west virginia department of environmental protection

REDESIGNATION REQUEST AND MAINTENANCE PLAN FOR THE WEST VIRGINIA PORTION OF THE STEUBENVILLE-WEIRTON, OH-WV 2006 $PM_{2.5}$ NONATTAINMENT AREA

PROPOSED
April 2012

Promoting a healthy environment.

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REDESIGNATION REQUEST AND MAINTENANCE PLAN FOR THE WEST VIRGINIA PORTION OF THE STEUBENVILLE-WEIRTON, OH-WV 2006 $PM_{2.5}$ NONATTAINMENT AREA

I. INTRODUCTION

The Steubenville-Weirton, OH-WV $PM_{2.5}$ nonattainment area (Weirton area) is a multi-state nonattainment area, comprising Brooke and Hancock Counties in West Virginia, and Jefferson County in Ohio. The area monitored attainment of the 2006 fine particle ($PM_{2.5}$) standard with a 24-hour design value for 2008-2010 of 31 $\mu g/m^3$, and 2009-2011 of 29 $\mu g/m^3$. The State of West Virginia herein requests redesignation by the United States Environmental Protection Agency (EPA) of Brooke and Hancock Counties to attainment relative to the 2006 $PM_{2.5}$ National Ambient Air Quality Standard. The State of Ohio also plans to request redesignation of Jefferson County, Ohio to attainment relative to the 2006 $PM_{2.5}$ National Ambient Air Quality Standard.

A. Request

The State of West Virginia is requesting that the EPA redesignate the West Virginia Portion of the Steubenville-Weirton, OH-WV 2006 $PM_{2.5}$ Nonattainment Area to attainment pursuant to the provisions of the Clean Air Act, section 107. The State is also requesting that EPA concurrently approve the associated maintenance plan as a revision to the State Implementation Plan (SIP), meeting the requirements of Clean Air Act, section 175A, which demonstrates that the area will continue to meet the current $PM_{2.5}$ air quality standards for at least ten more years.

B. Background

On October 17, 2006, based on its review of the air quality criteria and NAAQS for $PM_{2.5}$, EPA revised the primary and secondary NAAQS to provide increased protection of public health and welfare. With regard to the primary standards for $PM_{2.5}$ EPA revised the level of the 24-hour standard to 35 $\mu g/m^3$, and retained the level of the annual standard at 15 $\mu g/m^3$. With regard to the secondary standard, EPA revised the existing 24-hour $PM_{2.5}$ standard by making it identical to the revised 24-hour primary standard, retaining the annual $PM_{2.5}$ and 24-hour PM_{10} secondary standards, and revoking the annual PM_{10} secondary standard.

On November 13, 2009, EPA promulgated the initial $PM_{2.5}$ nonattainment areas designations for the $PM_{2.5}$ standards across the country for the 2006 24-hour $PM_{2.5}$ NAAQS, with an effective date of December 14, 2009 [74 FR 58688]. The basis for establishing these areas as nonattainment was monitored air quality for 2006-2008 indicating a violation of the NAAQS. The CAA Amendments require states with $PM_{2.5}$ nonattainment areas to submit a plan within three years of the effective date of the designations (December 14, 2009) detailing how the $PM_{2.5}$ standards would be attained by December 14, 2012.

Two areas in West Virginia were included in the initial $PM_{2.5}$ nonattainment area designations:

- Charleston, WV – Kanawha and Putnam Counties – with a 2006 - 2008 design value of 36 $\mu g/m^3$; and

- Steubenville-Weirton, OH-WV – Brooke and Hancock Counties in West Virginia and Jefferson County in Ohio – with a 2006 - 2008 design value of 41 $\mu g/m^3$.

The Clean Air Act (CAA) requires areas failing to meet a National Ambient Air Quality Standard (NAAQS) to develop State Implementation Plans (SIPs) to expeditiously attain and maintain the standard. However, areas that attain before the required date may be exempt from certain otherwise applicable requirements.

