ADRIAN M. FENTY
MAYOR

December 18, 2007

Donald S. Welsh
Regional Administrator (3RA00)
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103

Dear Mr. Welsh:

On behalf of the District of Columbia (DC), I thank you for the opportunity to make recommendations for the fine particulate matter ($PM_{2.5}$) pollution non-attainment areas. In the recent three-year period (2004-2006), DC's ambient air monitoring stations recorded exceedances of the revised daily national ambient air quality standard (NAAQS) for $PM_{2.5}$ of 35 micrograms per cubic meter (ug/m^3). The 2006 design value for the District was 37 ug/ m^3. Based on the monitored air quality data and the 2006 design value, in accordance with Section 107(d)(1) of the Clean Air Act, I am recommending that the entire District be designated as a non-attainment area under the new daily $PM_{2.5}$ standard.

The $PM_{2.5}$ pollution sources in DC contribute about six percent of the total emissions in the Washington DC-MD-VA metropolitan statistical area (MSA). Because of the regional nature of $PM_{2.5}$ pollution, I am recommending that the attainment area for the $PM_{2.5}$ daily NAAQS should include at a minimum the entire Washington DC-MD-VA MSA. This recommendation was based on the nine-factor assessment suggested by the U.S. Environmental Protection Agency (EPA). I also support the idea of using a wider Washington DC-Baltimore, MD-VA-WV consolidated metropolitan statistical area (CMSA) where the CMSA will determine the attainment or non-attainment designation while the state implementation plans (SIPs) are developed within the MSA boundaries. In urban areas such as the Washington DC-MD-VA MSA, additional controls on mobile sources will be a key component to attaining the revised daily $PM_{2.5}$ NAAQS.

If you need further information on this matter, please call George S. Hawkins, Director, District Department of the Environment, at (202) 535-2615.

Sincerely,

Adrian M. Fenty
Mayor

cc:
Judith Katz, Director, Air Protection Division, EPA Region III
George S. Hawkins, Director, DDOE
Cecily Beall, Associate Director for Air Quality Division, DDOE

STATE OF MARYLAND
OFFICE OF THE GOVERNOR

MARTIN O'MALLEY
GOVERNOR

STATE HOUSE
100 STATE CIRCLE
ANNAPOLIS, MARYLAND 21401-1925
(410) 974-3901
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TTY USERS CALL VIA MD RELAY

December 17, 2007

Mr. Donald Welsh
Regional Administrator (3RA00)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia PA 19103-2023

Dear Mr. Welsh:

Maryland thanks you for the opportunity to present the Environmental Protection Agency (EPA) with recommendations for Maryland's Fine Particle nonattainment areas under the revised daily standard. In accordance with Section 107(d)(1) of the Clean Air Act, Maryland's boundary recommendations for attainment, nonattainment, and control region areas under the revised daily fine particle standard are provided in Table 1.

Clean air continues to be very important to the State of Maryland and its citizens. Maryland is currently preparing an air quality plan related to the annual fine particle standard. Significant progress has already been made in reducing fine particle pollution. The adoption of the Maryland Healthy Air Act, the region's most aggressive power plant control program, will further this progress by reducing Maryland's power plant emissions faster and more aggressively than the Federal Clean Air Interstate Rule.

Maryland continues to emphasize the need for tough, multi-state, regional control programs that not only reduce pollution close to home but also significantly reduce the amount of transported pollution from out-of-state sources. The Maryland Healthy Air Act and other aggressive regulations have put Maryland in the forefront on local pollution control. Transported pollution, however, represents a sizeable contribution to Maryland's fine particle problems. Pollution controls over most of the East will be needed for Maryland to attain the revised daily fine particle standard. Reducing transported pollution is not only important to protect the health of Maryland's citizens but it is also directly linked to Maryland's business climate and our ability to spur continued economic development through new infrastructure investment.

Maryland's recommendations are based upon three guiding principles that emerged from our discussions with stakeholders over the past ten years. These principles are:

1. Accountability - EPA must continue to hold upwind areas that contribute to poor air quality in downwind areas responsible for making appropriate reductions in emissions.

2. Maintaining Effective Planning Processes - Existing, effective air quality planning and transportation conformity processes like those in the Baltimore and Washington areas should be recognized and maintained whenever possible. Maryland works with several separate Metropolitan Planning Organizations in developing clean air and transportation plans. This has worked very well for certain Clean Air Act requirements, like transportation conformity, where air quality and transportation planning responsibilities overlap.

3. Consistency - EPA needs to ensure that a consistent national designation policy is used in this and all designation processes.

Table 1 summarizes the specific areas that Maryland is recommending as attainment or nonattainment. These recommendations are based upon the 2006 annual PM2.5 design values as shown in Map 4 of Attachment A. Maps 1, 2, and 3 of Attachment A illustrate the recommended PM fine nonattainment areas, PM2.5 monitor locations, and the 2006 annual PM2.5 design values.

