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February 29, 2012

Mr. Shawn M. Garvin
Region 3 Office Administrator
US Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Administrator Garvin

This letter is in response to your December 9, 2011 letter to Governor Markell regarding air quality designations for the 2008 National Ambient Air Quality Standard (NAAQS) for ozone. I am disappointed that EPA has chosen to not consider our recommendation to establish nonattainment boundaries consistent with the ozone problem. It has become increasingly clear that the methodology EPA currently uses to set attainment boundaries has proven inadequate to achieve the result required by the Clean Air Act (CAA) of attaining air quality free of unhealthy levels of ozone in Delaware (and the northeast). Neither EPA's non-attainment boundaries under the 1997 8-hour standard nor the boundaries proposed here are sufficient. Delaware has proposed and prior letters and analysis from Delaware demonstrate that large nonattainment area boundaries are necessary to expeditiously and most cost-effectively provide for clean air, are feasible, and are consistent with the provisions of the CAA. This letter builds upon numerous previous letters from Delaware on the topic of ozone designations, and explains why EPA's newest approach, of drawing an even smaller boundary is likewise unreasonable because it will not cause any forward progress towards achieving the NAAQS in Delaware and will further harm Delaware businesses that are already implementing greater pollution control measures than any of their competitors located in upwind states.

Delaware strongly opposes EPA's decision to not establish large ozone non-attainment area boundaries, and its intended non-attainment designations toward Delaware. We are particularly troubled by what appears to be a cursory review by the EPA of Delaware's recommendations and analysis, without substantive consideration or comment. EPA's review of Delaware's recommendation is, in total, limited to three statements in your December 9, 2011 letter and associated technical support document (TSD): 1) Delaware's recommendation is not in keeping with a plain reading of the CAA section 107(d) related to the contribution from a "nearby" area with which we disagree, 2) there are other provisions of the CAA that address longer range transport of ozone pollution, such as sections 110(a)(2)(D), 126, and 184 which we believe should not obviate the need for proper designations, and 3) most of the states that Delaware seeks to include as part of this large nonattainment area did not make a similar request

which we argue is not a pre-requisite. Delaware has already addressed these issues in prior letters and analysis provided to EPA, and has given the EPA sufficient information to pursue establishment of large non-attainment boundaries. EPA's rejection of the concept without due consideration is not in keeping with the EPA-state partnership set out in the CAA nor is it in keeping with the EPA's Scientific Integrity Policy.

The Courts have given an extreme degree of deference to EPA when it is evaluating scientific data within its technical expertise, and EPA clearly has the ability and authority to extend their interpretation of "nearby" based on their scientific expertise. (See Pennsylvania v. EPA, where the court notes that a large area is one reasonable interpretation EPA could take.) Delaware believes that EPA's policy decision to pursue the opposite approach of creating small areas for ozone has repeatedly proven insufficient and that it continues to perpetuate non-attainment with ozone in the northeast because EPA has not adequately defined the term "nearby" relative to the pollutant of concern. Since transport is such an overwhelming part of the ozone problem, any reasonable legal definition of "nearby" must include the emissions that significantly contribute to non-attainment and interfere with maintenance in other areas. By this policy logic, headwater states should be exempted from requirements to reduce nutrient pollution affecting waterbodies outside of their jurisdiction, like the Chesapeake Bay, because New York would not be considered "nearby" Maryland or Virginia. The authorities of the Clean Water Act are in fact weaker to require cross-state action, yet EPA has broadened its interpretation of existing CWA authorities to address cross-state water pollution while it appears to be going in the opposite direction to address transport, despite much greater statutory authority in the CAA to require reductions.

Properly drawing the lines of the non-attainment boundaries in order to bring all the contributing parties onto the same "playing field" is the first step towards achieving healthy air quality. For this reason, we have been extremely supportive of the administration's efforts to finalize the Cross-State Air Pollution Rule both publicly and in the Courts, despite our ongoing frustration that CSAPR is built upon the non-health based 1997 NAAQS for ozone of 84 ppm. Indeed, those states currently challenging EPA in court over the Cross-State Air Pollution Rule and other regulations would have less incentive to fight pollution controls if they had their own obligation to reduce their significant contribution of pollutants.

