



GROUP AGAINST SMOG & POLLUTION

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May 1, 2017

VIA eComment System (<http://www.ahs.dep.pa.gov/eComment>)

Environmental Quality Board

Rachel Carson State Office Building, 16th Floor

400 Market Street

Harrisburg, PA 17101-2301

Re: Comments of Group Against Smog and Pollution Regarding Proposed Amendments to 25 Pa. Code Chapters 121 and 126 Concerning Gasoline Volatility Requirements

Dear Sir or Madam:

Please accept these comments regarding the proposed regulatory change referenced above, which I am submitting on behalf of the Group Against Smog and Pollution. According to the notice published in the Pennsylvania Bulletin on February 25, 2017, the Environmental Quality Board is accepting comments on the proposed plan approval through May 1, 2017.

My address and telephone number are provided above.

Very truly yours,

/s

John K. Baillie

**COMMENTS OF THE GROUP AGAINST SMOG AND POLLUTION
REGARDING THE PROPOSED REVISION OF
CHAPTER 126 SUBCHAPTER C**

The Environmental Quality Board proposes to revise 25 Pa. Code Chapter 126 Subchapter C, to rescind the requirement that the Reid Vapor Pressure (“RVP”) of gasoline sold between May 1 and September 15 of each year in the Pittsburgh-Beaver Valley Area¹ not exceed 7.8 pounds per square inch.² However, that requirement has been approved by the United States Environmental Protection Agency (“EPA”) and included in Pennsylvania’s State Implementation Plan (“SIP”). Accordingly, to rescind the low RVP requirement, Pennsylvania must demonstrate that the rescission will not interfere with attainment of National Ambient Air Quality Standards (“NAAQS”).³

The Clean Air Act requires the promulgation of NAAQS for certain pollutants, including both ground-level ozone and fine particulate matter (“PM_{2.5}”).⁴ The NAAQS represent ambient air quality standards that must be attained to protect the public health.⁵ The Pittsburgh-Beaver Valley Area is classified as nonattainment for both the 1997⁶ and the 2008⁷ NAAQS for ozone. After initially recommending that the Pittsburgh-Beaver Valley Area be designated as

¹ The Pittsburgh-Beaver Valley Area includes Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland Counties. 25 Pa. Code § 121.1.

² See 25 Pa. Code § 126.301 (imposing “compliant fuel” requirement); 25 Pa. Code § 121.1 (defining “complaint fuel” to mean “low RVP gasoline”).

³ See 42 U.S.C. § 7410(l).

⁴ See 42 U.S.C. § 7410(a).

⁵ 42 U.S.C. § 7410(b)(1).

⁶ Air Quality Designations and Classifications for the 8-Hour Ozone National Ambient Air Quality Standards; Early Action Compact Areas with Deferred Effective Dates; Final Rule, 60 Fed. Reg. 23858, 23931 (April 30, 2004).

⁷ Air Quality Designations for the 2008 Ozone National Ambient Air Quality Standards; Final Rule, 77 Fed. Reg. 30088, 30143 (May 21, 2012).

nonattainment for the 2015 NAAQS for ozone,⁸ Pennsylvania now recommends that the Pittsburgh-Beaver Valley Area be designated as attainment for that standard, based on data from air quality monitors that was certified in February 2017 and that purportedly demonstrates attainment.⁹

The Clean Air Act also requires each state to adopt, and submit to EPA for its approval, a SIP; each SIP must provide for the “implementation, maintenance, and enforcement” of the NAAQS,¹⁰ as well as the attainment of the NAAQS in nonattainment areas.¹¹ Further, each SIP must include all measures necessary to meet the requirements of the Clean Air Act.¹²

