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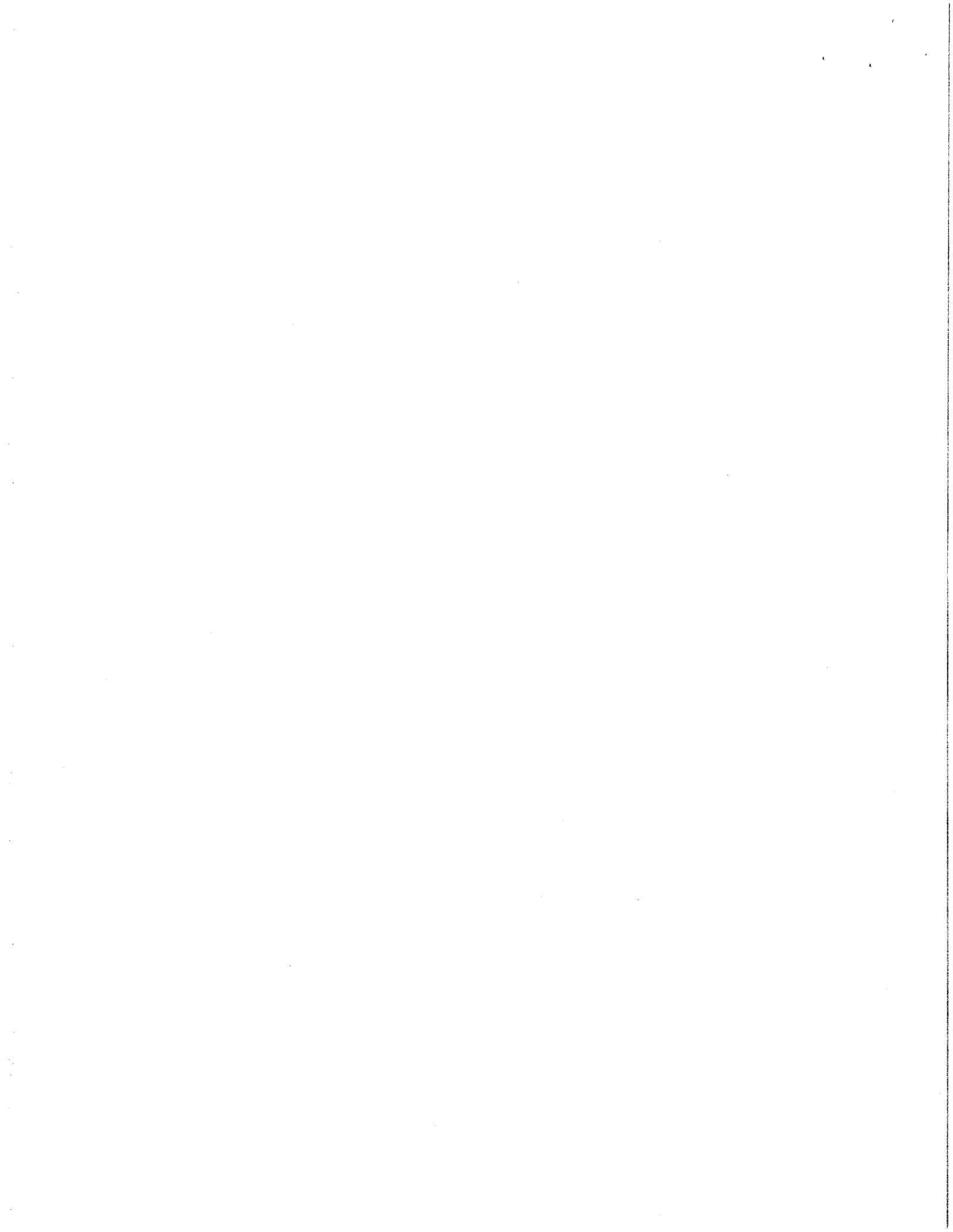
Tate, Michele

From: Shimshock, John [JShimshock@rrienergy.com]
Sent: Monday, April 12, 2010 3:36 PM
To: EP, RegComments
Cc: irrc@irrc.pa.us
Subject: Comments to Proposed Rulemaking No. 7-450 (#2818); 40 Pa.B 703 - Saturday, February 6, 2010; 25 Pa. Code Chapters 121 and 127 (New Source Review)