TABLE 1

Maryland's Designation Recommendations for EPA's Revised Daily Fine Particle Standard

Designated Area	Designation
Baltimore Area	
Anne Arundel County	Nonattainment
Baltimore City	Nonattainment
Baltimore County	Nonattainment
Carroll County	Nonattainment
Harford County	Nonattainment
Howard County	Nonattainment
Washington DC Area	
Charles County	Nonattainment
Frederick County	Nonattainment
Montgomery County	Nonattainment
Prince Georges County	Nonattainment

Hagerstown – WV Panhandle Area

Washington County	Attainment

Attainment Counties

Allegany County	Attainment
Calvert County	Attainment
Caroline County	Attainment
Cecil County	Attainment
Dorchester County	Attainment
Garrett County	Attainment
Kent County	Attainment
Queen Anne's County	Attainment
Somerset County	Attainment
St. Mary's County	Attainment
Talbot County	Attainment
Wicomico County	Attainment
Worcester County	Attainment

Maryland recognizes that this boundary recommendation submittal is only the first step in the fine particle designation process, and looks forward to working with the Environmental Protection Agency (EPA) and Maryland stakeholders during the final steps of the designation process.

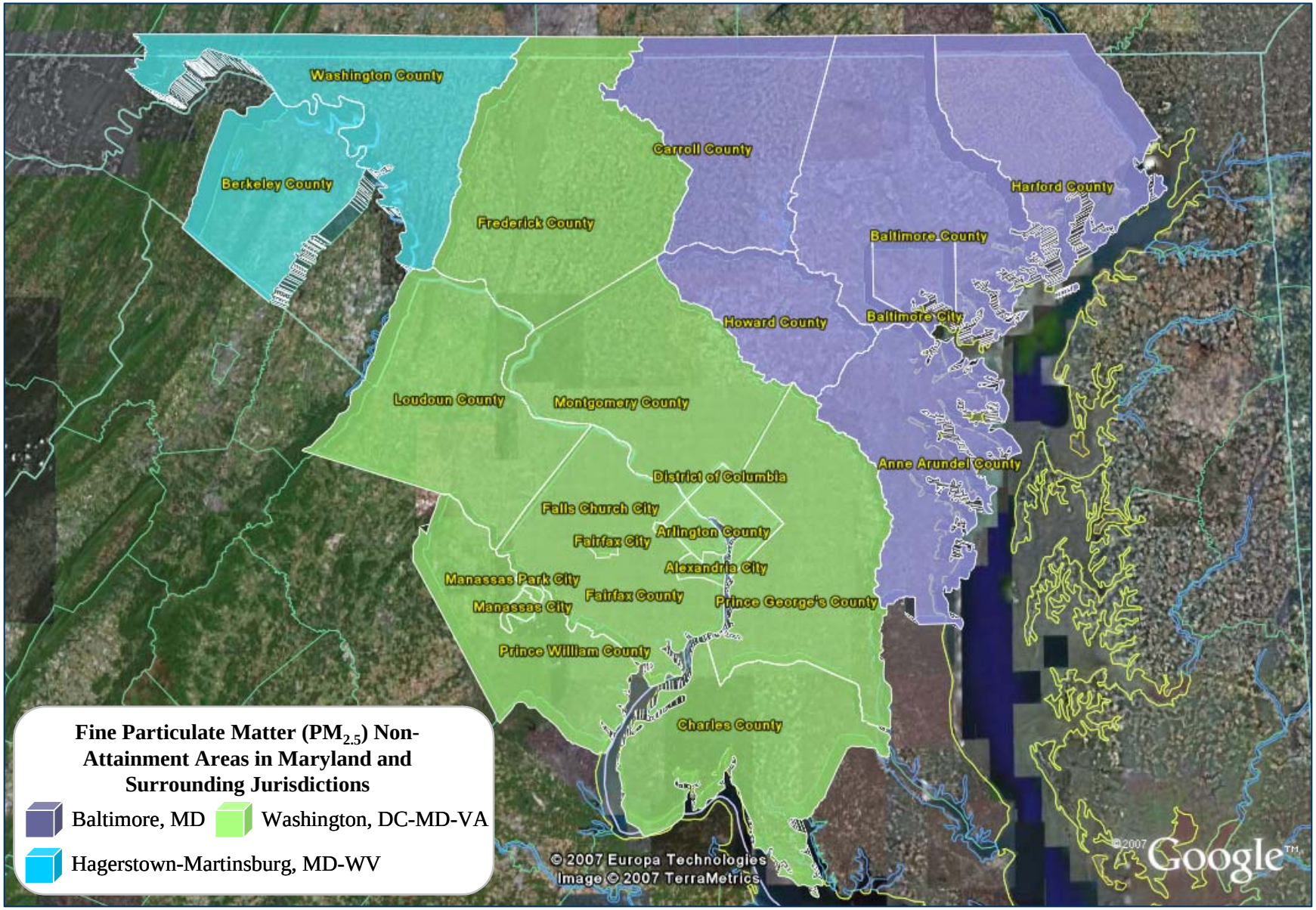
If you have any questions on this submission, please do not hesitate to contact Shari T. Wilson, Secretary, Maryland Department of Environment at (410) 537-3086 or George (Tad) Aburn, Director of the Air and Radiation Management Administration at (410) 537-3255.