On February 14, 2011, West Virginia requested that EPA make a formal finding, based on 2008-2010 data, that the two areas are attaining the 2006 $PM_{2.5}$ NAAQS.

On October 4, 2011 [76FR61291], EPA proposed to determine that the two-state Steubenville-Weirton, OH-WV nonattainment area has clean data for the 2006 $PM_{2.5}$ NAAQS. The proposed determination is based upon quality assured, quality controlled, and certified ambient air monitoring data showing that the area has monitored attainment of the 2006 $PM_{2.5}$ NAAQS based in the 2008-2010 data available in EPA's Air Quality System (AQS) database.

On March 2, 2012, Stephen Page, Director of EPA's Office of Air Quality Planning and Standards (OAQPS) issued *Implementation Guidance for the 2006 24-Hour Fine Particle ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS)*. This memorandum provides guidance regarding the development of state implementation plans (SIPs) to demonstrate attainment with the 2006 24-hour $PM_{2.5}$ NAAQS.

The Weirton area has previously been subject to nonattainment area rulemakings for the 1997 $PM_{2.5}$ NAAQS.

The EPA revised the NAAQS for particulate matter in July 1997. It replaced the existing PM_{10} standard with a health based $PM_{2.5}$ standard and retained the PM_{10} standard as a "coarse" standard protecting welfare. The 1997 $PM_{2.5}$ standards include an annual standard set at 15.0 micrograms per cubic meter ($\mu g/m^3$), based on the 3-year average of annual mean $PM_{2.5}$ concentrations and a 24-hour standard of 65 $\mu g/m^3$, based on the 3-year average of the 98th percentile of 24-hour concentrations.

The revised 1997 $PM_{2.5}$ NAAQS were legally challenged in the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit). On May 14, 1999, the D.C. Circuit remanded, without vacatur, the standard back to EPA. The remand did not question the level at which EPA set the standards but rather the constitutionality of the CAA provision that authorizes EPA to set national air quality standards. EPA requested a rehearing which the D.C. Circuit denied. Therefore, in December 1999, EPA appealed the D.C. Circuit decision to the U.S. Supreme Court. The U.S. Supreme Court issued a decision on February 27, 2001 that unanimously affirmed the constitutionality of the CAA

provision but did remand several other issues back to the D.C. Circuit, including the issue of whether EPA acted arbitrarily and capriciously in establishing the specific levels of the standards.

The D.C. Circuit heard arguments in this remanded case in December 2001, and issued its decision on March 26, 2002. The court rejected the claims that the EPA had acted arbitrarily and capriciously in setting the levels of the standards.

On December 17, 2004, EPA promulgated the initial 1997 $PM_{2.5}$ nonattainment areas designations for the $PM_{2.5}$ standards across the country. Modifications to those designations were made and an effective date was set at April 5, 2005. Unlike Subpart 2 of the CAA Amendments of 1990 which defined five ozone nonattainment classifications for the areas that exceed the NAAQS based on the severity of the ozone levels, $PM_{2.5}$ nonattainment designations are simply labeled "nonattainment." The CAA Amendments required states with $PM_{2.5}$ nonattainment areas to submit a plan within three years of the effective date of the designations (April 5, 2008) detailing how the $PM_{2.5}$ standards would be attained by April 5, 2010.

On June 24, 2009, West Virginia submitted an attainment demonstration for the Weirton-Steubenville, WV-OH area as a revision to the State Implementation Plan to meet the obligations under the Clean Air Act and the Federal Clean Air Fine Particle Implementation Rule.