Please find attached comments prepared by RRI Energy, Inc. to proposed Rulemaking No. 7-450 (#2818); 40 Pa. B 703 – Saturday February 6, 2010

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April 12, 2010

Via Electronic Submittal
RegComments@state.pa.us

Commonwealth of Pennsylvania
Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477

Re: *Comments to Proposed Rulemaking No. 7-450 (#2818)*
40 Pa.B 703 – Saturday, February 6, 2010
25 Pa. Code Chapters 121 and 127 (New Source Review)

Dear Sir or Madam:

Please find below comments prepared by RRI Energy, Inc. to the proposed changes to 25 Pa. Code Chapters 121 and 127 under consideration by the Environmental Quality Board (EQB). RRI Energy is a merchant electrical power producer¹ who owns and/or operates approximately 14,000 megawatts (MW) of power generation from 34 facilities in the United States. In Pennsylvania, the company owns and/or operates approximately 8,000 net MW of generation capacity. The Eastern Regional office is located in Canonsburg, PA. All of our Pennsylvania-based facilities will be affected by requirements of the proposed rule.

RRI Energy understands that the proposed rulemaking would amend the existing requirements promulgated in Chapter 127, Subchapter E (New Source Review [NSR]) to incorporate recently-promulgated Federal requirements for PM_{2.5} and PM_{2.5} precursors. Although RRI Energy understands the impetus for the proposed rulemaking, we insist that the proposed changes mirror the new federal requirements to the extent practicable. This would help to ensure consistency (where appropriate) among the following:

- ▶ Federal regulations, especially 40 CFR 51.166 and 40 CFR 52.21
- ▶ 25 Pa. Code Chapter 127, Subchapter D (Prevention of Significant Deterioration of Air Quality, applicable to attainment and unclassifiable areas) – 40 CFR 52.21 is incorporated by reference under Subchapter D
- ▶ 25 Pa. Code Chapter 127, Subchapter E (New Source Review, applicable to non-attainment areas) – Subchapter E regulations supersede 40 CFR 51.166 regulations in Pennsylvania

RRI Energy's review of the proposed rulemaking revealed inconsistencies between the Federal

1: A merchant power plant is funded by investors and sells electricity in the competitive wholesale power market. Because a merchant plant is not required to serve any specific retail consumers, consumers are not obligated to pay for the construction, operation or maintenance of the plant. A traditional rate-based power plant, on the other hand, is built and operated by a regulated electric utility specifically to serve that utility's retail customers. In return, the customers are obligated to pay for the plant's construction, operation and maintenance.

regulations and proposed changes to 25 Pa. Code Chapters 121 and 127. Enactment of the current proposed rulemaking would result in two distinct and different sets of definitions for some parameters of interest (e.g., two different definitions for a “regulated NSR pollutant” and “significant,” with the definitions depending on the attainment status of the pollutant of interest). RRI Energy insists that the definitions be consistent among the regulations in an attempt to promote understanding among the stakeholders and consistency of usage. In addition, RRI Energy’s comments include a proposed change to the existing Subchapter E regulations. This proposed change is (i) intended to provide clarity to the existing regulations and (ii) consistent with the proposed rulemaking under consideration by the EQB. A single page summary of RRI Energy’s comments is also enclosed for inclusion in the agenda package for the EQB meeting that plans to review this proposed rulemaking.

RRI Energy’s specific comments are as follows:

1. 25 Pa. Code §121.1 – Definitions (proposed rulemaking is denoted by bold font)

Proposed Rulemaking:

Maximum allowable emissions — **The emission rate calculated using the maximum rated capacity of the source unless the source is subject to enforceable permit conditions which limit operating rate or hours of operation, or both, and the most stringent of the following:**

- (i) **Applicable new source performance standards or standards for hazardous pollutants in 40 CFR Parts 60 and 61**
- (ii) **Applicable emission limitation under this title**
- (iii) **The emission rate specified as an enforceable permit**

Requested Change (verbatim per 40 CFR 52.21(b)(16), which is incorporated by reference under Subchapter D)

Allowable emissions means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

- (i) The applicable standards as set forth in 40 CFR parts 60 and 61;
- (ii) The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or
- (iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

Justification:

Consistency between Federal and 25 Pa. Code Chapter 121 regulations.

