

**Region 3 Plan Summary
Philadelphia-Wilmington-Trenton Ozone Nonattainment Area**

Title: Ozone Nonattainment Plan for the Philadelphia-Wilmington-Trenton Ozone Nonattainment Area

Federal Register Dates: December 16, 1999, 64 FR 70412 (proposed rule); September 7, 2001, 66 FR 46758 (supplemental proposed rule); October 29, 2001, 66 FR 54578 (final rule); July 9, 2003, 66 FR 40861 (proposed rule), October 27, 2003 (66 FR 66103).

EPA Effective date: November 28, 2001; revised effective November 26, 2003.

State Submittal: April 29, 1998; revisions submitted on August 18, 1998, December 21, 1999, December 28, 2000, August 31, 2001, and September 2, 2003.

Affected Area: Cecil County

Summary of the Plan: Maryland submitted a 1-hour ozone attainment demonstration. This demonstration consisted of: Photochemical grid modeling results for three episodes representing different weather conditions, additional evidence to demonstrate attainment for the Philadelphia-Wilmington-Trenton nonattainment area, VOC and NO_x emission inventories, and identification of control measures needed to attain the 1-hour national ambient air quality standard (NAAQS) for ozone by November 15, 2005. EPA evaluated this information and performed additional analysis and concluded that additional assurances were needed to conclusively determine that the Philadelphia-Wilmington-Trenton 1-hour Ozone Attainment Plan will result in attainment. Maryland provided this assurance by committing to adopt additional control measures which would result in the EPA-identified VOC and NO_x emission reductions and to perform a mid-course review which would determine whether Maryland was still on track to attain.

Control Measures/Regulations Included As Part of the Plan:

| Name of Control Measure or SIP Element | Type of Measure | Included in Local Modeling | Approval Status |
|---|------------------------|-----------------------------------|---|
| Enhanced Inspection & Maintenance | CAA SIP Requirement | Yes | SIP Approved (10/29/99, 64 FR 58340; revised 1/16/03, 68 FR 2208) |
| Federal Motor Vehicle Control Program (Tiers 1 & 2) | Federal Rule | Yes | Promulgated at 40 CFR Part 86 |

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|--|---------------------|-----|--|
| National Low Emission Vehicle (NLEV)- to the extent not superseded by Tier 2 | State Opt-In | Yes | Federal program promulgated at 40 CFR Part 86, subpart R. State opt-in adopted and submitted; SIP Approved (12/28/99, 64 FR 72564) |
| Reformulated Gasoline | Federal Rule | Yes | Promulgated at 40 CFR Part, 80 subpart D |
| Federal Non-Road Gasoline Engines (Small Gasoline Engines) | Federal Rule | Yes | Promulgated at 40 CFR Part 90 |
| Federal Non-Road Heavy Duty Diesel Engines | Federal Rule | Yes | Promulgated at 40 CFR Part 89 |
| Railroad Engine Standards | Federal Rule | Yes | Promulgated at 40 CFR Part 92 |
| Stage II Vapor Recovery | CAA SIP Requirement | Yes | SIP Approved (8/4/97, 62 FR 41853; revised 5/7/03, 68 FR 24363) |
| AIM Surface Coatings | Federal Rule | Yes | Promulgated at 40 CFR Part 59, subpart D |
| Consumer & Commercial Products | Federal Rule | Yes | Promulgated at 40 CFR Part 59, subpart C |
| Autobody Refinishing | State Rule | Yes | SIP- Approved (8/4/97, 62 FR 41853) |
| Surface Cleaning/Degreasing | State Rule | Yes | SIP Approved (8/4/97, 62 FR 41853) |
| Open Burning Ban | State Rule | Yes | SIP Approved (2/25/97, 62 FR 8380) |
| Marine Engine Standards | Federal Rule | Yes | Promulgated at 40 CFR Part 91 |
| Stage I Vapor Recovery | CAA SIP Requirement | No | SIP Approved (1/6/95, 60 FR 2018; revised 12/22/98, 63 FR 70667) |

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|-------------------------------------|---------------------|-----|---|
| Graphic Arts Control | State Rule | Yes | SIP Approved (9/2/97, 62 FR 46199) |
| Heavy Duty Diesel Engines (On-Road) | Federal Rule | Yes | Promulgated at 40 CFR Part 86 |
| VOC RACT to 25 tpy | CAA SIP Requirement | Yes | Limited SIP Approval (9/4/98, 63 FR 47174) |

Motor Vehicle Emissions Budget:

As of October 27, 2003 (68 FR 61103), EPA approves the following mobile budgets of the Philadelphia-Wilmington-Trenton area attainment plan:

TRANSPORTATION CONFORMITY BUDGETS FOR THE MARYLAND PORTION OF THE PHILADELPHIA AREA

| Type of control strategy SIP | Year | VOC (TPD) | NOx (TPD) |
|------------------------------|------|-----------|-----------|
| Attainment Demonstration | 2005 | 3.0 | 11.3 |

Emission Reductions:

Attainment year emission inventories were developed through the use of Bureau Economic Analysis (BEA) growth factors for area source (VOC & NOx) and point source (VOC) growth. EGAS growth factors were used for off-road mobile source (VOC & NOx) and point source (NOx) emission projections. EPS-2 and EMS-95 along with Mobile 5b were used to grid and speciate emissions for the July 1988 and the July 1991 episodes respectively. Column three of the below-listed table represents the percentage reduction in emissions from the 1990 levels expected in the Maryland portion of the Philadelphia interstate nonattainment area. The percentage reduction takes into account growth as well as emission reductions from measures adopted since 1990.

Maryland Portion of the Philadelphia Area Emissions (tons/day)

| | 1990 | 2005 | % Reduction |
|-----|------|------|-------------|
| NOx | 13.7 | 10.5 | 23.0 |
| VOC | 18.5 | 8.2 | 56.0 |

Commitments:

| Commitment | Adoption Date | Emission Reductions in Tons per Day (TPD) |
|---|---------------|--|
| Adopt additional control measures* | 10/31/01 | VOC- 62 TPD NO _x - 3.4 TPD |
| Submit revised SIP and motor vehicle emissions budget if additional adopted measures affect the motor vehicle emissions inventory | 10/31/01 | Not Applicable |
| Revise SIP and motor vehicle emissions budget within 1 year after MOBILE6 mobile emissions model is issued | 1/29/02 | SIP Revision (final rule) published on October 27, 2003, (68 FR 61103) |
| Perform a mid-course review and submit the results to EPA | 12/31/03 | Not Applicable |

* Emissions reductions are for the entire nonattainment area consisting of portions of DE, MD, NJ and PA.

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