In response to EPA's proposed designations on Delaware, we believe that they are not reasonably drawn to lead to clean air in Delaware or elsewhere. EPA's proposed designation relative to Sussex County, DE will be used as an example. Briefly, Sussex County has a land area of 600,320 acres, 269,464 acres (about 45%) of which are devoted to agriculture. Sussex County is largely rural, with its largest municipality, Seaford, having a 2010 population of 6,928. EPA evaluates in their TSD Sussex County relative to 5-factors[1], and concludes:

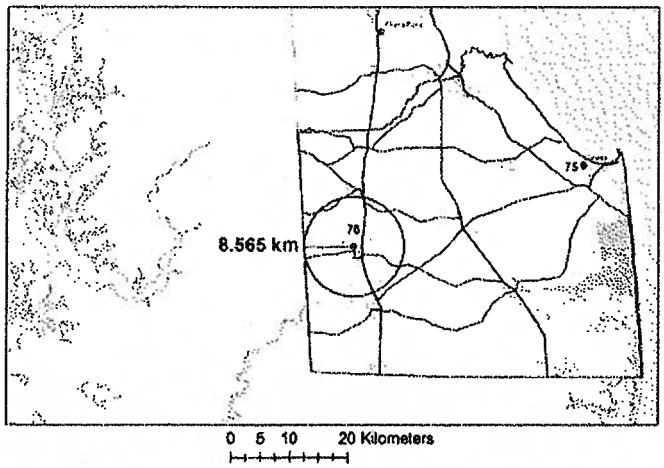
[1] The 5-factors are: 1) Air quality data, 2) Emissions and emissions-related data3), Meteorology, 4) Geography and topography, and 5) Jurisdictional boundaries. Note that EPA guidance identifies 9-factors, and EPA has reduced this to 5-factors by combining under factor 2) the following 5-factors: Emissions data, Population density and degree of urbanization, Traffic and commuting patterns, Growth Rates and Patterns, and Level of control of emission sources.

"Based on the assessment of factors described above, EPA has preliminarily concluded that Sussex County, Delaware meets the Clean Air Act criteria for inclusion in its own nonattainment area, the Seaford nonattainment area.

Sussex County, Delaware has violating monitors and the highest emissions, population, and VMT in the area of analysis. EPA has concluded that the other counties in this analysis are not likely to contribute to ozone violations in Sussex County. These counties have comparatively low emissions, populations, and VMT. Kent County, Delaware; and Cape May County, New Jersey have the next highest emissions, but those counties emissions are about half that of Sussex County's. Dominant ozone season winds are from the south-south west. This indicates that emissions from Kent County and the counties in New Jersey are not expected to contribute to violations at the Sussex County, Delaware monitors. Dorchester, Wicomico, and Worcester Counties in Maryland are upwind of the violating monitors. However, emissions from those counties are comparatively low suggesting that emissions from those counties would contribute little to violations in downwind Sussex County. Furthermore, the other counties in the area of analysis are not linked jurisdictionally to Sussex County and are not part of the Seaford Micropolitan Statistical Area."

First, Delaware notes that a significant difference between Sussex County and all but two of the "nearby" counties EPA analyzed is that Sussex has ozone monitors. EPA's methodology does not consider the air quality in any county that does not have an ozone monitor. For example, the Seaford monitor in Sussex County is located only 8.5 kilometers from the Maryland boarder (see map below), and is arguably representative of the air quality in Dorchester County, MD. EPA's determination that Dorchester County, MD is attainment and Sussex County, DE is non-attainment can only be explained as EPA ignoring science or that the value of the data collected at Seaford does not extend beyond 8.5 Kilometers. This logic indicates the scope of the nonattainment problem in Sussex is within a circle with a diameter of 8.5 kilometers, centered on the Seaford monitor.[2]

Extent of Non-Attainment?