2. 25 Pa. Code §121.1 – Definitions (proposed rulemaking is denoted by bold font)

Proposed Rulemaking:

Regulated NSR pollutant —

- (i) NO_x or VOCs.
- (ii) A pollutant for which the EPA has promulgated a NAAQS.
- (iii) A pollutant that is a constituent or precursor of a pollutant listed under subparagraph (i) or (ii), if the constituent or precursor pollutant may only be regulated under NSR as part of regulation of the pollutant listed under subparagraph (i) or (ii). **Precursors identified by the Administrator of the EPA for purposes of NSR are the following:**
 - (A) VOCs and NO_x are precursors to ozone in all ozone nonattainment areas.
 - (B) SO₂ and NO_x are precursors to PM_{2.5} in all PM_{2.5} nonattainment areas.
- (iv) **PM_{2.5} and PM-10 emissions, including gaseous emissions from a facility or activity that condense to form particulate matter at ambient 127.201(g) (relating to general temperatures, as specified in § requirements).**

Requested Change (verbatim per 40 CFR 52.21(b)(50), which is incorporated by reference under Subchapter D, except where denoted by strikeout for deletions or shading for proposed text):

Regulated NSR pollutant, for purposes of ~~this section~~ **25 Pa. Code Chapter 127**, means the following:

- (i) Any pollutant for which a national ambient air quality standard has been promulgated and any pollutant identified under this paragraph ~~(b)(50)(i)~~ as a constituent or precursor for such pollutant. Precursors identified by the Administrator ~~of the EPA~~ for purposes of NSR are the following:
 - (a) Volatile organic compounds and nitrogen oxides are precursors to ozone in all attainment, ~~non-attainment~~ and unclassifiable areas.
 - (b) Sulfur dioxide is a precursor to PM_{2.5} in all attainment, ~~non-attainment~~ and unclassifiable areas.
 - (c) Nitrogen oxides are presumed to be precursors to PM_{2.5} in all attainment, ~~non-attainment~~ and unclassifiable areas, unless the State demonstrates to the Administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM_{2.5} concentrations.
 - (d) Volatile organic compounds are presumed not to be precursors to PM_{2.5} in any attainment, ~~non-attainment~~ or unclassifiable area, unless the State

demonstrates to the EPA Administrator's satisfaction or EPA demonstrates that emissions of volatile organic compounds from sources in a specific area are a significant contributor to that area's ambient PM_{2.5} concentrations.

- (ii) Any pollutant that is subject to any standard promulgated under section 111 of the Act;
- (iii) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act;
- (iv) Any pollutant that otherwise is subject to regulation under the Act; except that any or all hazardous air pollutants either listed in section 112 of the Act or added to the list pursuant to section 112(b)(2) of the Act, which have not been delisted pursuant to section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under section 108 of the Act.
- (v) [Reserved]
- (vi) Particulate matter (PM) emissions, PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity which condense to form particulate matter at ambient temperatures. On or after January 1, 2011 (or any earlier date established in the upcoming rulemaking codifying test methods), such condensable particulate matter shall be accounted for in applicability determinations and in establishing emissions limitations for PM, PM_{2.5} and PM₁₀ in PSD or non-attainment NSR permits. Compliance with emissions limitations for PM, PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable particulate matter unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable particulate matter shall not be considered in violation of this section unless the applicable implementation plan required condensable particulate matter to be included.

Justification:

Consistency between Federal and 25 Pa. Code Chapter 121 regulations.

3. 25 Pa. Code §121.1 – Definitions (proposed rulemaking is denoted by bold font)Proposed Rulemaking:*Significant—*

- (i) In reference to a net emissions increase or the potential of a facility to emit one of the following pollutants at a rate of emissions that would equal or exceed the following emissions rates except as specified in subparagraphs (ii)—(v):

Pollutant	Emission Rate
Carbon monoxide (CO)	100 TPY
Nitrogen oxides (NO _x)	40 TPY
Sulfur oxides (SO _x)	40 TPY
Ozone	40 TPY of VOCs or NO _x
Lead	0.6 TPY
PM-10	15 TPY
PM2.5	10 TPY of PM2.5; 40 TPY of SO₂; 40 TPY of NO_x

- (ii) The emissions rate that is significant for VOCs in a serious or severe ozone nonattainment area is 25 TPY.
- (iii) For purposes of applying Chapter 127, Subchapter E to the owner or operator of modifications at a major facility located in an ozone nonattainment area or in an ozone transport region that emits or has the potential to emit NO_x, the emissions rate that is significant and other requirements for VOCs in subparagraphs (i) and (ii) apply to NO_x emissions.
- (iv) The emissions rate that is significant for CO in a serious nonattainment area is 50 TPY if the EPA has determined that the affected facility contributes significantly to CO levels in that area.
- (v) The emissions rate that is significant for VOCs in an extreme nonattainment area for ozone is any amount above zero.