Pennsylvania’s SIP limits the RVP of gasoline sold in the Pittsburgh-Beaver Valley Area during the summer months to comply with federal regulations promulgated pursuant to Section 211 of the Clean Air Act (42 U.S.C. § 7545).¹³ Those regulations authorize certain states to require that the RVP of gasoline be limited during the warmer months in areas that do not attain the NAAQS for ground-level ozone.¹⁴ “[L]owering the RVP of gasoline sold in the Pittsburgh area is an effective ozone control standard because it will reduce the VOC emissions from gasoline marketing and from vehicles.”¹⁵ The lower gasoline’s RVP, the less readily it

⁸ Pennsylvania Dept. of Env’tl. Prot., Bureau of Air Quality, Final Designation Recommendations for the 2015 Eight-Hour Ozone National Ambient Air Quality Standards (Oct. 2016), at 11, *available at* <http://www.dep.pa.gov/Business/Air/BAQ/Regulations/Pages/Recommendations-and-Final-Area-Designations.aspx>.

⁹ See 47 Pa. Bull. 2387 (Apr. 22, 2017).

¹⁰ See 42 U.S.C. § 7410(a).

¹¹ See 42 U.S.C. § 7502(c)(1).

¹² See 42 U.S.C. § 7410(a)(2).

¹³ See Approval and Promulgation of Air Quality Plans; Pennsylvania; Gasoline Volatility Requirements for the Pittsburgh-Beaver Valley Nonattainment Area; Direct Final Rule, 63 Fed. Reg. 31116, 31117-18 (June 8, 1998); 56 Fed. Reg. 64704;

¹⁴ See *id.*, at 31117.

¹⁵ *Id.*

evaporates.¹⁶ When gasoline evaporates, it emits volatile organic compounds (“VOCs”) into the atmosphere.¹⁷ Especially in the warmer months, VOCs in the atmosphere can combine with other pollutants to form ground-level ozone and PM_{2.5}.¹⁸

The proposed rulemaking does not specify the quantity of VOC emissions that are prevented by the Pittsburgh-Beaver Valley Area’s low RVP requirement.¹⁹ Obviously, authorizing the sale of higher RVP gas in the Pittsburgh-Beaver Valley Area would tend to increase VOC emissions and concentrations of ground-level ozone and PM_{2.5} in the atmosphere, and thus would interfere with the attainment of the NAAQS for ground-level ozone and PM_{2.5}.

As noted above, section 110(l) of the Clean Air Act requires that a proposed revision to a SIP **not** interfere with attainment of the NAAQS. Section 110(l) provides:

Each revision to an implementation plan submitted by a State under this chapter shall be adopted by such State after reasonable notice and public hearing. The Administrator shall not approve a revision of a plan if the revision would **interfere with any applicable requirement concerning attainment** and reasonable further progress (as defined in section 7501 of this title), or any other applicable requirement of this chapter.²⁰

Section 110(l) applies “to all NAAQS that are in effect, including those that have been promulgated but for which” attainment designations have yet to be made.²¹

A proposed revision to a SIP to rescind a low RVP gasoline requirement may satisfy Section 110(l)’s requirement that the revision not “interfere with any applicable requirement concerning attainment” if the revision is accompanied by an attainment demonstration or by a

¹⁶ Approval and Promulgation of Air Quality Plans; Pennsylvania; Gasoline Volatility Requirements for the Pittsburgh-Beaver Valley Nonattainment Area; Direct Final Rule, 63 Fed. Reg. 31116, 31117 (June 8, 1998)

¹⁷ *See id.*

¹⁸ *See id.*

¹⁹ *See* 47 Pa. Bull. 1157 (Feb. 25, 2017).

²⁰ 42 U.S.C. § 7410(l).