On September 14, 2011 [76 FR 56641] EPA determined that the Steubenville-Weirton, OH-WV area had attained the 1997 $PM_{2.5}$ NAAQS (Clean Data Determination). This determination was based on complete, quality-assured and certified ambient air monitoring data for the three year periods, 2007-2009 and 2008-2010. EPA also determined, in accordance with EPA's $PM_{2.5}$ Implementation Rule of April 25, 2007 [72FR20664], that the area had attained the 1997 annual $PM_{2.5}$ NAAQS by the applicable attainment date of April 5, 2010. This determination suspended the state's requirement to submit an attainment demonstration, Reasonably Available Control Measures (RACM), including Reasonably Available Control Technology (RACT), Reasonable Further Progress (RFP) plan, contingency measures, and other planning SIP revisions related to attainment of the 1997 $PM_{2.5}$ NAAQS for so long as the area continues to attain the 1997 $PM_{2.5}$ NAAQS.

On March 2, 2012, West Virginia proposed that EPA redesignate the West Virginia portion of the Weirton-Steubenville, WV-OH 1997 $PM_{2.5}$ Nonattainment Area to attainment pursuant to the provisions of the Clean Air Act, Section 107. The State also proposed that EPA concurrently approve, as a revision to the SIP, the related CAA, Section 175A maintenance plan which demonstrates that the area will continue to meet the 1997 $PM_{2.5}$ air quality standards for at least ten more years.

C. Geographic Description

The Steubenville-Weirton, OH-WV $PM_{2.5}$ nonattainment area (Weirton area) is a multi-state nonattainment area, comprising Brooke and Hancock Counties in West Virginia, and Jefferson County in Ohio. This area is shown in Figure 1 under Section II.A.

II. REDESIGNATION CRITERIA

Pursuant to Section 107(d)(3)(E) of the CAA states must sufficiently address five issues to obtain redesignation of a nonattainment area to attainment:

A. determinate that the area has attained the applicable NAAQS;
B. have a fully approved implementation plan under CAA section 110(k);
C. show that the improvement in air quality is due to permanent and enforceable emission reductions;
D. submit an EPA approvable maintenance plan which ensures attainment of the NAAQS for at least ten years beyond redesignation; and
E. show that the area has met the applicable requirements of CAA section 110 and part D.

The State of West Virginia herein affirmatively completes all five of the required elements as detailed below.

A. The Weirton Area has attained the 2006 $PM_{2.5}$ Standard

[See Appedix A]

The following information is taken from EPA's "Guideline on Data Handling Conventions for the PM NAAQS," U.S. EPA-454/R-99-008, April 1999.

In accordance with the CAA Amendments, three complete years of monitoring data are required to demonstrate attainment at a monitoring site.

The 24-hour $PM_{2.5}$ primary and secondary ambient air quality standards are met when the three-year average of the 98^{th} percentile values for $PM_{2.5}$ at each monitoring site is less than or equal to 35 $\mu g/m^3$. While calculating design values for 24-hour average $PM_{2.5}$ concentrations one decimal place must be carried in the computations, with final results rounded to the nearest 1 $\mu g/m^3$. Decimals 0.5 or greater are rounded up, and those less than 0.5 are rounded down, so that 35.49 $\mu g/m^3$ is the largest concentration that is less than or equal to 35 $\mu g/m^3$. Values at or below 35 $\mu g/m^3$ meet the standard; values greater than 35 $\mu g/m^3$ exceed the standard. An individual site's 3-year average of the 98^{th} percentile values is also called the site's design value. The air quality design value for the area is the highest design value among all sites in the area.

The annual $PM_{2.5}$ primary and secondary ambient air quality standards are met when the three-year average of the annual average is less than 15.0 $\mu g/m^3$. While calculating design values, three significant digits must be carried in the computations, with final values rounded to the nearest 0.1 $\mu g/m^3$. Decimals 0.05 or greater are rounded up, and those less than 0.05 are rounded down, so that 15.049 $\mu g/m^3$ is the largest concentration that is less than, or equal to 15.0 $\mu g/m^3$. Values at or below 15.0 $\mu g/m^3$ meet the standard; values equal to or greater than 15.1 $\mu g/m^3$ exceed the standard. An individual site's 3-year average of the annual average concentrations is also called the site's design value.

