

Measurement and Reporting of Condensable Particulate Matter Emissions 25 Pa. Code Chapters 121 and 139

Environmental Quality Board Regulation #7-477 Independent Regulatory Review Commission #2955

Comment and Response Document

Bureau of Air Quality

Measurement and Reporting of Condensable Particulate Matter Emissions

The Environmental Quality Board (Board) published notice of the public comment period and public hearings for the Measurement and Reporting of Condensable Particulate Matter Emissions proposed rulemaking in the *Pennsylvania Bulletin* on July 7, 2012 (42 *Pa.B.* 4363). The Board held three public hearings on the proposed rulemaking at the following locations:

August 7, 2012 Department of Environmental Protection

Southwest Regional Office

Monongahela Conference Room

400 Waterfront Drive Pittsburgh, PA 15222-4745

August 9, 2012 Department of Environmental Protection

Southeast Regional Office

Schuylkill River Conference Room

2 East Main Street Norristown, PA 19401

August 10, 2012 Department of Environmental Protection

Rachel Carson State Office Building

Conference Room 105 400 Market Street Harrisburg, PA 17105

The 66-day public comment period for the proposed rulemaking closed on September 10, 2012. Testimony received during the public hearings and written comments received during the public comment period are summarized in this comment and response document. The Independent Regulatory Review Commission (IRRC) reviewed the public comments and also submitted comments to the Board. The identity of each commentator making the comment is indicated by the assigned numbers in parentheses after each comment.

ID	Name/Address	Submitted one page Summary for distribution to EQB	Provided Testimony
1.	John A. Maitland		
	Eastern U.S. Environmental, Health, and Safety Manager		
	Graymont (PA) Inc. 194 Match Factory Place		
	Bellefonte, PA 16823		
2.	David Gibson		
	Plant Manager		
	Ontelaunee Power Operating Co., LLC.	✓	
	5115 Pottsville Pike		
	Reading, PA 19605		
3.	Douglas L. Biden		
	President		
	Electric Power Generation Association	✓	
	800 North Third Street, Ste 303		
4.	Harrisburg, PA 17102 Peter T. Kimmel		
4.	V.P. Operations		
	Armstrong Cement and Supply Corp.	√	
	100 Clearfield Road		
	Cabot, PA 16023-9521		
5.	David Sumner		
	Executive Director		
	Independent Regulatory Review Commission (IRRC)		
	333 Market Street, 14 th Floor		
	Harrisburg, PA 17101		

General Support

1. Comment: A commentator expresses general support for the proposed rulemaking to clarify requirements for measurement and reporting of condensable particulate matter (PM) emissions. (4)

Response: The Department of Environmental Protection (Department) appreciates the commentator's expression of support.

General Opposition, Concerns, and Suggestions

2. Comment: A commentator recommends deleting the word "primary" from the definition of "condensable particulate matter" because it is not used elsewhere in the regulation and could cause uncertainty. IRRC recommends either removing the word "primary" from the definition of "condensable particulate matter" or explaining why it is clear and necessary to that definition. (3, 5)

Response: The Department agrees with the commentator and IRRC and has removed the word "primary" from the definition. The final-form definition reads as follows:

Condensable particulate matter—Material that is vapor phase at stack conditions but which condenses or reacts, or both, upon cooling and dilution in the ambient air to form solid or liquid particulate matter immediately after discharge from the stack. All condensable particulate matter, if present from a source, is typically in the $PM_{2.5}$ size fraction and therefore all of it is a component of both $PM_{2.5}$ and PM-10.

3. Comment: Three commentators request changes to the first sentence of \S 139.12(c), to include PM10 and PM_{2.5} in addition to particulate matter, as follows:

"Compliance with a particulate matter (PM), PM10, or PM_{2.5} emission limitation..."; or, "Compliance with a particulate matter, PM10, or PM_{2.5} emission limitation..."

The commentators explain this would clarify that condensable particulate matter is not included in determining compliance with emission limits for PM-10 and PM_{2.5} that were established prior to January 1, 2011, unless required by a plan approval, operating permit, or the State Implementation Plan codified in 40 CFR § 52.2020 (relating to identification of plan). The commentators assert this would make the regulation more consistent with corresponding Federal regulations at 40 CFR § 51.166(b)(49)(i)(d)(vi) (sic) and 40 CFR § 52.21(b)(50)(i)(d)(vi) (sic), and note that some existing particulate matter emission limitations established in regulations, Plan Approvals and Permits refer to particulate matter or PM-10 and do not distinguish between filterable and condensable PM. IRRC recommends that the EQB either add this clarification or explain why it is unnecessary. (2, 3, 4, 5)

Response: The Department agrees with the commentators' suggestion and has made this change. The final-form revision to 25 Pa. Code § 139.12(c) reads as follows:

