



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

**DESIGNATION RECOMMENDATIONS FOR THE  
2012 ANNUAL FINE PARTICULATE MATTER (PM<sub>2.5</sub>)  
NATIONAL AMBIENT AIR QUALITY STANDARD**

**DECEMBER 2013**

**Comment and Response Document**

**Bureau of Air Quality**

E. Christopher Abruzzo  
Acting Secretary

Tom Corbett  
Governor

The Pennsylvania Department of Environmental Protection (DEP) requested public comments on its “Proposed Recommendations to the U.S. EPA for the 2012 Fine Particulate (PM<sub>2.5</sub>) National Ambient Air Quality Standard – Attainment/Nonattainment Area” on November 2, 2013 (43 *Pa.B* 6598). The public comment period on the proposed designation recommendations closed on November 18, 2013. A listing of the two commentators is provided below.

**COMMENTATORS:**

1. Keri Tucker  
Box 2199  
Allegheny College  
520 N. Main Street  
Meadville, PA 16335
  
2. Thomas Huynh, Air Director  
Philadelphia Air Management Services  
321 University Avenue, 2<sup>nd</sup> Floor  
Philadelphia, PA 19104

## COMMENTS AND RESPONSES

**1. COMMENT:** *Particulate matter needs to be regulated and given off at low levels to avoid health problems as a result of it. (1)*

**RESPONSE:** The DEP appreciates the comment.

**2. COMMENT:** *These specific areas are being labeled as “nonattainment areas:” The Greater Philadelphia Area (which includes Chester, Delaware and Philadelphia Counties), Northampton County Area, Lancaster County Area, Cambria County Area, the Greater Pittsburgh Area (which includes Allegheny and Westmoreland Counties) and the Liberty/Clairton Area. I agree with labeling these areas as “nonattainment” areas and labeling areas complying with lower emissions as “attainment” areas. (1)*

**RESPONSE:** The DEP appreciates the commentator’s support for the Pennsylvania’s proposed designation recommendations for the 2012 PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS).

**3. COMMENT:** *The commentator identifies several sources that emit particulate matter emissions in the Philadelphia area. The commentator states that urban “nonattainment” areas could meet the appropriate particulate matter levels through the reduction of transportation exhaust, by making public transportation more financially feasible for all “nonattainment” area residents. (1)*

**RESPONSE:** The DEP appreciates the comment. Fine particulate matter emissions can be contributed by a number of sources, directly or indirectly, including fuel combustion and industrial processes. Regulating emissions, however, is not addressed through the designation recommendations process. The DEP agrees that reducing transportation exhaust can assist in reducing particulate matter. It is important to note that recent state and federal highway vehicle emission standards have reduced vehicle pollution that contributes to particulate matter levels by almost 90 percent in the last 20 years. Vehicle emissions are expected to continue to decrease over the next 20 years.

**4. COMMENT:** *The commentator stated the following: “25.6% of Philadelphia county residents are under the poverty line and the median household income is 36,957, substantially lower than the average income of 51,651 in Pennsylvania. Stricter regulation and assessment of facilities to make sure they are complying with particle regulations should be of the utmost importance I believe. Particulate matter from factories affects workers and the community as a whole. Reduced lung function, lung disease and asthma are only a few of the illnesses related to increased particulate matter emissions. People living in cities such as Philadelphia are proportionally affected by factory emissions. Financial reasons may prevent them from being able to readily move away from pollutants. This is an issue environmental justice.” (1)*

**RESPONSE:** The DEP appreciates the comment, which requests stricter regulation and assessment of facilities, especially in environmental justice areas. However, it is important to note that the designation recommendations for the 2012 annual standard are consistent with CAA requirements and guidance provided by EPA. See section 107(d)(1)(A) of the CAA, 42 U.S.C. § 7407(d)(1)(A), and EPA’s April 16, 2013, guidance document, *Initial Area Designations for the 2012 Revised Primary Annual Fine Particle National Ambient Air Quality Standard* (Designation Guidance). More information about the designation methodology and EPA’s guidance can be located on page 5 of the DEP’s *Recommendations to the U.S. EPA for the 2012 Fine Particulate (PM<sub>2.5</sub>) National Ambient Air Quality Standard – Attainment/Nonattainment Areas* document.

**5. COMMENT:** *The commentator believes that Philadelphia County should be designated as “attainment” instead of the proposed “nonattainment” designation for several reasons. First, the commentator notes that the one violating monitor in the county (the AMS Laboratory monitor) experienced unusually high PM<sub>2.5</sub> values due to a change in the type of monitor being used, from a Federal Reference Method (FRM) monitor to a Federal Equivalent Method (FEM) monitor. Philadelphia Air Management Services submitted a data exclusion request to EPA for the monitor as part of their 2013-2014 Air Monitoring Network Plan for the period of 2011 through the second quarter of 2013. The commentator writes that assuming that the data exclusion request is approved by EPA, data from the co-located monitor for the time in question provides a 2010-2012 design value under the PM<sub>2.5</sub> National Ambient Air Quality Standard (NAAQS). Historical data for the site also shows the AMS Laboratory monitor as one of the lowest PM<sub>2.5</sub> sites in Philadelphia County. The commentator points out that the analysis in the proposed designations document states that the annual trends for this monitor do not follow regional trends. (2)*

**RESPONSE:** The DEP’s evaluation of the Greater Philadelphia Area, described in Appendix C-1, supports its recommendation that Philadelphia County should be designated as part of the recommended “nonattainment area” for the 2012 annual PM<sub>2.5</sub> health-based standard. The DEP is making initial designation recommendations based on currently available monitoring data. The EPA’s states in its April 16, 2013, Designation Guidance, mentioned in the response to Comment No. 4, above, that “prior to the EPA making final designation decisions, quality-assured, certified air quality monitoring data from 2013 may be available. If so, the EPA’s final designation decisions will be based on data from 2011 to 2013. States may also update their designation recommendations when these new data become available.” If the Philadelphia Air Management Services data exemption request is approved by EPA, then EPA is likely to take that into account in promulgating its final designations. The DEP will continue to work with Philadelphia AMS to modify the recommendation, as appropriate, prior to EPA’s issuance of the final designations.

**6. COMMENT:** *The commentator requests that the proposed designation for Philadelphia County be modified from “nonattainment” to “attainment” or include additional details in the documentation outlining AMS’ data exclusion request to EPA and the outcome if approved. (2)*

**RESPONSE:** The initial “nonattainment” designation recommendation will be retained for Philadelphia Area, pending EPA’s final action on the “data exclusion request” submitted to EPA for consideration by the Philadelphia AMS. If EPA acts on Philadelphia AMS’s data exclusion request prior to finalizing its designations for the 2012 annual PM<sub>2.5</sub> NAAQS, the Department will seek a modification of the designation following the receipt of EPA’s “120-day letter.”