

US EPA ARCHIVE DOCUMENT

# **PLAN TO IMPROVE AIR QUALITY IN THE WASHINGTON, DC-MD-VA REGION**

**State Implementation Plan (SIP)  
“Severe Area SIP”**

**Demonstrating Rate of Progress for 2002 and 2005;  
Revision to 1990 Base Year Emissions; and  
Severe Area Attainment Demonstration  
for the  
WASHINGTON DC-MD-VA  
NONATTAINMENT AREA**

**Prepared by:**

**Metropolitan Washington Council of Governments**

**for the**

**District of Columbia Department of Health**

**Maryland Department of the Environment  
and the**

**Virginia Department of Environmental Quality**

**on behalf of the Metropolitan Washington Air Quality Committee**

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### 8.1.3 Technological Feasibility

All technology-based control measures must include technologies that have been verified by EPA. The region cannot take SIP credit for technologies that do not produce EPA-verified reductions.

### 8.1.4 Economic Feasibility and Cost Effectiveness

EPA guidance states that regions should consider both economic feasibility and cost of control when evaluating potential RACM measures. Therefore, the Washington region has specified a cost-effectiveness threshold for all possible RACM measures. Measures for which the cost of compliance exceeds this threshold will not be considered RACM.

In setting this threshold, the region took into consideration two major factors. First, EPA has issued guidance regarding the relationship between RACT and RACM. In its RACM analysis for the Dallas/Forth Worth nonattainment area (see Reference 4), EPA states:

“RACT is defined by EPA as the lowest emission rate achievable considering economic and technical feasibility. RACT level control is generally considered RACM for major sources.”

In the Washington region, installation of Reasonably Available Control Technology (RACT) costs approximately \$8,000 to \$10,000 per ton of emissions reduced. Therefore, it seems reasonable to adopt this cost effectiveness for area, nonroad and mobile sources in addition to stationary. Secondly, the National Capital Region Transportation Planning Board (TPB) frequently adopts Transportation Emissions Reduction Measures (TERMs) to offset mobile emissions for the purpose of conformity. The majority of TERMS adopted by TPB in the past ten years for the express purpose of reducing mobile emissions have cost less than \$10,000 per ton.<sup>2</sup>

In order to avoid excluding otherwise worthy measures that slightly exceed the cost effectiveness threshold, the region has specified a threshold of \$10,000-\$20,000 for cost effectiveness. All measures costing under \$20,000 per ton NO<sub>x</sub> or VOC reduced will be evaluated against the remaining criteria to determine whether they meet the requirements for a RACM measure.

### 8.1.5 Substantial and Widespread Adverse Impacts

Some candidate RACM measures have the potential to cause substantial and widespread adverse impacts to a particular social group or sector of the economy. Due to environmental justice concerns, measures that cause substantial or widespread adverse impacts will not be considered RACM.