CLEAN AIR COUNCIL

Allegheny County Health Department Proposed Revision to Allegheny County's Portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of the National Ambient Air Quality Standards

Regulation Tracking No. 90A

(Nonattainment New Source Review Program for the Allegheny, Pennsylvania PM_{2.5} Nonattainment Area (2012 Standard))

December 18, 2018

<u>Written Comments by Clean Air Council,</u> <u>Communities First–Sewickley Valley,</u> <u>Rail Pollution Prevention Pittsburgh (RP3),</u> <u>Allegheny County Clean Air Now (ACCAN),</u> <u>and the Breathe Project</u>

Clean Air Council ("the Council") submits these written comments on behalf of itself, Communities First–Sewickley Valley, Rail Pollution Prevention Pittsburgh (RP3), Allegheny County Clean Air Now (ACCAN), and the Breathe Project, regarding the Allegheny County Health Department's ("Department's") proposed amendments to the Nonattainment New Source Review regulations ("Proposed Amendments"), to be incorporated as a proposed revision to Allegheny County's portion of the Pennsylvania State Implementation Plan for the Allegheny, PA PM_{2.5} Nonattainment Area.

The Council is a non-profit environmental organization headquartered at 135 South 19th Street, Suite 300, Philadelphia, Pennsylvania, 19103. The Council maintains an office in Pittsburgh. For 50 years, the Council has worked to improve air quality across Pennsylvania. The Council has members throughout the Commonwealth who support its mission to protect everyone's right to breathe clean air, including members in Allegheny County. The Council has approximately 35,000 activist members.

1. <u>To Address the Longstanding Problem of Nonattainment for Fine Particulates, the</u> <u>Department Should Impose More Stringent Offset Ratios for Fine Particulates as</u> <u>Part of the Revision of its State Implementation Plan.</u>

Because of Allegheny County's longstanding inability to come into attainment for the national ambient air quality standard for fine particulates, the Department should require an enhanced offset ratio for major sources subject to permitting requirements under the



www.cleanair.org www.facebook.com/cleanaircouncil www.twitter.com/cleanaircouncil Nonattainment New Source Review program.

In the proposed amendments, the Department merely proposes to follow the past practice of imposing a 1:1 offset ratio, for both flue emissions and fugitive emissions:

4. 25 Pa. Code §127.210, "Offset ratios," Subsection (a) shall

read as follows for the PM2.5 offset levels:						
Pollutant/Area	Flue Emissions	Fugitive Emissions				
PM2.5 Nonattainm	nent Area					
PM2.5	1:1	1:1				
PM2.5 Precursors						
SO2	1:1	1:1				
NOx	1:1	1:1				
VOCs	1:1	<u>1.1</u>				
Ammonia	1:1	1:1				

Proposed Amendments, page 6, to be codified at Section 2102.06(b)(3)(B)(3). The Department's existing offset ratios for PM2.5, SO2, and NOx are the same as the offset ratios in the Commonwealth regulations, applicable to the Department of Environmental Protection. *See* 25 Pa. Code §127.210(a).

However, the Department maintains the authority to impose more stringent offset ratios for fine particulates. Now is an appropriate time to do this, given the context of its proposed regulatory amendments. The Department is proposing these amendments as part of its revision of its state implementation plan for fine particulates, which was due on October 15, 2016--over two years ago.

It is notable that Allegheny County suffers from a problem with fine particulates that is as bad as that in some parts of San Joaquin Valley, California. *See* San Joaquin Valley Air Pollution Control District, 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards (November 15, 2018), Appendix A (Ambient PM2.5 Data Analysis), page A-11, Table A-7 (Annual PM2.5 Design Values (Three-Year Averages, µg/m³), <u>http://valleyair.org/pmplans/documents/2018/pmplan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf</u>, available at <u>http://valleyair.org/pmplans/</u>. Allegheny County's design value of 13.0 mg/m³ for 2015-2017 is worse than the available design values for seven of the seventeen areas in the San Joaquin Valley. *See id. See* Allegheny County Health Department, 2017 Air Quality Annual Report, <u>https://www.alleghenycounty.us/uploadedFiles/Allegheny_Home/Health_Department/Resources</u> /<u>Data_and_Reporting/Air_Quality_Reports/2017-Air-Quality-Annual-Report.pdf</u>, page 8 (design value for the Liberty monitor in Allegheny County for 2015-2017 is 13.0 mg/m³).

