

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

AUG 1 8 2008

Honorable Adrian M. Fenty Mayor of the District of Columbia 1350 Pennsylvania Avenue, NW Suite 316 Washington, D.C. 20004

Dear Mayor Fenty:

Thank you for your recommendations on the status of fine particle pollution (PM_{2.5}) throughout the District of Columbia (D.C.). Fine particle pollution represents one of the most significant barriers to clean air facing our nation today. Health studies link these tiny particles – about 1/30th the diameter of a human hair – to serious human health problems including aggravated asthma, increased respiratory symptoms like coughing and difficult or painful breathing, chronic bronchitis, decreased lung function, and even premature death in people with heart and lung disease. Fine particle pollution can remain suspended in the air for long periods of time and create public health problems far away from emission sources. Reducing levels of fine particle pollution is an important part of our nation's commitment to clean, healthy air.

The U.S. Environmental Protection Agency (EPA) has reviewed the December 18, 2007 letter from Mayor Adrian M. Fenty, submitting the District of Columbia's recommendations on air quality designations for the 2006 24-hour PM_{2.5} standard. EPA has also reviewed the technical information submitted to support the recommendations. EPA appreciates the effort the District of Columbia has made to develop this supporting information.

Consistent with the Clean Air Act, this letter is to inform you that the EPA intends to make modifications to the District of Columbia's recommended designations and boundaries. Based upon 2005 to 2007 air quality monitoring data, the Washington, D.C. area is now in attainment. This is truly good news for the residents of the Washington, D.C. area.

EPA has enclosed a detailed description of the areas where EPA intends to modify the District of Columbia's recommendations, and the basis for such modification. Your District Department of the Environment Director, Mr. George S. Hawkins and the Air Quality Division Associate Director, Ms. Cecily M. Beall, will also receive a copy of this letter and the enclosure. Should you have additional information that you wish to be considered by EPA in this process, please provide it to EPA Region III by October 20, 2008.

EPA has taken steps to reduce fine particle pollution across the country, such as the Clean Diesel Program, to dramatically reduce emissions from highway, nonroad, and stationary diesel engines. In addition, State programs implemented to attain the 1997 PM_{2.5} standards, will also help to reduce unhealthy levels of fine particle pollution.

EPA intends to make final designation decisions for the 2006 24-hour PM_{2.5} standard by December 18, 2008. If you have any questions, please do not hesitate to contact me. Please also be aware that in the near future, EPA is planning to publish a notice in the Federal Register to solicit public comments on our intended designation decisions. EPA looks forward to a continued dialogue with you as we work together to implement the PM_{2.5} standards.

Sincerely,

Donald S. Welsh

Regional Administrator

Enclosure

cc: Mr. George S. Hawkins, Director

District of Columbia Department of the Environment

Ms. Cecily M. Beall, Associate Director for Air Quality Division District Department of the Environment

Enclosure 1

District of Columbia Area Designations for the 2006 24-Hour Fine Particle National Ambient Air Quality Standard

The table below identifies that EPA intends to designate Washington, D.C. as attaining the 2006 24-hour fine particle standard.¹ A county or an area will be designated as nonattainment if it has an air quality monitor that is violating the standard or if the county or area is determined to be contributing to the violation of the standard.

	District of Columbia	EPA's Intended
Area	Recommended Nonattainment Area	Nonattainment Area
Washington, D.C.	District of Columbia	None: monitoring
		attainment based on 2005-
		2007 data

¹ EPA designated nonattainment areas for the 1997 fine particle standards in 2005. In 2006, the 24-hour PM_{2.5} standard was revised from 65 micrograms per cubic meter (average of 98th percentile values for 3 consecutive years) to 35 micrograms per cubic meter. The level of the annual standard for PM_{2.5} remained unchanged at 15 micrograms per cubic meter (average of annual averages for 3 consecutive years).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

1650 Arch Street Philadelphia, Pennsylvania 19103-2029

AUG 1 8 2008

Honorable Martin O'Malley Governor of Maryland 100 State Circle Annapolis, Maryland 21401

