

**Region 3 Plan Summary
Pittsburgh-Beaver Valley, Pennsylvania Ozone Area**

Title: 15 % Rate of Progress (ROP) Plan for the Pittsburgh- Beaver Valley, Pennsylvania Ozone Area

Federal Register Dates: January 14, 1998, 63 FR 2147 (final rule-conditional approval); April 3, 2001, 66 FR 17647 (proposed rule- full approval), 66 FR 17634 (final rule-full approval).

EPA Effective date: June 3, 2001

State Submittal Date: March 22, 1996, as revised on February 17, 1998, and July 22, 1998.

Affected Areas: Allegheny, Armstrong, Beaver, Butler, Fayette, Washington and Westmoreland Counties

Summary of the Plan: The Pennsylvania 15% RPP for the Pittsburgh-Beaver Valley ozone nonattainment area is summarized in five parts. Part I summarizes the 1990 base year inventory. Part II summarizes the calculations of the 1996 target level of VOC emissions. Part III presents the individual control measures to be implemented by 1996 with their associated VOC emission reductions. Part IV summarizes the overall rate-of-progress calculations through 1996.

Part I-- 1990 Base Year Emissions Inventory

SIP-Approved 1990 Base Year VOC Emissions Inventory Pittsburgh, Pennsylvania Ozone Nonattainment Area (in tons/day)				
County	<u>Point</u>	<u>Area</u>	<u>Non-road</u>	<u>Highway</u>
Allegheny	80.44	73.3	15.48	76.54
Armstrong	1.1	3.3	1.01	3.9
Beaver	6.15	8.19	1.91	12.8
Butler	4.85	8.59	2.19	9.28
Fayette	0.57	7.53	1.42	7.8
Washington	0.85	10.74	2.53	14.96
Westmoreland	3.54	16.31	3.67	24.84
TOTAL	97.50	127.96	28.21	150.12
Pittsburgh Area-wide total = 403.79 tpd				

Part II- Calculation of the July 22, 1998 15% Plan for the Pittsburgh-Beaver Valley Ozone Area

Steps:	Calculation Method:	Tons per Day (tpd)
Calculate the 1990 base (relative to 1996)	[1996 MOBILE factor (w/ CAA off) x 1990 VMT] + non-mobile 1990 inventory	374.92
Calculate the 1996 base (relative to 1999)	[1999 MOBILE factor (w/ CAA off) x 1990 VMT] + non-mobile 1990 inventory	369.18
Calculate non-creditable fleet turnover between 1996 and 1999	1990 base (relative to 1996) - 1990 base (relative to 1999)	5.74
Calculate the 1996 target level	1990 adjusted base (for 1996) x 0.85	318.68
Correct the 1996 target level	1996 target level - non-creditable fleet turnover between 1996-99	312.94
Project the 1996 controlled emissions level (as remodeled)	remodeled highway emissions + remainder of existing 1996 projected inventory (i.e., point, area, non-road) [95.07 + 61.61 + 117.53 + 29.14]	303.35 ¹

Part III- Summary of Control Measures & Associated Emissions Reductions for the Pittsburgh, Pennsylvania 15% Plan

The list of control measures for which Pennsylvania claimed emissions reductions towards the Pittsburgh 15% plan is reflected in the table below.

Control Measure:	Federal Approval Status:	VOC Reduction (tpd):
Enhanced I/M Program	SIP approved [June 17, 1999 (64 FR 32411)]	17.08

¹Pennsylvania's I/M remodeling summary attached to the cover letter submitted with the July 22, 1998 SIP revision lists 1996 controlled highway emissions (remodeled) of 102.45 tpd. However, the supporting highway mobile source documentation in Tabulations 3 and 4 of the same SIP revision provides detailed calculations which lead to a 1996 controlled highway emissions estimate of 95.07 tpd. EPA believes Pennsylvania listed the 1996 controlled highway emissions incorrectly in its summary table attached to the cover letter. This would make the overall 1996 controlled VOC emissions level 303.35 tpd, instead of 310.73 tpd (as Pennsylvania lists in its summary attachment to the SIP cover letter.

Tier 1 Motor Vehicle Standards / post-1990 FMVCP	Federal rule	10.56
Benzene NESHAP	Federal rule	35.20
AIM Coatings Reformulation	Federal rule	5.05
Consumer & Commercial Products	Federal rule	4.35
Autobody Refinishing Reformulation	Federal rule	2.55
Total Creditable Emission Reductions		74.79

Part IV- Summary of Pennsylvania's 15% Rate of Progress Plan Target Level for Pittsburgh

Category	tons/day
1990 Base Year Inventory	403.79
Adjustments for pre-1990 FMVCP/RVP (1990-1996)	<u>-28.70</u>
1990 Adjusted Base Year Inventory (for 1996)	374.92
1990 Adjusted Base Year Inventory (for 1999)	<u>- 369.18</u>
Non-creditable fleet turnover (1996-1999)	5.74
15% Reduction Requirement	56.24
RACT "fix-ups"	+ 0.00
FMVCP & RVP Reductions (1990-1996)	<u>+ 28.70</u>
<i>Required Reduction (w/o growth)</i>	84.94
1990 Baseline Emissions	403.79
Required Reductions (w/o growth & non-creditable fleet turnover adjustment)	<u>- 84.94</u>
1996 Target Level	<u>318.68</u>
Non-creditable fleet turnover (1996-1999)	<u>-5.74</u>
Corrected 1996 Target Level (for I/M remodeling)	312.94

Required Reductions (w/o growth & non-creditable fleet turnover adjustment)	84.94
1990-1996 Emissions Growth	-20.51
Non-creditable fleet turnover (1996-1999)	<u>+5.74</u>
Total Required Reduction	70.17
<u>Reductions Claimed in Pennsylvania's Revised 15% Plan</u>	<u>74.79</u>

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