Sincerely,

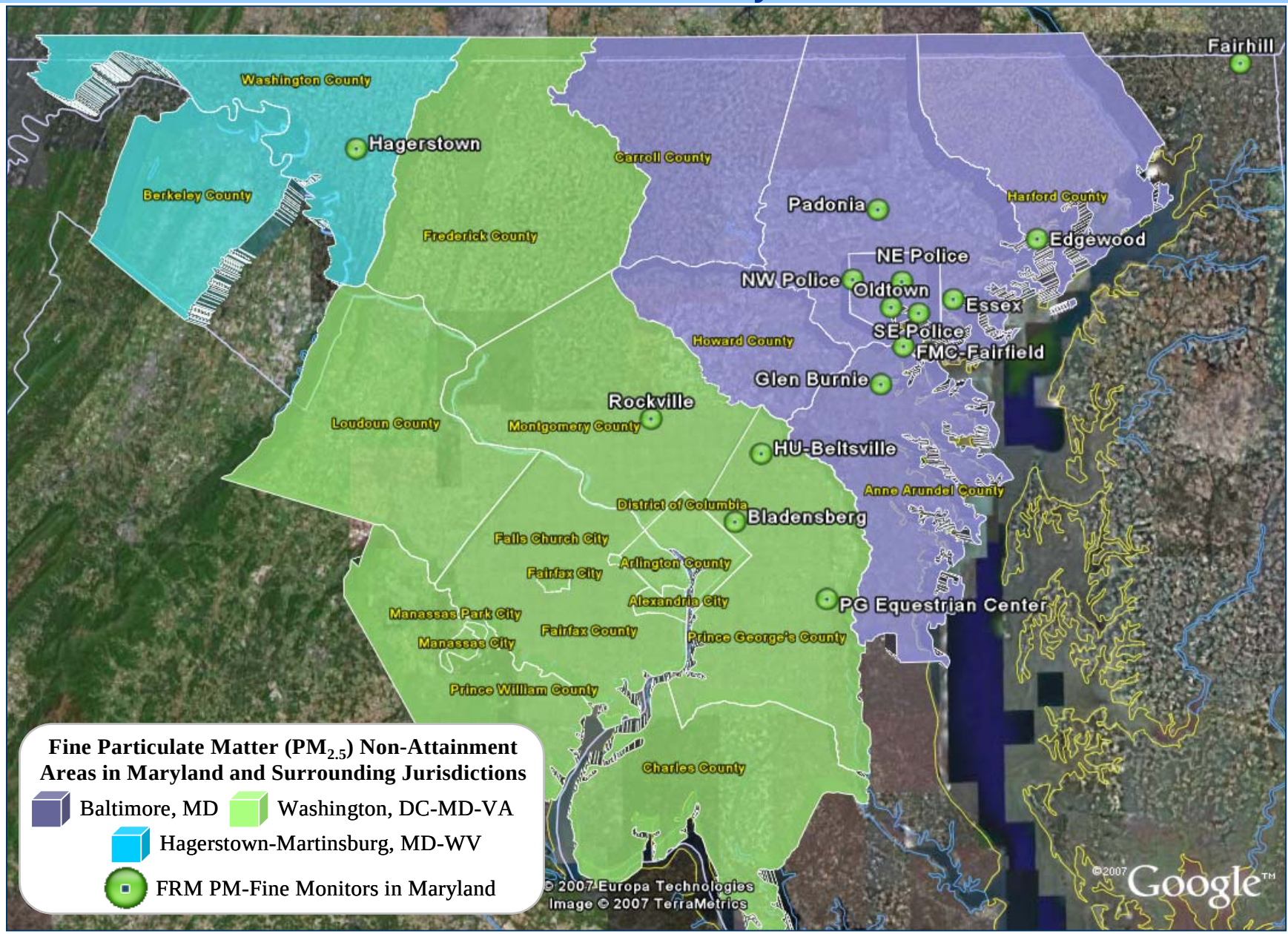
Governor

Attachments: MDE maps of proposed nonattainment areas and air monitoring data

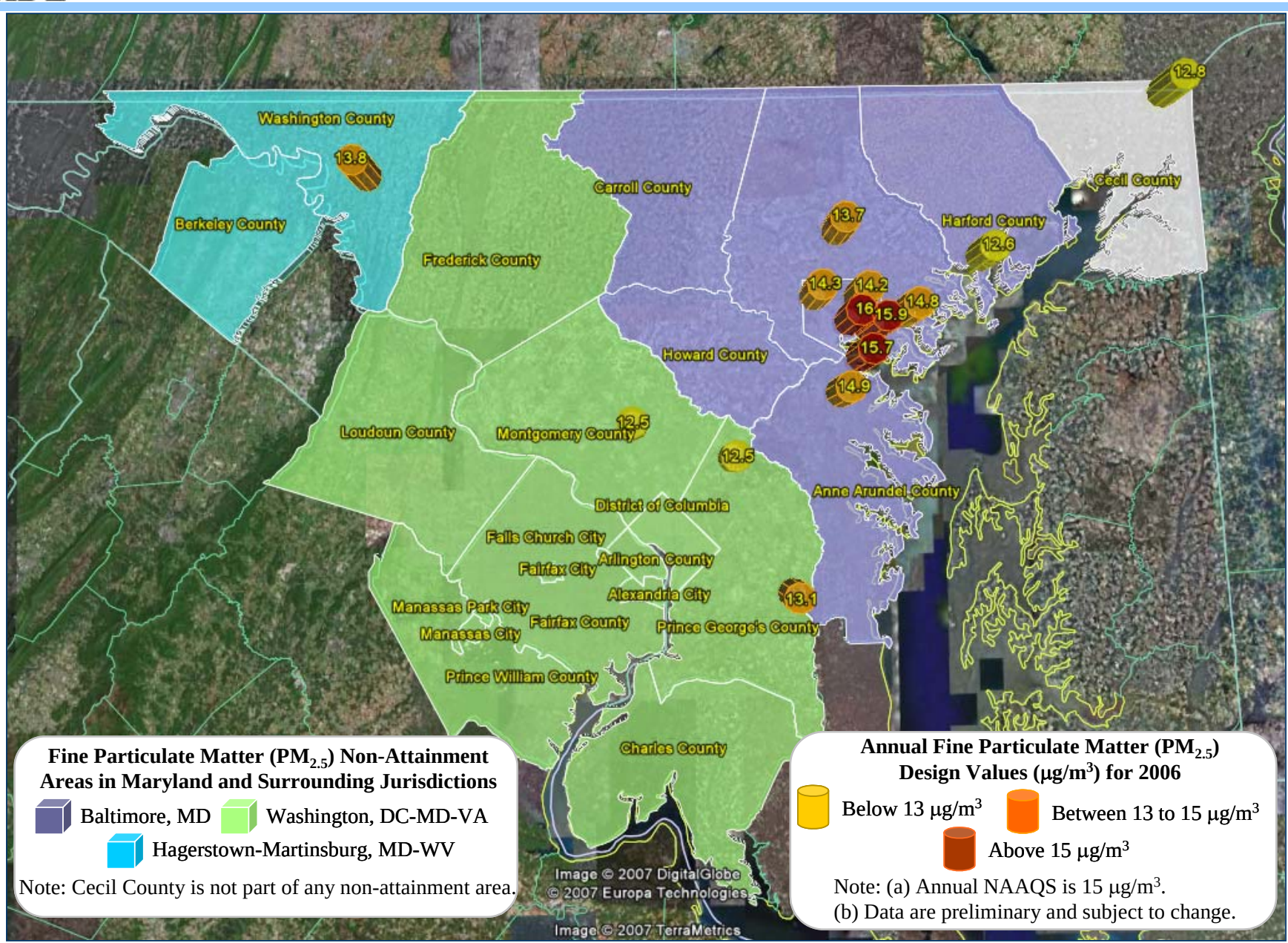
Attachment A, Map 1
Fine Particulate Matter Nonattainment Areas



Attachment A, Map 2
Fine Particulate Matter Non-Attainment Areas and FRM Monitors in Maryland



Attachment A, Map 3
Annual Fine Particulate Matter for 2006



Fine Particulate Matter ($PM_{2.5}$) Non-Attainment Areas in Maryland and Surrounding Jurisdictions

Baltimore, MD

Washington, DC-MD-VA

Hagerstown-Martinsburg, MD-WV

Note: Cecil County is not part of any non-attainment area.