- (c) Compliance with a particulate matter, PM-10 or $PM_{2.5}$ emission limitation issued by the Department prior to January 1, 2011, will not be based on condensable particulate matter unless required under the terms and conditions of a plan approval, operating permit or the State Implementation Plan codified in 40 CFR 52.2020 (relating to identification of plan).
- **4. Comment:** In addition to the requested change described under Comment 3, above, one commentator requests that the phrase "or an applicability determination made," be added to § 139.12(c) because the EPA intended for condensable emissions to be considered prospectively for both emission limitation compliance demonstrations and major NSR program applicability determinations. The Department included the January 1, 2011, date based on the EPA's transition period for implementation of the federal NSR program for PM_{2.5}. (See 75 Fed. Reg. 80118, 80124, December 21, 2010). When implementing the NSR program, the EPA established a transition period partly in response to operator concerns about retroactive enforcement, and explained that it would not revisit applicability determinations made prior to January 1, 2011, unless an Implementation Plan or Permit clearly required otherwise. (See 73 Fed. Reg. 28321, 28335, May 16, 2008). (4)

Response: The Department disagrees that the additional language is necessary. The final-form rulemaking clarifies the filterable and condensable PM testing applicability requirements adequately. Limitations regarding review of applicability determinations made before January 1, 2011, remain as established in the United States Environmental Protection Agency's (EPA) final rule for *Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5})*, 73 FR 28321 (May 16, 2008), and the EPA's final rule for *Methods for Measurement of Filterable PM*₁₀ and PM_{2.5} and Measurement of Condensable PM Emissions From Stationary Sources, 75 FR 80118 (December 21, 2010).

5. Comment: In addition to the requested changes described under Comments 3 and 4, one commentator requests revision of proposed 25 *Pa. Code* § 139.12(c) to expressly indicate that the Department will specify when an emission limitation for PM, PM10, or PM_{2.5} is based on condensable emissions in addition to filterable emissions. The commentator asserts the regulated community understands a generic "particulate matter" emission limitation to mean filterable only, and that limitations expressed without specific reference to condensable emissions should be interpreted as filterable only. The commentator proposes this language:

Compliance with a particulate matter (PM), PM10, or PM_{2.5} emission limitation issued by the Department or an applicability determination made prior to January 1, 2011, will not be based on condensable particulate matter unless expressly required under the terms and conditions of a plan approval, operating permit or the State Implementation Plan codified in 40 CFR 52.2020 (relating to identification of plan). PM, PM10, and PM_{2.5} emission limitations issued by the Department on or after January 1, 2011 shall specifically identify whether condensable emissions are to be included. (4)

Response:

The Department has revised final-form 25 Pa. Code § 139.12(c) as explained in the response to Comment No. 3. The Department disagrees with adding the commentator's other requested language because the language set forth in final-form 25 Pa. Code § 139.12(c) clearly states that compliance with a particulate matter, PM-10 or PM_{2.5} emission limitation issued by the Department prior to January 1, 2011, will not be based on condensable particulate matter unless required under the terms and conditions of a plan approval, operating permit or the State Implementation Plan codified in 40 CFR 52.2020 (relating to identification of plan). Compliance with a particulate matter emission limitation issued by the Department on and after January 1, 2011, will include condensable particulate matter as specified in 25 Pa. Code § 139.12(b) and (d).

6. Comment: A commentator recommends revising 25 *Pa. Code* § 139.12(b) to clarify that the applicability of the substantive requirements in subsection (b) is limited by subsections (a) and (c), by adding the phrase "except as provided in (a) and (c)" at the end of the last sentence in 25 *Pa. Code* § 139.12(b). (4)

Response: The Department disagrees. The requirements of subsection (b) are not limited by subsections (a) or (c). The owner and operator of a regulated stationary source are required to meet the Federal requirements for particulate matter standards. The changes to the regulatory language and exceptions requested by the commentator would result in a regulation that does not comply with Federal requirements.

7. Comment: A commentator recommends removing the first sentence of 25 *Pa. Code* § 139.12(d), contending that this sentence is redundant with 25 *Pa. Code* § 139.12(b) and inconsistent with 25 *Pa. Code* § 139.12(c). (4)

Response: The Department disagrees that 25 *Pa. Code* § 139.12(d) is redundant with 25 *Pa. Code* § 139.12(b). Section 139.12(b) requires that the owner or operator of a unit subject to emission limitations for PM-10 and PM_{2.5} demonstrate compliance for filterable and condensable PM10 and PM_{2.5} emissions. The first sentence in 25 *Pa. Code* § 139.12(d) requires the demonstration of compliance specified in 25 *Pa. Code* § 139.12(b) to be made by measurement and reporting. The second sentence in 25 *Pa. Code* § 139.12(b) follows by requiring that the measurement and reporting methods used are equivalent to the test methods and procedures specified in 25 *Pa. Code* § 139.4(5). The Department disagrees that 25 *Pa. Code* § 139.12(d) conflicts with 25 *Pa. Code* § 139.12(b). The Department requires that testing include filterable and condensable emissions regardless of whether the condensable portion will be used in the compliance demonstration. A compliance demonstration under 25 *Pa. Code* § 139.12(c) shall include the measurement and reporting of both filterable and condensable particulate matter, regardless of whether the condensable portion is subject to compliance demonstration under subsection (c).