Moreover, Allegheny County's design value has been <u>increasing</u>, not decreasing. This spring, the American Lung Association's report ranked Allegheny County as having the 12th worst air in the nation, with a design value of 12.8 mg/m³ for the three-year period 2014-2016, higher than that for San Joaquin, California and Merced, California. *See* American Lung

Association, State of the Air 2018, <u>https://www.lung.org/assets/documents/healthy-air/state-of-the-air/sota-2018-full.pdf</u>, page 22 (ranking Allegheny as 12th worst in the country (at 12.8 mg/m³), ranking San Joaquin as 15th worst (at 12.2 mg/m³), and ranking Merced as 18th worst (at 11.8 mg/m³)). Notably, the design value for Allegheny County actually <u>increased</u> from 12.6 mg/m³ for the three-year period 2013-2015, which was higher than that for Merced. *See* American Lung Association, State of the Air 2017,

https://www.lung.org/assets/documents/healthy-air/state-of-the-air/state-of-the-air-2017.pdf, page 19 (ranking Allegheny as 13th worst in the country (at 12.6 mg/m³) and ranking Merced 14th worst (at 12.5 mg/m³)).

With increases in the design value during the last two years, this is clearly a trend.

The need to impose enhanced control measures for fine particulates is underscored by the recent increase in regional VOC emissions in Southwestern Pennsylvania due to the increased build-out of natural gas infrastructure, and the addition of large VOC-emitting facilities such as the Shell Appalachia ethane cracker.

Since the poor air quality in Allegheny County is on a par with poor air quality in the San Joaquin Valley, the Department should consider the approaches that the San Joaquin Valley Air Pollution Control District has adopted. It is notable that the topographical problems of the San Joaquin Valley are analogous to those in Allegheny County, which contributes to the longstanding problems with nonattainment:

Surrounded by mountain ranges to the west, east, and south; the airflow through the Valley can be blocked, leading to severely constrained dispersion. During the winter, high-pressure systems can cause the atmosphere to become stagnant for longer periods of time, where wind flow is calm and air movement is minimal. These stagnant weather systems can also cause severe nighttime temperature inversions, which exacerbate the build-up of PM2.5 and related precursors beneath the evening inversion layer.

San Joaquin Valley Air Pollution Control District, 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards, page 2-1, Section 2.1.1 (Unique Climate and Geography") (emphasis added), http://valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006and-2012-PM2.5-Standards.pdf. The Department experiences similar challenges:

The Liberty-Clairton PM2.5 nonattainment area was designated a separate nonattainment area from the surrounding Pittsburgh-Beaver Valley nonattainment area because, in addition to the regional air quality problem, *there is a localized air quality issue in the local sources and the specific geologic and meteorological features of the area*. Large industry located along the river sides in the valley. *The sharp difference in elevation between the industrial and residential areas and the high hillsides surrounding them create a significant river basin, and spikes in*

localized PM2.5 concentrations coincide with temperature inversions.

Allegheny County Health Department, Revision to the Allegheny County Portion of the Pennsylvania State Implementation Plan, Attainment Demonstration for the Liberty-Clairton PM2.5 Nonattainment Area (April 2011), page 5 (emphasis added), <u>http://county.allegheny.pa.us/uploadedFiles/Allegheny_Home/Health_Department/Programs/Air_Quality/SIPs/Liberty-Clairton_PM2.5_SIP-Apr_2011.pdf</u>.

Therefore, it is not a coincidence that both areas of the country have longstanding problems in attaining and maintaining the health standards for fine particulates. *See* EPA Green Book, <u>https://www3.epa.gov/airquality/greenbook/anayo_pa.html</u> (nonattainment history for Allegheny County), <u>https://www3.epa.gov/airquality/greenbook/anayo_ca.html</u> (nonattainment history for the San Joaquin Valley).