²¹ Air Plan Approval; Ohio; Removal of Gasoline Volatility Requirements in the Cincinnati and Dayton Areas; Proposed Rule, 82 Fed. Reg. 10727, 10728 (Feb. 15, 2017).

plan “to substitute equivalent emissions reductions to compensate for any change to a SIP-approved program.”²² An increase in VOC emissions that will result from rescinding a low RVP gasoline requirement may be determined using EPA’s Motor Vehicle Emissions Simulator (“MOVES”) model.²³ “Equivalent emissions reductions” to those achieved by the low RVP gasoline requirement must be “new,” “actual,” and “contemporaneous to the proposed change,” as well as “permanent, enforceable, quantifiable, and surplus.”²⁴

An increase in VOC emissions that will result from rescinding a low RVP gasoline requirement may be offset on a ton-per-ton basis by equivalent emissions reductions of VOCs.²⁵ However, if a state proposes to substitute reductions in emissions of oxides of nitrogen (“NO_x”)²⁶ for reductions of VOC emissions, it must reduce NO_x emissions in the area by an amount that represents an equivalent percentage change in the area’s inventory of pollutants. Thus, “if an area has twice as many tons of NO_x emissions as VOC emissions, then 2 tons of NO_x emissions would be assumed to have the same effect on ozone as 1 ton of VOC emissions.”²⁷ The following chart shows that in 2015 (the most recent year for which data is available from the Pennsylvania Department of Environmental Protection’s eFACTS database and from EPA’s National Emissions Inventory), the Pittsburgh-Beaver Valley Area had approximately 4.51 tons of NO_x emissions for each ton of VOC emissions:

²² *Id.*

²³ *See id.*

²⁴ *Id.* Although EPA has stated that emissions reductions are “contemporaneous” if they occur within approximately one year of a proposed SIP revision that will rescind a low RVP requirement, it has determined that emissions reductions from facilities that have already permanently shut down may be used as offsets. *See id.* EPA has stated that emissions reductions are “surplus” if they are due to permanent shutdowns of sources or are a “co-benefit” of new regulations. *See id.*

²⁵ *See id.*, at 10729.

²⁶ NO_x emissions are also a precursor to the formation of ground-level ozone.

²⁷ *Id.*

	2014 NOx Emissions	2014 VOC Emissions
Allegheny County-Stationary ²⁸	13189.70	1411.53
Allegheny County-Onroad ²⁹	11753.99	6422.12
Armstrong County-Stationary	17504.55	343.74
Armstrong County-Onroad	890.68	508.83
Beaver County-Stationary	19629.84	641.32
Beaver County-Onroad	1933.83	1035.18
Butler County-Stationary	1039.59	518.94
Butler County-Onroad	3011.84	1479.69
Fayette County-Stationary	209.38	134.02
Fayette County-Onroad	1471.38	921.53
Washington County-Stationary	467.47	166.96
Washington County-Onroad	3650.30	1437.44
Westmoreland County-Stationary	1409.40	753.94
Westmoreland County-Onroad	5430.21	2328.84
TOTAL	81592.16	18104.08

The Proposed Rulemaking does not specify either the type of emission reductions in the Pittsburgh-Beaver Valley Area that are proposed to offset the increased VOC emissions that will

²⁸ Emissions data for stationary sources is from Emissions Summary Reports generated by the Pennsylvania Department of Environmental Protection eFACTS database: http://www.ahs.dep.pa.gov/eFACTSWeb/criteria_emissionssummary.aspx (April 24, 2017).

²⁹ Emissions data for onroad sources is from SCC data files from EPA's National Emissions Inventory: <https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data> (April 24, 2017). NEI data for nonroad or nonpoint sources does not include VOC or NOx emissions.

result from any rescission of the low RVP standard, or the sources of such reductions. However, as discussed above, such reductions of NO_x emissions must be new, actual, contemporaneous, permanent, enforceable, quantifiable, and surplus. Further, to the extent Pennsylvania seeks to offset increases in VOC emissions that will result from the rescission of the low RVP gasoline standard in the Pittsburgh-Beaver Valley Area with reductions of NO_x emissions, it must use the ratio of total NO_x emissions to total VOC emissions in the area, which is approximately 4.51 tons of NO_x per ton of VOCs.