Annual Fine Particulate Matter ($PM_{2.5}$) Design Values ($\mu g/m^3$) for 2006

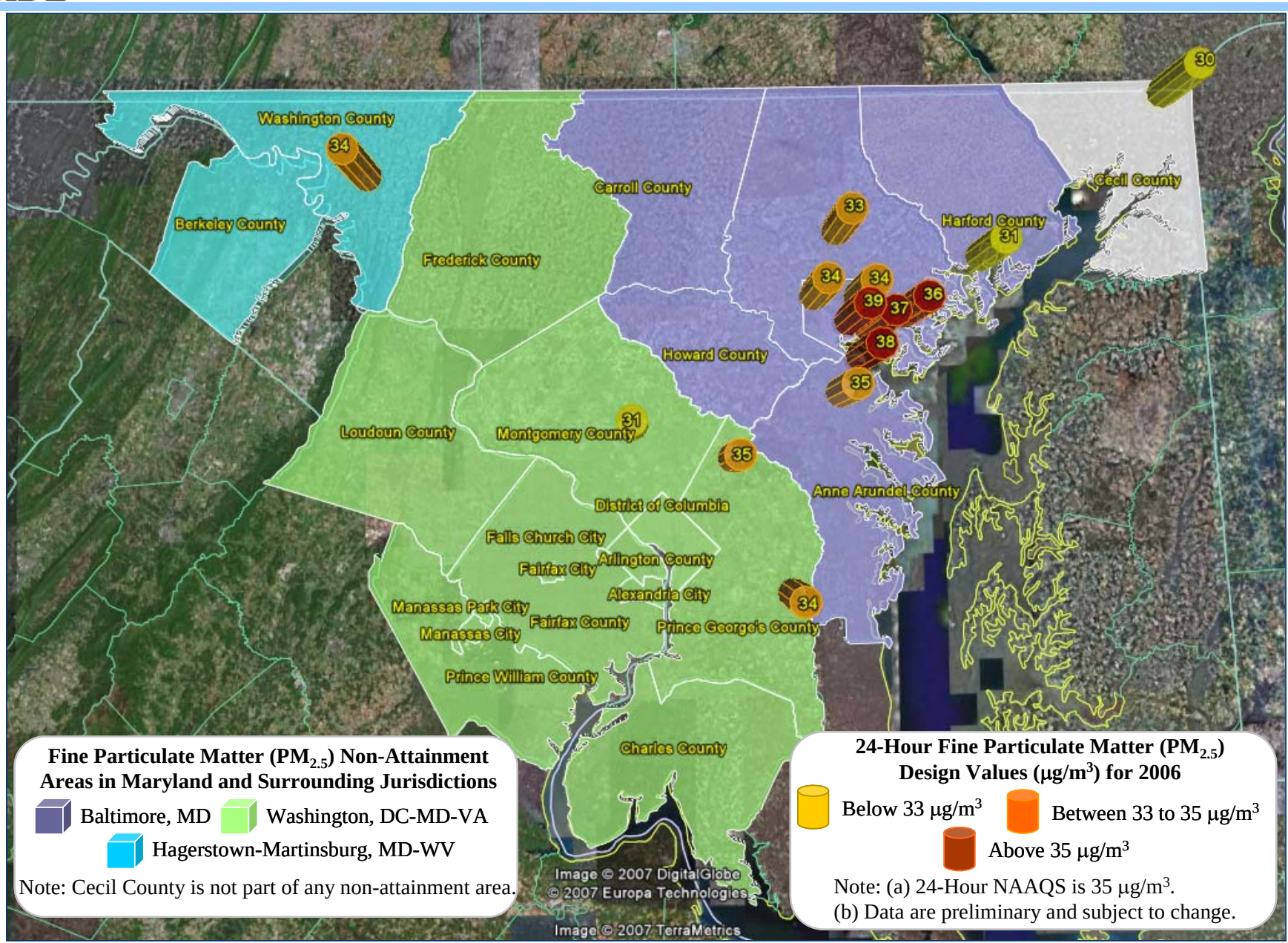
Below 13 $\mu g/m^3$

Between 13 to 15 $\mu g/m^3$

Above 15 $\mu g/m^3$

Note: (a) Annual NAAQS is 15 $\mu g/m^3$.
(b) Data are preliminary and subject to change.

Attachment A, Map 4
24-Hour Fine Particulate Matter for 2006



Fine Particulate Matter ($PM_{2.5}$) Non-Attainment Areas in Maryland and Surrounding Jurisdictions

Baltimore, MD

Washington, DC-MD-VA

Hagerstown-Martinsburg, MD-WV

Note: Cecil County is not part of any non-attainment area.

24-Hour Fine Particulate Matter ($PM_{2.5}$) Design Values ($\mu g/m^3$) for 2006

Below 33 $\mu g/m^3$

Between 33 to 35 $\mu g/m^3$

Above 35 $\mu g/m^3$

Note: (a) 24-Hour NAAQS is 35 $\mu g/m^3$.
(b) Data are preliminary and subject to change.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
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L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

December 17, 2007

Mr. Donald S. Welsh
Regional Administrator
USEPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Administrator Welsh:

The purpose of this letter is to formally respond on behalf of the Commonwealth of Virginia to the U.S. Environmental Protection Agency's (EPA's) request for area designations under the 2006 short term National Ambient Air Quality Standard (NAAQS) for fine particulate matter ($PM_{2.5}$). This newly promulgated standard requires compliance with the 35 micrograms per cubic meter ($\mu g/m^3$) standard over a 24-hour period. These designation recommendations are required under Section 107(d)(1) of the Clean Air Act (CAA).

As you know, a great deal of progress has already been made in reducing $PM_{2.5}$ pollution due to both federal and state air pollution control programs. In fact, I am pleased to inform you that all the ambient monitoring sites for $PM_{2.5}$ in Virginia are currently in compliance with the new 24-hour standard. A table with the most recent daily design values for calendar years 2004 to 2006 at these monitoring sites is presented in Enclosure I to this letter.

In light of these data, I strongly urge you to designate the entire Commonwealth as an attainment area for this standard. Beyond the current air quality attainment indicators, this request is further supported by the anticipated emission reductions and air quality improvements that will result from the pending federal Clear Air Interstate Rule (CAIR) and other programs.

