

PM_{2.5} Redesignation Request Considerations and Possibilities **Virginia Department of Environmental Quality**

BACKGROUND: The metropolitan DC area was designated by EPA as not attaining the 1997 PM_{2.5} National Ambient Air Quality Standard, which is 15 ug/m³ on an annual basis. However, local and regional pollution reduction strategies have worked, and the air quality has improved. According to EPA's database, the area's monitoring network shows a value of 14.9 ug/m³ in 2005, 14.5 ug/m³ in 2006, and 14.3 ug/m³ in 2007 (interim data). Modeling indicates that air quality will continue to improve into the future. 2007 interim data also shows compliance with the 2006 NAAQS of 35 ug/m³ on a daily basis.

If the 2007 data, after final QA and certification by the states, shows compliance with the 2006 daily PM_{2.5} NAAQS, the area may be designated attainment for the 2006 standard.

WHY REDESIGNATE?

- Would validate the work done to improve air quality.
- Mobile source budgets: A maintenance plan is the required progression for an attainment strategy.
- Permitting: Redesignation would alleviate the necessity of nonattainment permitting review in the area.

WHAT IS NEEDED FOR A REDESIGNATION REQUEST & MAINTENANCE PLAN?

- Inventories: We'd need a base year (2002), an attainment year, an interim year, and an out year inventory to meet EPA requirements.
 - Base year: 2002 would be the base year.
 - Attainment year: We could pick any year between 2005 and 2007 since we showed attainment in those years. 2005 may be the best choice since it was a full inventory year and most of the data is probably already available. The attainment year inventory also becomes a cap for the area that limits all future emissions to under that cap for significant pollutants (probably SO₂, NO_x and PM_{2.5} direct).
 - Interim year: EPA guidance says this year should be somewhere between the attainment and out year. Indiana used, and had approved, the use of 2010, which we have already developed.
 - Out year: EPA guidance says this year should be a minimum of 10 years in the future, beyond the time frame when the plan is approved. If we could submit the plan in 2008 or early 2009, and EPA acted in a fairly expeditious manner, we could use 2020, for which we have mobile data.
- Mobile source budgets: We'd need to set mobile source budgets for the interim and the out year for NO_x and PM_{2.5}.
- Listing of control strategies creating the real reductions: We pretty much have that from the two SIPS we've just completed.
- Contingency measures: Contingency measures are needed to deal with two situations. The first situation is an exceedence of the emission cap for 2005. The second situation is the exceedence or violation of an air quality standard. Contingency requirements for maintenance plans are much less stringent and rigid than those for attainment plans.