[2] Two areas in Sussex County have ozone monitors; Seaford and Lewes. 2009-2011 design values indicate the Lewis area is attaining compliance with the 0.075 ppm ozone NAAQS.

As absurd as this outcome is, it demonstrates the illogical consequences of utilizing the current EPA methodology. EPA's methodology starts with areas that monitor air pollution. The current ozone monitoring network is neither designed nor is it effective at identifying all areas with poor air quality. For areas without monitors EPA does not use the modeling and monitoring tools available to them – they instead default to attainment. And, under EPA's narrow interpretation of the word "nearby" in CAA 107(d), it is critical that all areas that are not attaining the standard be identified. Not first identifying all areas, to include both whole and partial counties, that are non-attainment not only results in those areas being incorrectly designated, but also all areas that are "nearby." For example, as discussed above the air quality in at least a portion of Dorchester County, MD is non-attainment based on the Seaford, DE monitor. Given this, even under the EPA methodology the contribution analysis should be expanded from including just the counties that surround Sussex, DE to also including those that surround Dorchester County, MD. And, given that counties (and probably partial counties) across the Chesapeake Bay are non-attainment, the "nearby" areas EPA would analyze becomes broader. The fact that an area does not have a monitor 1) does not mean the air quality in that area meets the NAAQS, and 2) should not shield other areas that significantly impact such an unmonitored area from being designated non-attainment. Certainly, it is not reasonable to conclude without analysis that areas contiguous to nonattainment areas without monitors should be classified as attainment.

Nevertheless, EPA is proposing to establish Sussex County as a standalone non-attainment area.[3] As a non-attainment area Sussex is required by the CAA to come into compliance with the ozone NAAQS as soon as practicable and not later than 2015.[4] As a marginal non-attainment area Sussex will be subject to various requirements under the CAA intended to reduce emissions within the non-attainment area boundaries: reasonably available control technology (RACT) corrections, savings clause for vehicle inspection and maintenance, non-attainment NSR, 3-year PEIs, annual emissions statements from stationary sources, and 1:1.1 emission offset requirements. However, Sussex has already met all of these requirements. Below is a list of the ozone control measures (i.e., controls for emission of volatile organic compound (VOC) and nitrogen oxides (NOx)) currently implemented and enforced in Sussex County:

- Construction and operating permits are required for any stationary source emitting 10 pounds per day or greater of any air contaminant.

- NOx emission control requirements are imposed on major NOx emitting equipment, and fuel burning equipment with maximum rated heat input of 15 million BTUs or greater.

[3] Note that the EPA methodology could have resulted in two outcomes, 1) Sussex as a standalone area, or 2) Sussex and one or more of the surrounding rural counties as a non-attainment area. Neither of these outcomes are capable of addressing the air quality problem in Sussex.

[4] The attainment date will be based on EPA's final implementation rule. Presumably Sussex will be classified as "marginal non-attainment," with an attainment date of 2015.

- Every coal or residual oil fired power plant in Delaware must meet stringent, unit specific multi-pollutant NOx, SO2, and Hg emission limitations.

- Stringent NOx emission limitations apply to any combustion turbine that was not appropriately controlled prior to 2007 is required.

- Outdoor burning is banned during the ozone season.

- General VOC handling and disposal requirements are imposed on all stationary sources, to include a generally applicable VOC content limitation of 50 g/l.