Regarding the jurisdictions in Northern Virginia that are part of the Washington, D.C. Metropolitan Statistical Area (MSA), I offer the following additional supporting information for these jurisdictions to be designated as an

attainment area, despite a single isolated area of monitored nonattainment in the District of Columbia.

- All monitors in Northern Virginia are currently in compliance with both the annual and daily standard.
- Significant emission reductions in sulfur dioxide (SO_2) and oxides of nitrogen (NO_X) have been achieved in Northern Virginia since 2002. This reduction trend is expected to continue.
- Current $PM_{2.5}$ modeling results predict that all monitors in the Washington MSA will be in compliance with the daily standard by 2009.

Additional data supporting the points made above are provided in Enclosure II. Finally, I would urge EPA to continue to monitor and consider the most recent monitoring data for this area up to the completion of the designation process.

Thank you for the opportunity to provide input on this very important air quality issue on behalf of the citizens of Virginia who are benefiting from our collective efforts to improve air quality.

Sincerely,

David K. Paylor

David K. Paylor

Enclosures

Cc: L. Preston Bryant, Jr.
James Sydnor, DEQ

ENCLOSURE I

Virginia Department of Environmental Quality
2004-2006 $PM_{2.5}$ 24-hour Averages, 98th Percentile Values
Units, Micrograms per Cubic Meter

County/City	AIRS ID	2004	2005	2006	3-Year Average (NAAQS = 35 µg/m3)
Southwest Virginia Area:					
Bristol	515200006	30.2	30.6	30.9	31
Roanoke/Lynchburg Area:					
Roanoke	517700014	32.2	35.4	29.9	33
Salem	517750010	33.0	37.0	NA	NA
Lynchburg	516800015	28.0	35.1	27.8	30
Richmond Area:					
Chesterfield Co.	510410003	29.8	30.4	31.1	30
Henrico Co. - Math & Science Ctr.	510870014	30.2	32.2	30.9	31
Henrico Co. - DEQ Piedmont Office	510870015	28.1	29.0	28.7	29
Charles City Co.	510360002	28.9	31.4	33.7	31
Tidewater Area:					
Hampton	516500004	27.9	26.9	32.0	29
Norfolk	517100024	28.2	29.6	31.3	30
Virginia Beach	518100008	27.9	29.9*	32.0*	30*
Northern Virginia Area:					
Arlington Co.	510130020	35.7	34.2	32.5	34
Loudoun Co.	511071005	34.2	37.7	32.8	35
Fairfax Co. - Lee Park	510590030	35.3	35.8	33.9	35
Fairfax Co. - McLean	510595001	33.7	34.6	32.4	34
Fairfax Co. - Annandale	510591005	34.0	35.1	32.0	34
Transport Monitoring Site:					
Page Co.	511390004	27.2	32.0	28.3	29

**** - Incomplete data capture for the year***

Disc. - Discontinued

ENCLOSURE II

The following jurisdictions are part of the Washington, D. C. metropolitan area and are also part of the existing air quality nonattainment area for the annual fine particulate matter ($PM_{2.5}$) National Ambient Air Quality Standard (NAAQS):

- Arlington County
- Fairfax County
- Loudoun County
- Prince William County
- Alexandria City
- Fairfax City
- Falls Church City
- Manassas City
- Manassas Park City

These jurisdictions were included in this nonattainment area by EPA despite the fact that all monitors in the area were in compliance with the annual standard at the time of designation, and over the objection of the Commonwealth of Virginia.

To further justify the exclusion of these jurisdictions from any future nonattainment area for the 2006 24-hour $PM_{2.5}$ NAAQS, the following information is presented below:

- Current and future air quality
- Local emissions and reductions
- Area population and traffic trends
- Control of emissions sources

AIR QUALITY DATA

As presented in Enclosure I, all the monitors in the Northern Virginia (NOVA) area are currently in compliance with the daily $PM_{2.5}$ standard. Furthermore, only one monitor in the entire Washington metropolitan area is currently violating this standard by a small amount. This monitor is located in the District of Columbia and has a current design value of 36 $\mu g/m^3$.

As part of the annual standard planning process, the VADEQ has performed regional modeling for the DC area. This modeling predicts that all monitors in the area will be in compliance with the annual and 24-hour standard by 2009. The maps below show both the current and predicted future status of the Washington area for the daily standard.