8. Comment: A commentator requests that the Board adopt EPA Conditional Test Method 039 as an equivalent alternative to EPA Test Methods 201A and 202. IRRC asks whether EPA Conditional Test Method 039 is equivalent to the methods specified in the *Source Testing Manual*. (1, 5)

Response: The Department disagrees with the suggestion of including a Federal Conditional Test Method (CTM) in the final-form rulemaking. A CTM is an analytical method conditionally approved by the EPA to be applicable to measurement of a pollutant for a specific category of stationary sources. A CTM is potentially subject to change based on EPA review of additional information when the CTM undergoes the Federal rulemaking process to be adopted as a Federal Reference Test Method (RTM). The Department will therefore not include a CTM in the finalform rulemaking that may change upon adoption as a Federal RTM, may not be approved by EPA for certain source categories, or may never be adopted as a final RTM. The owner or operator of an affected source may request the Department's approval to use CTM 039 as an alternative to Method 201A or 202 on a case-by-case basis in accordance with 25 Pa. Code § 139.12(d), and by 25 Pa. Code § 139.12(d)'s reference to 25 Pa. Code § 139.4(5) (relating to references), with the Department's Source Testing Manual (Revision 3.3) and Technical Guidance Document (TGD) Number 274-0300-002. Condensable particulate matter is defined in § 1.3.1.3 (relating to definitions) of the Source Testing Manual as "The sum of the condensable organic particulate and the condensable inorganic particulate as determined by EPA Method 202 or an equivalent method."

9. Comment: One commentator recommended that the Board confirm that this rulemaking action will not affect the annual inventory required by 25 *Pa. Code* § 135.3. The commentator asserts that operators are not currently required to include condensable emissions in the emission inventory. (4)

Response: The Department agrees that this final-form rulemaking does not affect annual emission statement reporting requirements under 25 *Pa. Code* § 135.21 (relating to emission statements) or annual emission inventory reporting requirements under § 135.3 (relating to reporting). Owners and operators of air contamination sources subject to those reporting requirements are presently required to report emissions of PM-10 and PM_{2.5} in accordance with the Department's *Instructions for Completing the Annual Emission Statement Reporting Forms*. However, the Department disagrees with the commentator's assertion that operators are not currently required to include condensable emissions in the emission inventory. It is also important to note that under existing regulations the owners and operators of Title V facilities must also pay emission fees for condensable emissions in accordance with 25 *Pa. Code* § 127.705 (relating to emission fees). As discussed in the response to Comment # 2, condensable particulate emissions are a component of PM_{2.5} and PM-10.

10. Comment: A commentator recommended that the Board clarify and address whether condensable emissions will be considered a regulated pollutant for purposes of calculating the Title V annual emission fees required by 25 *Pa. Code* § 127.705 (relating to emission fees). IRRC will review the EQB's response to this comment as part of its determination of whether the final-form regulation is in the public interest. (4, 5)

Response: Condensable particulate matter emissions are already regulated pollutants and required to be included in the accounting of a facility's emissions of particulate matter and reported for the purposes of calculating the Title V annual emission fees required by 25 *Pa. Code* § 127.705. Title V emission fees are already being paid to the Department. This final-form rulemaking does not add a separate fee for condensable particulate matter emissions or increase the Title V annual emission fee for regulated pollutants required by 25 *Pa. Code* § 127.705.

11. Comment: IRRC commented that 25 *Pa. Code* § 139.12(d) is not clear regarding who makes the determination that a test method or procedure is equivalent to those specified in the *Source Testing Manual*. IRRC recommended that the subsection be revised to clarify who makes the determination. (5)

Response: To address IRRC's concern, 25 *Pa. Code* § 139.12(d) has been revised in the final-form regulation to expressly state that the Department's prior written approval is required for the use of a different test method or procedure as an alternative to a method or procedure prescribed in the Source Test Manual.

12. Comment: IRRC requests EQB to consider cross referencing 25 *Pa. Code* § 139.5 (relating to revisions to the source testing manual and continuous source monitoring manual) to clarify how the Department revises the *Source Testing Manual*. (5)

Response: The Department considered IRRC's request to cross-reference 25 *Pa. Code* § 139.5 in 25 *Pa. Code* § 139.12(d) to clarify how the *Source Testing Manual* is revised. To this end, § 139.12(e) has been added in the final-form regulation to cross reference 25 *Pa. Code* § 139.5 as follows: The Source Testing Manual referenced in § 139.4(5) is subject to revision in accordance with the procedures described in § 139.5 (relating to revisions to the source testing manual and continuous monitoring manual).