The Department has an obligation to do more than just say that air pollution is a difficult problem caused by a number of factors, including urbanization and topography. It should make efforts to accelerate emissions reductions, to reverse its current pathway of regression under the 2012 standard for fine particulates.

One way to do this is through a more aggressive use of the concept of offsets under the Nonattainment New Source Review program. The premise behind imposing an offset requirement at all is that Congress did not want the air quality in a nonattainment area to become worse. *See* 42 U.S.C. §7503(a)(1)(A) ("sufficient offsetting emissions reductions have been obtained, such that total allowable emissions ... will be sufficiently less than total emissions from existing sources ... prior to the application for such permit to construct or modify so as to represent ... reasonable further progress").

However, Congress did not strictly limit the offset ratio to 1:1. Rather, it allowed a state air permitting agency to impose a greater offset ratio:

Such emission reductions shall be, by the time a new or modified source commences operation, in effect and enforceable and shall assure that the total tonnage of increased emissions of the air pollutant from the new or modified source shall be offset by an equal or greater reduction, as applicable, in the actual emissions of such air pollutant from the same or other sources in the area.

Id., 42 U.S.C. §7503(c)(1) (emphasis added).

Moreover, in a preamble to the 2008 Implementation Rule for the standard for fine particulates, EPA noted that the states may impose an enhanced offset ratio to facilitate reasonable further progress toward attainment:

We interpret section 173 of the Act to allow higher offset ratios where necessary to achieve reasonable further progress.

Accordingly, we believe that States may establish higher offset ratios in their State programs if they wish, but we do not believe that it would be appropriate for us to do so for PM[2.5] in national regulations. We do not have cause to believe a higher ratio is necessary for PM[2.5] in each area of the country and prefer to leave this to the discretion of States.

Final Rule, 73 Fed. Reg. 28,321, 28,338 (col. 2) (May 16, 2008) (emphasis added).

Applying these principles, the San Joaquin Valley Air Pollution Control District has imposed an enhanced offset ratio of 1.5:1 for direct emissions of fine particulates where the offsets are obtained from a source that is more than 15 miles away from the facility triggering the need for the offset. *See* San Joaquin Valley Air Pollution Control District, Rule 2201, New and Modified Stationary Source Review Rule, Section 4.8.4 <u>https://www.valleyair.org/rules/currntrules/Rule22010411.pdf</u> (last amended February 18, 2016), available at <u>https://www.valleyair.org/rules/1ruleslist.htm</u> (Current District Rules and Regulations). (For offsets obtained from facilities within 15 miles, the ratio is 1.3:1 for major sources and 1.2:1 for non-major sources, and for offsets obtained from the same facility triggering the need for the offset, the ratio is 1:1). *Id*.

Because the problem of fine particulates in Allegheny County is as bad as many areas of the San Joaquin Valley, there is no legal or policy reason why the Department should not imposed an enhanced offset ratio for facilities in Allegheny County, where the fine particulate problem is getting worse.

This proposal is consistent with the reasoning behind the establishment of enhanced offset ratios for ozone in ozone nonattainment areas, codified by the Clean Air Act Amendments of 1990. Ozone offset ratios are graduated based on the severity of ozone nonattainment:

Ozone Nonattainment	Offset Ratio
Marginal	1.1:1
Moderate	1.15:1
Serious	1.2:1
Severe	1.3:1 (or at least 1.2:1 if all existing major sources meet BACT for VOC)
Extreme	1.5:1 (or at least 1.2:1 if all existing major sources meet BACT for VOC)

See 40 C.F.R. § 51.165(a)(9)(ii)(A-E); *Accord*, 42 U.S.C. §7511a(a)(4)(Marginal), (b)(5) (Moderate), (c)(10) (Serious), (d)(2) (Severe), (e)(1) (Extreme).

Given the longstanding problem with attaining the standard for fine particulates, the Department should impose an enhanced offset ratio of 1.5:1 for fine particulates, to be

incorporated into the proposed revision of the state implementation plan.

