of a VOC emissions capture system and add-on control device meeting an overall control efficiency of 85% or more.
- Can use one or more of these options for flexibility.

Environmental Impact of § 129.63a

- Maximum VOC emission reductions that may be achieved are estimated at 12,499 tons annually from 576 affected facilities.
- Actual VOC emission reductions achieved may be lower because many affected facility owners and operators may already comply.
- Many owners and operators already use compliant solvents in their cleaning operations as compliant solvents have been available for many years.
- Work practices for industrial cleaning solvents may also provide VOC emission reductions.

Economic Impact of § 129.63a

- Determination of RACT considers costs to the affected owners and operators.
- Annual cost of compliance for each facility owner or operator is estimated to range from a savings of \$282 to a cost of \$27 based upon analysis in the 2006 CTG.
- Work practices may result in a net cost savings by reducing the amounts of solvents that are lost to evaporation, spillage, and waste.

Public Participation Process

- Proposed rulemaking published in the *Pennsylvania Bulletin* on June 17, 2017 (47 Pa. B. 3356).
- EQB's 66-day public comment period ended on August 21, 2017.
- Public hearings were held on July 18, 19, and 20, 2017, in Norristown, Pittsburgh, and Harrisburg, respectively.
- One commentator, SGIA, provided testimony.
- Six commentators submitted written comments.
 - Members of Regulated Industry
 - Environmental Protection Agency (EPA)
- IRRC submitted written comments.

Summary of Comments

- Regulated Industry Comments
 - Technical infeasibility
 - Names of exempted categories
- EPA Region III
 - Justification for exemptions for Federal Agencies and Screen Printing.
 - Retroactively relieving affected owners and operators from the applicability of §§ 129.96—129.100
- IRRC
 - Incorporated the EPA's concerns.
 - Reasonableness of exemptions.
 - Reasonableness of compliance options.

DEP Actions on Comments

- DEP justified exemptions as requested by the EPA and IRRC.
- DEP addressed concerns regarding retroactively relieving affected owners and operators from the applicability of §§ 129.96—129.100.
- All comments received are addressed in the comment response document and in the preamble to this final rulemaking.
- All issues have been resolved.

Advisory Committee Review

Advisory committees and the Citizens Advisory Council (CAC) voted to concur with DEP's recommendation to present the final rulemaking to the EQB for consideration:

- January 24, 2018 – Small Business Compliance Advisory Committee
- February 8, 2018 – Air Quality Technical Advisory Committee
- February 9, 2018 – CAC Policy and Regulatory Oversight Committee
- February 20, 2018 – CAC

Final Rulemaking Recommendation

- **DEP recommends EQB adoption of this rule.**
- Compliance date will be the date of publication as a final rulemaking in the *Pennsylvania Bulletin*.
- DEP will submit the final-form regulation, if adopted, to the EPA for approval as a revision to the State Implementation Plan upon publication.
- Finding of failure to submit RACT for industrial cleaning solvents; 18-month EPA sanction clock deadline is September 6, 2018.



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