Requested Change (verbatim per 40 CFR 52.21(b)(23), which is incorporated by reference under Subchapter D, except where denoted by strikeout for deletions or shading for proposed text):

Significant—

- (i) In reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed the following emissions rates:

Pollutant	Emission Rate
Carbon monoxide	100 tons per year (tpy)
Nitrogen oxides	40 tpy
Sulfur dioxide	40 tpy
Particulate matter	25 tpy of particulate matter emissions
PM10	15 tpy
PM2.5	10 tpy of direct PM _{2.5} emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions unless demonstrated not to be a PM_{2.5} precursor under paragraph (b)(50) of this section
Ozone	40 tpy of volatile organic compounds or nitrogen oxides
Lead	0.6 TPY
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S)	10 tpy
Reduced sulfur compounds (including H ₂ S)	10 tpy
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.2×10^{-6} megagrams per year (3.5×10^{-6} tons per year)
Municipal waste combustor metals (measured as particulate matter)	14 megagrams per year (15 tons per year)
Municipal solid waste landfills emissions (measured as nonmethane organic compounds)	45 megagrams per year (50 tons per year)

- (ii) Significant means, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that ~~paragraph (b)(23)(i) of this section, subsection (i) above~~ does not list, any emissions rate.
- (ii) Notwithstanding ~~paragraph (b)(23)(i) of this section, subsection (i) above~~, *significant* means any emissions rate or any net emissions increase associated

with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than $1 \mu\text{g}/\text{m}^3$, (24-hour average).

Justification:

Consistency between Federal and 25 Pa. Code Chapter 121 regulations.

4. 25 Pa. Code §127.201 – General requirements (proposed rulemaking is denoted by bold font)

Proposed Rulemaking:

Existing subsections (a) through (f) remain unchanged and are not presented here.

- (g) **PM2.5 and PM-10 emissions include gaseous emissions from a facility or activity that condense to form PM at ambient temperatures, if present, in accordance with the following requirements:**
- (1) **Beginning January 1, 2011, or an earlier date established by the Administrator of the EPA, condensable PM shall be accounted for in applicability determinations and in establishing emissions limitations for PM2.5 and PM-10 in permits issued under this subchapter.**
 - (2) **Compliance with emissions limitations for PM2.5 and PM-10 issued prior to January 1, 2011, or an earlier date established by the Administrator, may not be based on condensable PM unless required by the terms and conditions of a plan approval, operating permit or the SIP.**
 - (3) **Applicability determinations made prior to January 1, 2011, or an earlier date established by the Administrator, without accounting for condensable PM may not be considered in violation of this subchapter unless the applicable plan approval, operating permit or SIP includes requirements for condensable PM.**

Requested Change: Please delete proposed subsection (g) above

Justification: Please see Comment No. 2 – acceptance of the requested change for Comment No. 2 obviates the need to include subsection (g) above.

In the event that the requested change cannot be implemented, please modify Subsection (2) and (3) as follows to allow for consistency with the Federal regulation:

- (2) **Compliance with emissions limitations for PM2.5 and PM-10 issued prior to January 1, 2011, or an earlier date established by the Administrator, ~~may~~ shall not be based on condensable PM unless required by the terms and conditions of a plan approval, operating permit or the SIP.**
- (3) **Applicability determinations made prior to January 1, 2011, or an earlier date established by the Administrator, without accounting for condensable PM ~~may~~ shall not be considered in violation of this subchapter unless the applicable plan approval, operating permit or SIP includes requirements for condensable PM.**

5. 25 Pa. Code §127.203a – Applicability determination

Existing Regulation and Proposed Change (proposed text denoted by shading):

Existing subsections (a)(1) through (a)(4) precede subsection (a)(5) below and are not presented here.