Dear Governor O'Malley:

Thank you for your recommendations on the status of fine particle pollution (PM_{2.5}) throughout Maryland. Fine particle pollution represents one of the most significant barriers to clean air facing our nation today. Health studies link these tiny particles – about 1/30th the diameter of a human hair – to serious human health problems including aggravated asthma, increased respiratory symptoms like coughing and difficult or painful breathing, chronic bronchitis, decreased lung function, and even premature death in people with heart and lung disease. Fine particle pollution can remain suspended in the air for long periods of time and create public health problems far away from emission sources. Reducing levels of fine particle pollution is an important part of our nation's commitment to clean, healthy air.

The U.S. Environmental Protection Agency (EPA) has reviewed the December 17, 2007 letter from Governor Martin O'Malley, submitting Maryland's recommendations on air quality designations for the 2006 24-hour PM_{2.5} standard. EPA has also reviewed the technical information submitted to support the recommendations. EPA appreciates the effort Maryland has made to develop this supporting information.

Consistent with the Clean Air Act, this letter is to inform you that the EPA supports most of Maryland's recommended nonattainment designations and boundaries, except for the Washington, District of Columbia (D.C.) area. Based upon 2005 to 2007 air quality monitoring data, the Washington, D.C. area is now in attainment. This is truly good news for the residents of Maryland.

EPA has enclosed a detailed analysis of relevant areas that serves as the basis for EPA's preliminary concurrence with Maryland's recommendations, as well as a detailed description of areas where EPA intends to modify Maryland's recommendations, and the basis for such modification. Your Department of the Environment Secretary, the Honorable Shari T. Wilson and the Air and Radiation Management Administration Director, Mr. George S. Aburn, will also receive a copy of this letter and the enclosures. Should you have additional information that you wish to be considered by EPA in this process, please provide it to EPA Region III by October 20, 2008.

EPA has taken steps to reduce fine particle pollution across the country, such as the Clean Diesel Program, to dramatically reduce emissions from highway, nonroad, and stationary diesel engines. In addition, State programs implemented to attain the 1997 PM_{2.5} standards, will also help to reduce unhealthy levels of fine particle pollution.

EPA intends to make final designation decisions for the 2006 24-hour PM_{2.5} standard by December 18, 2008. If you have any questions, please do not hesitate to contact me. Please also be aware that in the near future, EPA is planning to publish a notice in the Federal Register to solicit public comments on our intended designation decisions. EPA looks forward to a continued dialogue with you as we work together to implement the PM_{2.5} standards.

Sincerely,

Donald S. Welsh

Regional Administrator

Sonald S. Welsh

Enclosures

cc: Honorable Shari T. Wilson, Secretary
Maryland Department of the Environment

Mr. George S. Aburn, Director Air and Radiation Management Administration

Enclosure 1

Maryland Area Designations for the 2006 24-Hour Fine Particle National Ambient Air Quality Standard

The table below identifies the counties in Maryland that EPA intends to designate as not attaining the 2006 24-hour fine particle standard.¹ A county will be designated as nonattainment if it has an air quality monitor that is violating the standard or if the county is determined to be contributing to the violation of the standard.

	Maryland Recommended	EPA's Intended
Area	Nonattainment Counties	Nonattainment Counties
Baltimore	Anne Arundel County	Anne Arundel County
	Baltimore County	Baltimore County
UED	Baltimore City	Baltimore City
	Carroll County	Carroll County
	Harford County	Harford County
	Howard County	Howard County
Washington, DC	Charles County	None: demonstrating
-	Frederick County	attainment based on 2005-
	Montgomery County	2007 monitoring data
	Prince George's County	

EPA intends to designate the remaining counties as "attainment/unclassifiable."

¹ EPA designated nonattainment areas for the 1997 fine particle standards in 2005. In 2006, the 24-hour PM_{2.5} standard was revised from 65 micrograms per cubic meter (average of 98th percentile values for 3 consecutive years) to 35 micrograms per cubic meter. The level of the annual standard for PM_{2.5} remained unchanged at 15 micrograms per cubic meter (average of annual averages for 3 consecutive years).