2. <u>The Department Should Comply With Deadlines Set by Congress in the Federal</u> <u>Clean Air Act.</u>

The Department is over two years behind in addressing the problem of nonattainment with the 2012 annual standard for fine particulates. It ignored a deadline set by Congress and it is now preparing the current revision only after a federal lawsuit against EPA that led to a finding by EPA that the Department has failed to make the required submissions, which has started the clock running for sanctions under the Clean Air Act. The Department's actions are not acceptable.

For moderate nonattainment areas, states were required to submit revisions of state implementation plans within 18 months of the effective date of the nonattainment designations. 81 Fed. Reg. 58,010, 58,026 (col. 2), 58,152 (col. 3) (August 24, 2016), https://www.federalregister.gov/documents/2016/08/24/2016-18768/fine-particulate-matter-national-ambient-air-quality-standards-state-implementation-plan. Because EPA designated Allegheny County as nonattainment for the annual standard for fine particulates effective April 15, 2015, the deadline for submission was October 15, 2016. *See* 80 Fed. Reg. 2206, 2264 (January 15, 2015), https://www.federalregister.gov/documents/2015/01/15/2015-00021/air-quality-designations-for-the-2012-primary-annual-fine-particle-pm25, 80 Fed. Reg. 18,535, 18,537-18,538 (April 7, 2015), https://www.federalregister.gov/documents/2015/04/07/2015-07948/additional-air-quality-designations-and-technical-amendment-to-correct-inadvertent-error-in-air (clarifying that this designation applied to the entire county).

The reason the Department is doing this now is because the 18-month clock for sanctions started on May 7, 2018, after EPA made a finding that the Department failed to make the timely submissions by that deadline. *See* 83 Fed. Reg. 14,759 (April 6, 2018), <u>https://www.federalregister.gov/documents/2018/04/06/2018-06989/findings-of-failure-to-submit-state-implementation-plan-submissions-for-the-2012-fine-particulate</u>. The publication of this notice started the clock for sanctions. *See* 42 U.S.C. §7509(a), 40 C.F.R. §52.31(c),(d).

The Department's failure to address the problem of fine particulates during a period of time when the design value has increased is particularly alarming.

The Department's proposed amendments to the Nonattainment New Source Review regulations represent only the smallest part (and the easiest part) of a larger task that involves the preparation of an attainment demonstration. In turn, the attainment demonstration requires an analysis of an emissions inventory, RACM/RACT, reasonable further progress (RFP), quantitative milestones, and contingency measures. As noted on EPA's website today, the Department has not made any of these submissions:

SIP Requirement	Deadline	Submittal Date	Latest Action	Date of Latest Action	FR Citation Click to view FR notice
Emission Inventory (Moderate)	10/15/2016		Failure to submit	05/07/2018	<u>83 FR 14759</u>
RACM/RACT (Moderate)	10/15/2016		Failure to submit	05/07/2018	<u>83 FR 14759</u>
Attainment Demonstration (Moderate)	10/15/2016		Failure to submit	05/07/2018	<u>83 FR 14759</u>
RFP (Moderate)	10/15/2016		Failure to submit	05/07/2018	<u>83 FR 14759</u>
Quantitative Milestones (Moderate)	10/15/2016		Failure to submit	05/07/2018	<u>83 FR 14759</u>
Contingency Measures (Moderate)	10/15/2016		Failure to submit	05/07/2018	<u>83 FR 14759</u>
Nonattainment NSR (Moderate)	10/15/2016		Failure to submit	05/07/2018	<u>83 FR 14759</u>

Pennsylvania: PM-2.5 (2012) / Allegheny County

Source: EPA, Status of SIP Required Elements for Pennsylvania Designated Areas, <u>https://www3.epa.gov/airquality/urbanair/sipstatus/reports/pa_elembypoll.html</u> (last visited on December 18, 2018). The Federal Register notice represents EPA's finding that the Department failed to make the timely submissions by that deadline. *See* 83 Fed. Reg. 14,759.

There is no excuse for the Department's disregard for the rule of law and its obligation to protect air quality for the benefit for the benefit of the citizens of Allegheny County.

Thank you for your consideration of these comments.

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