

**Region 3 Plan Summary**  
**Charleston, West Virginia 8-Hour Ozone Maintenance Plan**

**Title:** Maintenance Plan for the Charleston, West Virginia 8-Hour Ozone Area

**Federal Register Dates:** May 4, 2006, 71 FR 26299 (Proposed rule); July 11, 2006, 71 FR 39001 (Final rule). **Revised:** January 14, 2008, 73 FR 2209 (Proposed rule), 73 FR 2156 (Final rule); September 15, 2011, 76 FR 57013 (Proposed rule), 76 FR 56975 (Final rule); December 22, 2011, 76 FR 75939 (Correction Final rule).

**EPA Effective date:** August 10, 2006; revised, effective March 14, 2008 and November 14, 2011.

**State Submittal Dates:** November 30, 2005, March 3, 2006, January 8, 2007, and March 14, 2011.

**Affected Areas:** Kanawha and Putnam Counties

**Key Features:**

1. 2004 attainment year; projections to 2009 and 2018
2. The Charleston area plan shows maintenance of the 8-hour ozone NAAQS by

demonstrating that current and future emissions of VOC and NO<sub>x</sub> remain at or below the attainment year 2004 emissions levels throughout the Charleston area through the year 2018.

**Monitoring Network:** West Virginia will continue to operate its current air quality monitor in accordance with 40 CFR part 58.

**Contingency Plan Triggers:**

1. The triennial inventories indicate emissions growth in excess of 10 percent of the 2002 base-year inventory or if a monitored air quality exceedance pattern indicates that an ozone NAAQS violation may be imminent.
2. A violation of the 8-hour ozone standard occurs at the Kanawha County/Charleston monitor.

**Contingency Measures:**

1. Contingency measure for trigger 1: WVDEP will evaluate existing control measures to ascertain if additional regulatory revisions are necessary to maintain the ozone standard.
2. Contingency measures for trigger 2:

- a. Extend the applicability of 45CSR21 (VOC/RACT rule) to include source categories previously excluded (e.g., waste water treatment facilities).
- b. Revised new source permitting requirements requiring more stringent emissions control technology and/or emissions offsets.
- c. NOX RACT requirements.

- (1). Regulations to establish plant-wide emissions caps (potentially with emissions trading provisions).

- (2). Establish a Public Awareness/Ozone Action Day Program, a two pronged program focusing on increasing the public's understanding of air quality issues in the region and increasing support for actions to improve the air quality, resulting in reduced emissions on days when the ozone levels are likely to be high.

- d. Initiate one or more of the following voluntary local control measures:

- (1). Bicycle and Pedestrian Measures--A series of measures designed to promote bicycling and walking including both promotional activities and enhancing the environment for these activities.

- (2). Reduce Engine Idling--Voluntary programs to restrict heavy duty diesel engine idling times for both trucks and school buses.

- (3). Voluntary Partnership with Ground Freight Industry--A voluntary program using incentives to encourage the ground freight industry to reduce emissions.

- (4). Increase Compliance with Open Burning Restrictions--Increase public awareness of the existing open burning restrictions and work with communities to increase compliance.

- (5) School Bus Engine Retrofit Program--Have existing school bus engines retrofitted to lower emissions.

**Schedule:**

1. The following schedule for adoption, implementation and compliance applies to the contingency measures concerning the option of implementing regulatory requirements:

- a. Confirmation of the monitored violation within 45 days of occurrence.
- b. Measure to be selected within 3 months after verification of a monitored ozone

standard violation.

- c. Develop rule within 6 months of selection of measure.
- d. File rule with state secretary (process takes up to 42 days).
- e. Applicable regulation to be fully implemented 6 months after adoption.

2. The following schedule for adoption, implementation and compliance applies to the voluntary contingency measures:

- a. Confirmation of the monitored violation within 45 days of occurrence.
- b. Measure to be selected within 3 months after verification of a monitored ozone standard violation.
- c. Initiation of program development with local governments within the area by the start of the following ozone season.

**Additional Provision:** Based on the 2002 inventory data and calculation methodology, it is expected that area and mobile source emissions would not exhibit substantial increases between consecutive periodic year inventories. Therefore, if significant unanticipated emissions growth occurs, it is expected that point sources would be the cause. West Virginia regulation 45CSR29 requires significant point source emitters in six counties, including Kanawha and Putnam, to submit annual emission statements which contain emission totals for VOCs and NOx. Any significant increases that occur can be identified from these reports without waiting for a periodic inventory.

<b>Total VOC Emissions for 2004-2018 (TPD) Source Category</b>	<b>2004 VOC emissions<sup>1</sup></b>	<b>2009 VOC emissions</b>	<b>2018 VOC emissions</b>
Mobile	13.4	11.6	7.2
Nonroad	5.3	4.6	3.5
Area	20.9	20.1	22.1
Point <sup>2</sup>	10.0	10.4	12.2
<b>Total</b>	<b>49.6</b>	<b>46.7</b>	<b>45.0</b>

<sup>1</sup>2004 Emissions estimated by linear interpolation for all sectors except highway and EGUs.

<sup>2</sup> Non-EGU emissions updated for 2008 NOx SIP Call.

**Total NOx Emissions for 2004-2018 (TPD)**

Source Category	2004 NOx emissions <sub>1</sub>	2009 NOx emissions	2018 NOx emissions
Mobile	22.0	19.8	8.2
Nonroad	12.7	12.0	10.1
Area	2.5	2.6	2.9
Point <sub>2</sub>	87.8	67.9	59.4
Total	125.0	102.3	80.6

**Summary of Motor Vehicle Emissions Budgets (MVEB)**

<b>Motor Vehicle Emissions Budgets in Tons per Day (tpd)</b>		
Year	NOx	VOC
<b>2004</b>	26.4	16.1
<b>2009</b>	38.9*	16.7*
<b>2018</b>	17.1*	13.5*

\*The State effective date is March 14, 2011.

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