- All VOC emitting operations are regulated for the following source categories:
  - Aerospace Coating
  - Mobile Equipment Repair and Refinishing
  - Surface Coating of Plastic Parts.
  - Automobile and Light-Duty Truck Coating Operations
  - Can Coating
  - Coil Coating
  - Paper, Film, and Foil Coating
  - Fabric Coating
  - Vinyl Coating
  - Coating of Metal Furniture
  - Coating of Large Appliances
  - Coating of Magnet Wire
  - Coating of Miscellaneous Metal Parts
  - Coating of Flat Wood Paneling
  - Bulk Gasoline Plants
  - Bulk Gasoline Terminals.
  - Gasoline Dispensing Facility Stage I Vapor Recovery.
  - Gasoline Tank Trucks
  - Petroleum Refinery Sources
  - Leaks from Petroleum Refinery Equipment
  - Petroleum Liquid Storage in External Floating Roof Tanks
  - Petroleum Liquid Storage in Fixed Roof Tanks
  - Leaks from Natural Gas/Gasoline Processing Equipment
  - Solvent Cleaning and Drying.
  - Cutback and Emulsified Asphalt
  - Manufacture of Synthesized Pharmaceutical Products
  - Stage II Vapor Recovery
  - Graphic Arts Systems
  - Petroleum Solvent Dry Cleaners
  - Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment.
  - Manufacture of High-Density Polyethylene, Polypropylene and Polystyrene Resins

- Air Oxidation Processes in the Synthetic Organic Chemical Manufacturing Industry
- Bulk Gasoline Marine Tank Vessel Loading Facilities.
- Batch Processing Operations.
- Industrial Cleaning Solvents.
- Crude Oil Lightering Operations.
- Offset Lithographic Printing and Letterpress Printing.
- Reactor Processes and Distillation Operations in the Synthetic Organic Chemical Manufacturing Industry.
- Control of Volatile Organic Compound Emissions from Volatile Organic Liquid Storage Vessels
- Any other facilities that emit VOCs that is not covered above.

- Any new VOC or NOx source with potential emissions equal to or greater than 5 TPY must be controlled by best available control technology.

- Any major new or modified VOC source with potential emissions greater than 50 TPY, or NOx emissions greater than 100 TPY must be controlled by lowest achievable emission rate technology, and must secure offsets at a rate of 1.15:1.

- On-road vehicles are subject to centralized inspection and maintenance program requirements.

- On-road mobile emissions are managed under Transportation Conformity requirements.

- Federal actions with emission increases of 100 TPY NOx or 50 TPY VOC are subject to General Conformity Requirements.

- Model year 2014 and newer vehicles must be CA LEV II certified.

- The allowable VOC content of paints and coatings used in Delaware are limited to levels much lower than the federal requirements.

- The allowable VOC content of many consumer products (e.g., perfume, bug killer, nail polish remover, etc.) used in Delaware are limited to levels much lower than the federal requirements.

- Stringent NOx emissions limitations apply to various industrial boilers that were not appropriately controlled prior to 2001 is required.

- Stationary generators must meet stringent emission limitations, based on selective catalytic reduction technology, in order to operate in demand response programs.

- Excessive Idling of Heavy Duty Vehicles is prohibited.

Implementation and enforcement of the above control measures have greatly reduced VOC and NOx emissions in Sussex County—and are significantly greater than the control measures required in any upwind state. The table below compares VOC and NOx emissions in Sussex from the 1990 and 2008 periodic emission inventories, and where they are projected to be now (i.e., 2012).

1990 Sussex Emissions in tons/year **Annual (tons)**

Pollutant	Point	Area	On-road	Off-road	Total
VOC	1891	4884	4877	819	12471
NOx	18043	759	5256	1898	25956

2008 Sussex Emissions in tons/year **Annual (tons)**

Pollutant	Point	Area	On-road	Off-road	Total
VOC	1587	2361	2013	3140	9101
NOx	7724	574	5113	3109	16520

2012 Sussex Emissions in tons/year **Annual (tons)**

Pollutant	Point	Area	On-road	Off-road	Total
VOC	1594	1925	2048	2340	7907
NOx	1701	581	2626	3811	8718

