



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Robert L. Ehrlich, Jr.
Governor

Kendl P. Philbrick
Secretary

Michael S. Steele
Lt. Governor

Jonas A. Jacobson
Deputy Secretary

February 22, 2005

RECEIVED

FEB 25 2005

Division Director (3AP00)

Mr. David Arnold
Environmental Protection Agency, Region III
Air Protection Division
1650 Arch Street
Philadelphia PA 19103-2029

Dear Mr. Arnold:

Dave

Pursuant to your January 5, 2005 final PM_{2.5} designations notice in the *Federal Register*, the Maryland Department of the Environment (MDE) would like to submit additional justification for the attainment designation of Washington County, Maryland. In the *Federal Register* notice, the Environmental Protection Agency (EPA) provides that if any state submits complete, quality assured 2004 data that indicates a different designation status, then EPA, if in agreement, would withdraw the designation for such area and issue another designation that reflects the inclusion of 2004 data. In our response, MDE presents 2004 data and rationale to support our PM_{2.5} attainment recommendation for Washington County.

Maryland has worked with state legislators, the business community, numerous environmental organizations, local governments from Maryland, Virginia, and West Virginia, and the public during this designation process. Washington County is of particular concern to MDE when it comes to the PM_{2.5} designation process. The MDE believes that designating the county as nonattainment under the PM_{2.5} standard negates any of the perceived benefits of the Early Action Compact (EAC) program, under which Washington County operates for the 8-hour ozone standard. Washington County has worked extremely hard and with good faith over the past two years to develop air quality control measures to meet the 8-hour ozone standard and the EAC requirements as requested by EPA.

The MDE has continued to analyze the PM_{2.5} data for Washington County through the end of 2004. The study of a decade of wind data allowed the generation of quarterly wind roses that indicate that, for most of the year, the winds in Washington County blow into the County from the northwest and west. Only in third quarter do the winds come from the southwest. In general, the wind pattern does not directly implicate Washington County sources in the high values of PM_{2.5} seen in Berkeley County, West Virginia. Similar data showing that Washington County did not affect the Berkeley monitor on high PM_{2.5} days was submitted to you earlier. That data used the Hysplit model to show that on the individual days, air parcels affecting the Berkeley monitor did not originate in Washington County.

Maryland's PM_{2.5} data for 2002-2004 shows that first and fourth quarters generally have the lowest quarterly average. Second quarter data shows some increase from first and fourth quarter levels, while the third quarter is generally the highest quarter. From our speciation data, the rise in second and third quarters is due to a larger portion of sulfate in the PM_{2.5}. This rise is probably caused by a higher percentage of sulfates from SO₂ emissions under more favorable reaction conditions in the summer.

Western Maryland, consisting of Washington, Allegany, and Garrett Counties, has only 10% of the point sources in Maryland. Even so, under the NOx SIP call, all of those sources were controlled. As part of the Ozone Transport Region (OTR), all sources already have VOC and NOx RACT applied to them. The R.P. Smith power plant already has low NOx burners and separated over fire air (SOFA) controls applied to it. Although these controls are not the most stringent available, the maps obtained from EPA's Clean Air Markets website show emissions from this plant are dwarfed by other power plants in the West Virginia and Virginia area. Thus, the Washington County monitor is more likely to be affected by transported pollution than local sources of pollution.

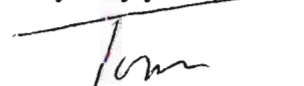
Approximately 75% of the SO₂ emissions (the primary PM_{2.5} driver in our regional nonattainment concern) generated in Washington County come from the power plant that will be controlled via the Clean Air Interstate Rule (CAIR) or some form of federal rule. Other source sectors, like mobile sources, will also be controlled through federal rules.

Currently, Washington County's PM_{2.5} annual design value for 2004 (averaging data from the years 2002, 2003, and 2004) is 14.1 ug/m³ (micrograms per cubic meter). Design values for the years 2002 and 2003 were 14.8 ug/m³ and 14.0 ug/m³, respectively. Clearly, this is indicative of a downward trend in annual PM_{2.5} levels within Washington County and merits reconsideration of the designation status. Additionally, the latest data released by the state of West Virginia for Berkeley County (Martinsburg) shows PM_{2.5} design values continuing to decline from 16.32 ug/m³ (2001-2003) to 16.15 ug/m³ (2002-2004). The Eastern Panhandle of West Virginia, comprising Berkeley and Jefferson Counties, is considered part of the Baltimore (MD) – Washington (DC) CMSA under the 1999 federal definitions.

The MDE requests that EPA reconsider excluding Washington County from Maryland's nonattainment areas as proposed in your December 17, 2004 designation letter. Enclosed with this letter are the December 17, 2004 EPA letter to Governor Robert Ehrlich, Jr., the September 1, 2004 letter from Washington County to MDE requesting the County remain in attainment for PM_{2.5}, a technical support document providing PM_{2.5} data and design values for Maryland's monitoring network, wind rose data for Washington County, maps from the EPA's Clean Air Markets website, and an excerpt from the January 5, 2005 EPA Federal Register.

The Department looks forward to working with EPA to ensure clean air and economic prosperity in Maryland. Please contact Tad Aburn, Manager of the Air Quality Planning and Monitoring Program, at (410) 537-3245 if you have any questions.

Very truly yours,



Thomas C. Snyder, Director,
Air & Radiation Management Administration

Enclosures

cc: Kendl P. Philbrick, Secretary, Maryland Department of the Environment
Tad Aburn, Program Manager, Air Quality Planning and Monitoring Program
Gregory L. Snook, President, Board of County Commissioners of Washington County