(5) Projected actual emissions is the maximum annual rate, in TPY, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major facility. The following procedures apply in determining the projected actual emissions of a regulated NSR pollutant for an emissions unit, before beginning actual construction on the project:

* * * * *

(iii) If the projected actual emissions for a regulated NSR pollutant are in excess of the baseline actual emissions and the project results in a net emissions increase which equals or exceeds the applicable significant emissions rate, the following apply:

(A) The projected actual emissions for the regulated NSR pollutant must be incorporated into the required plan approval or the operating permit as an emission limit.

Justification:

The proposed change provides clarity to this regulation and is in accordance with the requirements of 25 Pa. Code §127.203(f) – Facilities subject to special permit requirements - as outlined below:

The NSR requirements of this subchapter do not apply to an owner or operator of a major facility at which:

(1) A physical change or change in the method of operation still maintains its total facility-wide emissions below the PAL, meets the requirements in §127.218 (relating to PALs) and complies with the PAL permit.

(2) A project results in a net emissions increase which does not meet or exceed the applicable emissions rate that is significant.

(3) A proposed de minimis increase results in a net emissions increase calculated using emissions increases and decreases which occurred within 10 years prior to

the date of submission of a complete plan approval application, which does not meet or exceed the emissions rate that is significant.

- (4) Construction of a new facility or a project at an existing major facility located in an attainment or unclassifiable area does not impact a nonattainment area for the applicable pollutant in excess of the significance level specified in § 127.203a.

Please note that RRI Energy met with Department representatives Joyce Epps, Virendra Trivedi, Krish Ramamurthy, Bo Reilly and Joe White in Harrisburg on August 18, 2008 to discuss the Subchapter E inconsistencies as summarized above. In discussions with the Department, PA DEP agreed to either (i) issue guidance clarifying the Department's intent for implementation of Subchapter E requirements or (ii) include proposed changes to address the aforementioned Subchapter E inconsistencies concurrent with the proposed changes for PM2.5. Because the Department did not implement either of the two options, RRI Energy must submit this proposed change to ensure consistent application of this provision.

RRI Energy appreciates the opportunity to provide these comments to the EQB. Please contact Mr. Keith Schmidt (724-597-8193, kschmidt@rrienergy.com) or me via telephone or email as listed above with any questions or concerns.

Very truly yours,



John P. Shimshock
Sr. Air Environmental Specialist

cc via electronic submittal: Independent Regulatory Review Commission
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Harrisburg, PA 17101
Email: irrc@irrc.state.pa.us

Synopsis of Comments to Proposed Rulemaking No. 7-450 (#2818)
40 Pa.B 703 – Saturday, February 6, 2010
25 Pa. Code Chapters 121 and 127 (New Source Review)

Submitted by

RRI Energy, Inc.
121 Champion Way, Suite 200
Canonsburg, PA 15317

Attn.: Mr. Keith A. Schmidt (724) 597-8193 kschmidt@rrienergy.com
Mr. John P. Shimshock (724) 597-8405 jshimshock@rrienergy.com

1. Although RRI Energy understands the impetus for the proposed rulemaking, we insist that the proposed changes mirror the new federal requirements to the extent practicable. This would help to ensure consistency (where appropriate) among the Federal regulations and 25 Pa. Code Chapter 127, Subchapters D and E. Enactment of the current proposed rulemaking would result in two distinct and different sets of definitions for some parameters of interest (e.g., two different definitions for a “regulated NSR pollutant” and “significant,” with the definitions depending on the attainment status of the pollutant of interest). RRI Energy insists that the definitions be consistent among the regulations in an attempt to promote understanding among the stakeholders and consistency of usage.
2. Please amend 25 Pa. Code §127.203a(5) – Applicability determination – as outlined below to provide for clarity and consistency with the requirements of 25 Pa. Code §127.203(f) – Facilities subject to special permit requirements:

(5) Projected actual emissions is the maximum annual rate, in TPY, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit of that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major facility. The following procedures apply in determining the projected actual emissions of a regulated NSR pollutant for an emissions unit, before beginning actual construction on the project:

* * * * *

(iii) If the projected actual emissions for a regulated NSR pollutant are in excess of the baseline actual emissions and the project results in a net emissions increase which equals or exceeds the applicable significant emissions rate, the following apply:

(A) The projected actual emissions for the regulated NSR pollutant must be incorporated into the required plan approval or the operating permit as an emission limit.