Figure 1 – Current (2004-2006) Monitor Status

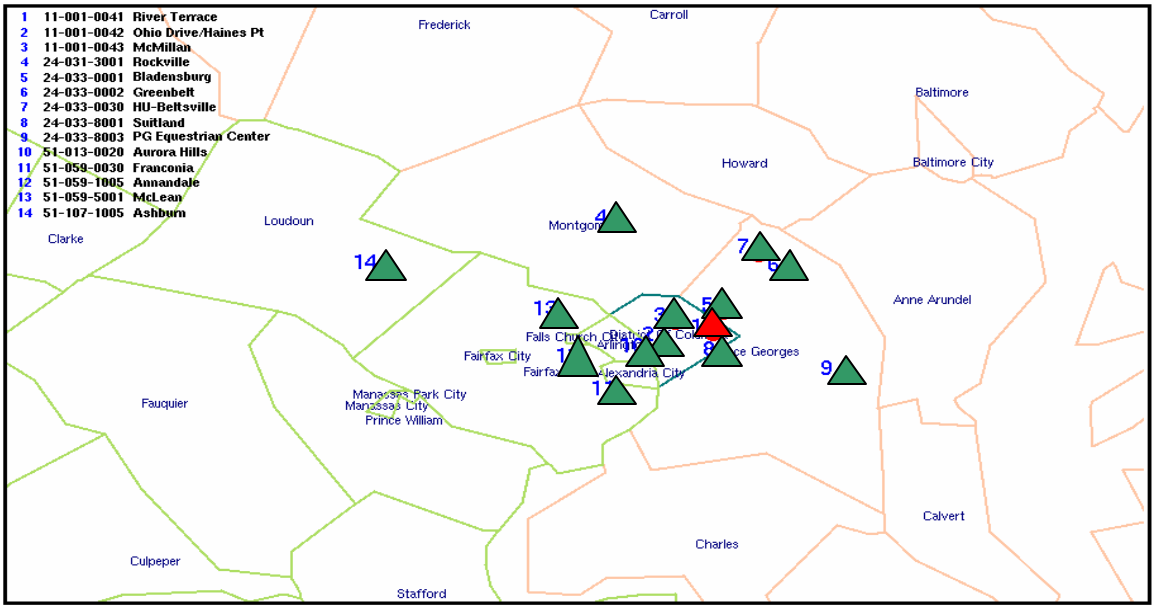
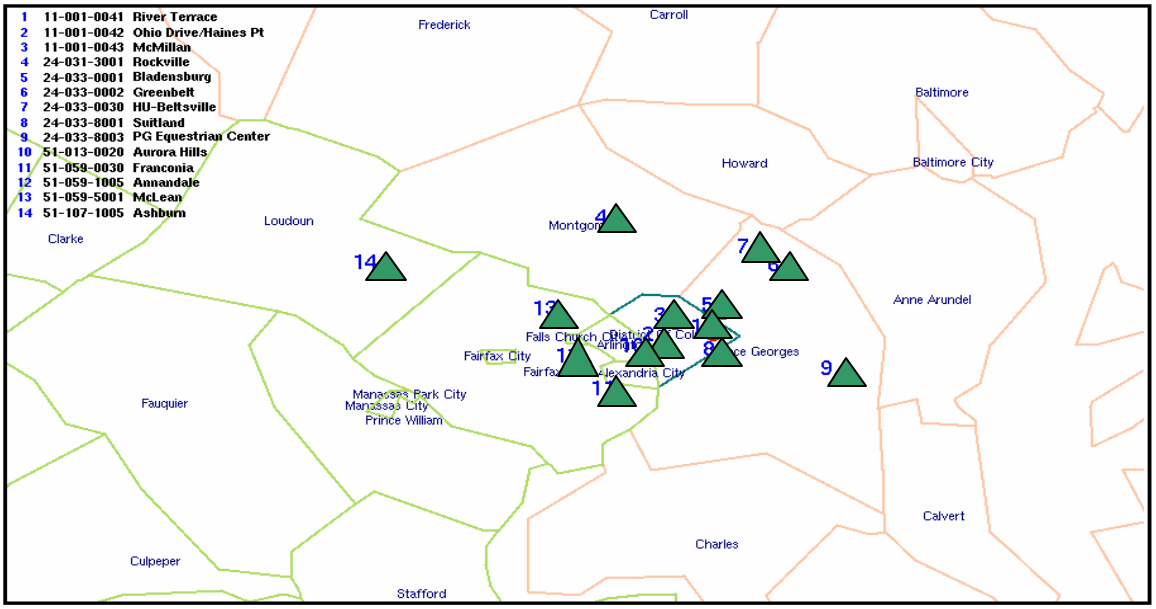