Enclosure 2

Description of the Contributing Emissions Score

The Contributing Emissions Score (CES) is a metric that takes into consideration emissions data, meteorological data, and air quality monitoring information to provide a relative ranking of counties in and near an area. Using this methodology, scores were developed for each county in and around the relevant metro area. The county with the highest contribution potential was assigned a score of 100, and other county scores were adjusted in relation to the highest county. The CES represents the relative maximum influence that emissions in that county have on a violating county. The CES, which reflects consideration of multiple factors, should be considered in evaluating the weight of evidence supporting designation decisions for each area.

The CES for each county was derived by incorporating the following significant information and variables that impact fine particle (PM_{2.5}) transport:

- Major PM_{2.5} components: total carbon (organic carbon (OC) and elemental carbon (EC)), sulfur dioxide (SO₂), nitrogen oxides (NO_x), and inorganic particles (crustal).
- PM_{2.5} emissions for the highest (generally top 5%) PM_{2.5} emission days (herein called "high days" or "high PM_{2.5} days") for each of two seasons, cold (October-April) and warm (May-September).
- Meteorology on high days using the NOAA HYSPLIT model for determining trajectories of air masses for specified days.
- The "urban increment" of a violating monitor, which is the urban PM_{2.5} concentration that is in addition to a regional background PM_{2.5} concentration, determined for each PM_{2.5} component.
- Distance from each potentially contributing county to a violating county or counties.

A more detailed description of the CES can be found at http://www.epa.gov/ttn/naaqs/pm/pm25 2006 techinfo.html#C.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION III**

1650 Arch Street Philadelphia, Pennsylvania 19103-2029

AUG 18 2008

Honorable Timothy M. Kaine Governor of Virginia Patrick Henry Building, 3rd Floor 1111 East Broad Street Richmond, Virginia 23219

Dear Governor Kaine:

Thank you for your recommendations on the status of fine particle pollution (PM_{2.5}) throughout Virginia. Fine particle pollution represents one of the most significant barriers to clean air facing our nation today. Health studies link these tiny particles – about 1/30th the diameter of a human hair - to serious human health problems including aggravated asthma, increased respiratory symptoms like coughing and difficult or painful breathing, chronic bronchitis, decreased lung function, and even premature death in people with heart and lung disease. Fine particle pollution can remain suspended in the air for long periods of time and create public health problems far away from emission sources. Reducing levels of fine particle pollution is an important part of our nation's commitment to clean, healthy air.

The U.S. Environmental Protection Agency (EPA) has reviewed the December 17, 2007 letter from Mr. David K. Paylor, Director of the Department of Environmental Quality, submitting Virginia's recommendations on air quality designations for the 2006 24-hour PM_{2.5} standard. EPA has also reviewed the technical information submitted to support the recommendations. EPA appreciates the effort Virginia has made to develop this supporting information.

Consistent with the Clean Air Act, this letter is to inform you that EPA agrees that the entire Commonwealth of Virginia is in attainment at this time. This means that across the Commonwealth of Virginia, all areas meet the 2006 24-hour PM_{2.5} standard. This is truly good news for the residents of Virginia.

EPA has taken steps to reduce fine particle pollution across the country, such as the Clean Diesel Program, to dramatically reduce emissions from highway, nonroad, and stationary diesel engines. In addition, State programs implemented to attain the 1997 PM_{2.5} standards, will also help to reduce unhealthy levels of fine particle pollution.

EPA intends to make final designation decisions for the 2006 24-hour PM_{2.5} standard by December 18, 2008. If you have any questions, please do not hesitate to contact me. Please also be aware that in the near future, EPA is planning to publish a notice in the Federal Register to solicit public comments on our intended designation decisions. EPA looks forward to a continued dialogue with you as we work together to implement the PM_{2.5} standards.

Sincerely,

Donald S. Welsh

Regional Administrator

cc: Mr. David K. Paylor, Director

Virginia Department of Environmental Quality

Mr. Michael G. Dowd, Air Quality Division Director Virginia Department of Environmental Quality