The above comparison demonstrates that Sussex County emission sources are already well controlled, contributing less than 4 ppb ozone concentration, and that the cost-effective and technically feasible control measures already in place in Delaware are producing results that could be replicated upwind.[5] And, because the above control measures have been applied statewide and similar reductions have occurred in the other two Delaware counties, there are no reasonable and cost-effective measures that Delaware can take to further reduce ozone concentrations in Sussex. So comes the dilemma: the air quality in Sussex County is unhealthy to breathe, and the CAA requires attainment as expeditiously as practicable but not later than 2015, yet no reductions are required in Delaware nor in the states that are causing the problem[6]. Reducing ozone levels requires reduction in NOx and VOC emissions, EPA's chosen strategy set in motion by its decisions on boundary designations would cause no such reductions anywhere within the timeframe mandated by the CAA. This makes EPA methodology nonsensical and one that is designed to fail. However, failure will only bring repercussions to Sussex County (who has taken great steps to reduce pollution) and not the contributing upwind areas (who are permitted to pollute with abandon and try to avoid installing even the most cost effective of pollution controls).

[5] EPA's recent Cross State Air Pollution Rule (CSAPR) modeling helps confirm that Sussex County emissions are well controlled. CSAPR 2012 base case modeling indicates that all Delaware anthropogenic emissions (I.e., statewide emissions) contribute less than 4ppb ozone concentration to Sussex County.

[6] The cause of the Sussex County ozone problem is emissions from outside of Delaware. This is confirmed by many modeling studies, the most recent being EPA's 2012 base case CSAPR modeling. CSAPR modeling indicates that Sussex is impacted by 56 ppb from anthropogenic emissions that originate outside of Delaware

The EPA suggests in its December 9, 2011 letter that "the phenomenon of ozone transport must be balanced against the need to have smaller areas that can focus on local control measures." This statement might have made sense before the installation of stringent local controls, but is completely backward at this point in our journey towards achieving clean air, given Delaware's record of implementing all cost-effective and technically feasible control measures. Sussex has already completed its focus on local control measures, and since the non-attainment boundaries do not extend beyond Sussex County boundaries no other areas will be required to focus on local control measures. So the EPA methodology results in the entire problem of transport not being addressed . The EPA has suggested in its December 9, 2011 and associated TSD that CAA sections 110(a)(2)(D), 126, and 184 are the ways available to Delaware to reduce transport.

- Section 110(a)(2)(D). SIPs were due in March 2011 that demonstrated all significant impact on DE has been mitigated. [7] EPA's historical approach has been to address compliance with 110(a)(2)(D) through federal transport rules and FIPs. The transport rule for the 1997 ozone standard is now stayed by the Courts, and the EPA has not yet proposed a transport rule for the 0.075 ppm ozone NAAQS. Delaware agrees that 110(a)(2)(D) required upwind states to mitigate their impact on DE, and that they have not yet done this. The CAA requires the EPA to take action to require states to comply with 110(a)(2)(D). It is not clear what action the EPA is suggesting that Delaware can take under 110(a)(2)(D) to require upwind reductions.

- Section 126. Delaware has submitted two CAA 126 petitions in the past, and the EPA has failed to act on them. If we submit another petition it will likely be largely based on the work the EPA has done under CAIR, CSAPR, etc. Delaware can submit another petition, but since the EPA is already obligated to require these reductions under CAA 110(a)(2)(D), and since we would be primarily using EPA modeling data to support a petition, and since the EPA is the approval authority we are not sure why EPA would place such burden on our limited resources to accomplish what should be reasonably accommodated through appropriate boundary designation. If Delaware does expend resources to submit another 126 petition, as the EPA appears to be suggesting, is the EPA in turn committing to review and approve our third petition in accordance with the timing mandated in the CAA? Under Section 126 of the Clean Air Act, which addresses interstate pollution abatement, any state or political subdivision may petition the EPA Administrator for a finding that a major source or group of sources is violating the act's prohibition of emissions contributing significantly to nonattainment or interfering with the maintenance of attainment in another state. EPA has 60 days to make a finding in response to such a petition. If the Administrator found that out-of-state sources were significantly contributing to an area's nonattainment, the out-of-state sources would have to shut down within three months unless EPA imposed emission limits and a compliance schedule of not more than three years. According to a March 4, 2010 Congressional

[7] CAA 110(a)(2)(d) required all areas except for non-attainment areas to mitigate their impact before March 2011. Mitigation for non-attainment areas is required in the timing of the CAA 181.