Figure 2 – Future Predicted (2009) Monitor Status



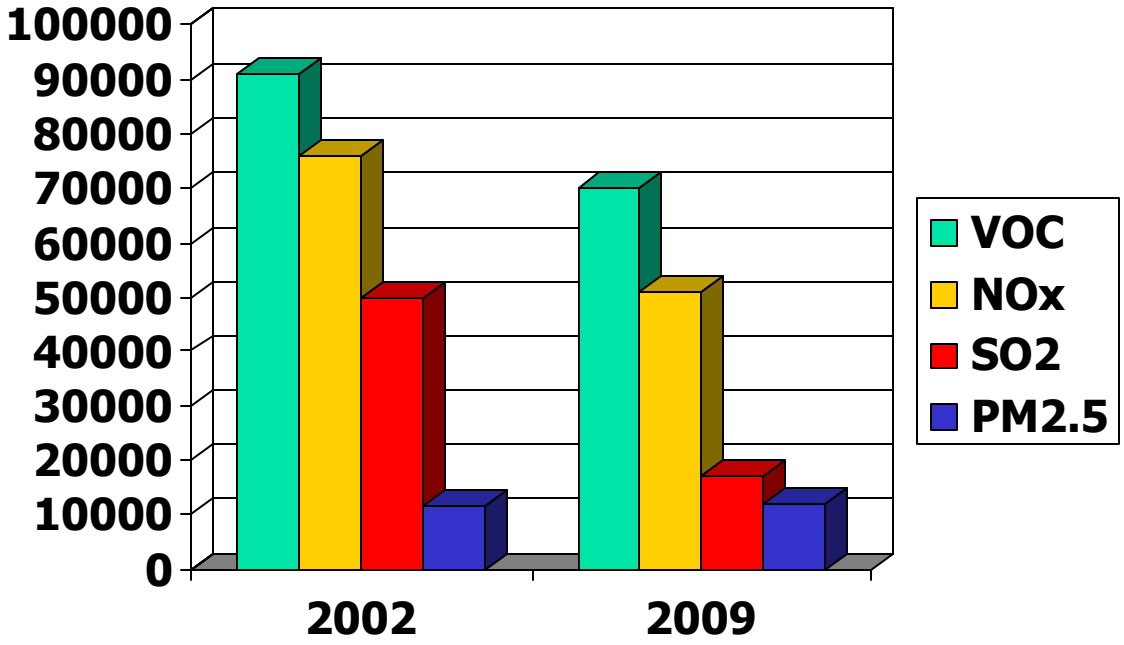
Attainment Nonattainment

LOCAL EMISSIONS AND REDUCTIONS

Emission of direct $PM_{2.5}$ and the main secondary precursor pollutants of SO_2 and NO_X have dramatically decreased in NOVA since 2002. In point

sources alone, there has been an actual decrease of about 30,000 tons per year of SO_2 and 8,000 tons per year of NO_X in NOVA since 2002. Furthermore these reductions are predicted to continue through 2009. These emission levels are presented in the graph below:

Figure 3 – NOVA Emissions and Emission Reductions (All Sources)



The reduction in SO_2 emissions is of particular note since secondary sulfates is the main contributor to ambient $PM_{2.5}$ levels in the Washington area. VOC emissions continue to decrease which may also benefit the area in reducing the organic carbon contribution to overall $PM_{2.5}$ levels in the area.

AREA POPULATION AND TRAFFIC TRENDS

The NOVA area is one of the fastest growing areas in terms of population in Virginia. This area is also a significant commuter generating area for Washington. As of 2005, the population of NOVA was 2.4 million which represents a 15% increase from the 2000 census.

However, despite this increase in population and associated commuter traffic, motor vehicle emissions have substantially decreased in the area due to federal and state control programs. By 2009, it is predicted that NO_X emissions from mobile sources will be reduced by about 19,000 tons per year, and SO_2 emissions will be reduced by 1,300 tons per year.

CONTROL OF EMISSION SOURCES

Substantial controls have been implemented in NOVA to control $PM_{2.5}$ and precursor emissions.

Point Sources – Significant controls have been applied to the two power generating stations in NOVA. In the case of the Dominion Virginia Power Possum Point Generating Station, a major fuel switching project was completed in 2003 which discontinued all coal operations at this facility. This has resulted in significant reductions in all $PM_{2.5}$ related emissions at this facility. At the Mirant Potomac River Generating Station, controls have been installed to reduce SO_2, NO_X, and particulate matter emissions.

Motor Vehicles – Major controls have also been implemented to reduce $PM_{2.5}$ related emissions from mobile sources. These controls include:

- High-tech vehicle inspection and maintenance
- National low emissions vehicle program
- Tier 2 motor vehicle emissions standards
- Low sulfur gasoline

As mentioned earlier these control programs combine to produce significant reductions in NO_X and VOC emissions, and lesser reduction in SO_2 and particulate matter emissions.

Nonroad Equipment – Controls have also been implemented to reduce $PM_{2.5}$ related emissions from nonroad vehicles and equipment that result in reductions of SO_2, NO_X, VOC, and primary $PM_{2.5}$ emissions. These controls include:

- Nonroad gasoline and diesel engine rules
- Marine engine rule
- Locomotive standards
- Low sulfur gasoline

In addition to these control programs, the VADEQ is in the process of initiating a major multi-million dollar project to retrofit local vehicle fleets and other equipment in NOVA.

Area Sources – A number of control programs have been implemented to further reduce VOC emissions in the DC area. These include AIM coatings, consumer products, auto refinishing, portable fuel containers, and others.

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

AUG 18 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

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.

Area	District of Columbia Recommended Nonattainment Area	EPA's Intended 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 18 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 $1/30^{th}$ 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

Donald S. Welsh
Regional Administrator

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.

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

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 (SO_2), 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

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