Research Service Report,[8] "EPA has never granted a Section 126 petition in the manner outlined by the statute."

- Section 184. The process of enlarging the existing OTR starts when the EPA or a State Governor determines other states significantly impact. EPA's CAIR and CSAPR modeling clearly show upwind states significantly impact the existing OTR. Delaware can submit a request, but given the EPA has the authority to do this on their own, and a DE request would be largely based on EPA data, and since EPA is the approval authority, we are not sure what we will gain. Is the EPA suggesting that if Delaware submits a request the EPA will expedite its approval?

Given the above, the EPA designation methodology appears to leave Delaware with no clear options. Sussex County is required to attain compliance with the ozone NAAQS as expeditiously as practicable, but not later than 2015, yet Delaware does not have the authority to regulate the emissions that are causing the ozone non-attainment problem in Sussex County. And, as a non-attainment area, it is penalized because its sources must comply with stringent emission regulations, its new sources must comply with stringent limitations and must acquire scarce and expensive emission offsets, and its citizens continue to be exposed to breathing unhealthy air. In comparison, the upwind states that are the cause of the problem do not have any of these issues and enjoy an unfair competitive advantage economically and better public health outcomes. EPA is applying the CAA such that the victim is penalized, and the upwind contributing states are allowed to continue and increase their impact with impunity. And all this stems from the EPA's extremely narrow and inaccurate interpretation of the word "nearby" in Section 107(d) of the CAA.

So, by designating Sussex County as nonattainment, EPA has set up a situation where Delaware is totally dependent on the EPA to require emission reductions in upwind states to clean up the air in Sussex County. If EPA does not require upwind states to mitigate their impact, Delaware has no hope of attaining the standard because as discussed above, it is the upwind areas that are causing the air quality problem in Sussex. If Delaware does not attain, through no fault of its own, it will be bumped up to a higher classification. Sussex has already complied with the requirements of the higher classification under prior ozone NAAQSs (i.e., reasonable further progress, CTG and non-CTG RACT, Gasoline vapor recovery, Motor vehicle inspection and maintenance, emission offsets at 1.15:1). However, the reasonable further progress requirement would be applied again. Sussex emission sources are well controlled (see above), yet a bump-up would require Sussex emissions to be reduced by at least an additional 15%. This result is patently unfair to Delaware businesses that are already doing more to reduce emissions that competitors in upwind states and which would be placed at an even greater economic disadvantage by being required to do more. It is untenable that under the EPA methodology Delaware could be subject to unhealthy air quality and even higher emission control costs, when the emissions in upwind states that cause the problem are not subject to appropriate control.

[8] Clean Air After the CAIR Decision: Multi-Pollutant Approaches to Controlling Powerplant Emissions, Congressional Research Service, 7-5700, March 4, 2010

Our goal is simple: clean, healthy air for all of our citizens. Illegal emissions from upwind states are preventing this. We have complied with the requirements of the Clean Air Act, and we want our nearby states that cause our air to be unhealthy to be required to do their part so that we can actually breathe the healthy air our actions should have already achieved. We are not asking anyone to do anything thing that we have not already done. It is absolutely unfair, both environmentally and economically, that many upwind states stay untouched while many downwind states are targeted and forced to struggle with costly controls over their already well controlled sources. In fact, the EPA methodology sets up a situation where the upwind states receive an even greater competitive advantage that will enable them to pursue economic growth (i.e., increase emissions) that will further impact DE air quality. Delaware urges that EPA reconsider its preliminary intentions of (1) not establishing large nonattainment area boundaries in the east part of the country, and (2) designating Delaware's three counties into three different and separate attainment/non-attainment areas. Either of EPA's intentions would inevitably impose additional, unrealistic and unacceptable burdens on Delaware. We look forward to seeing EPA's serious and careful considerations on our recommendations and comments, and are willing to continue working closely with EPA on relevant issues.

Sincerely,

Collin P. O'Mara
Secretary

cc: Ali Mirzakhalili
Diana Esher