There are five (5) monitors measuring $PM_{2.5}$ concentrations in the Weirton, OH-WV nonattainment area. Three (3) monitors are located in West Virginia and operated by the West Virginia Division of Air Quality (DAQ). Two (2) of the monitors are located in Ohio and operated by the Ohio Environmental Protection Agency (OEPA). The location of the monitoring sites for this nonattainment area are shown in Figure 1. A listing of the design values based on the three-year average of the annual mean concentrations from 2001-2003 through 2009-2011 for the West Virginia monitors is shown in Table 1. The data for all five monitors is located in Appendix A.

The data in Appendix A has been quality assured, up through 2010 in accordance with 40 CFR 58.10 and all other federal requirements. The data has been recorded in the AQS database and, therefore, the data are available to the public. Table 1 shows the monitoring data for 2001-2010 that were retrieved from the EPA AQS, and preliminary 2011 data that will be certified and recorded in the AQS database in accordance with 40 CFR 58.10.

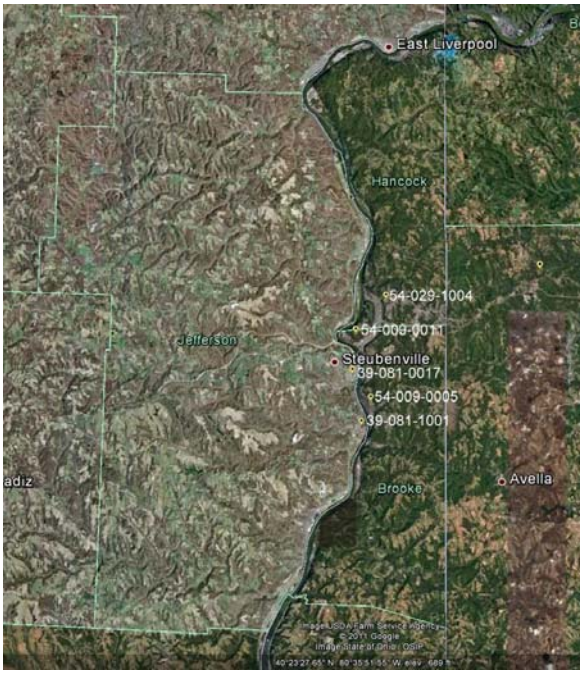


Figure 1: Map of the Steubenville-Weirton, OH-WV nonattainment area and monitor locations

Table 1: Weirton Nonattainment Area Design Values for the 2006 Annual and 24-hr $PM_{2.5}$ NAAQS																		
	2006 NAAQS 24 hr 3 yr 98% = 35									2006 Annual NAAQS = 15								
FRM Site	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11	01-03	02-04	03-05	04-06	05-07	06-08	07-09	08-10	09-11
54-009-0005	42	44	42	40	37	37	34	31	27	16.8	16.5	16.8	16.4	16.4	15.4	14.4	13.7	13.0
54-009-0011	46	47	45	43	44	41	37	31	29	16.2	15.8	16.4	15.7	16.1	14.9	14.0	13.1	11.6
54-029-1004	45	44	41	40	41	36	35	31	28	17.4	17.0	16.6	15.4	15.2	14.3	13.4	12.4	11.7

Source: EPA Air Quality System (AQS); http://www.epa.gov/ttn/airs/airsaqs/index.htm
Notes: Green shading indicates meeting the standard, all monitors in the area monitor attainment.
2011 data is preliminary, and has not yet been certified.

The design values calculated for the Weirton area demonstrate that the 2006 $PM_{2.5}$ NAAQS has been attained. The area's design values have trended downward as emissions have declined due to such factors as cleaner automobiles and fuels, and controls for EGUs, at the national, regional and local level.

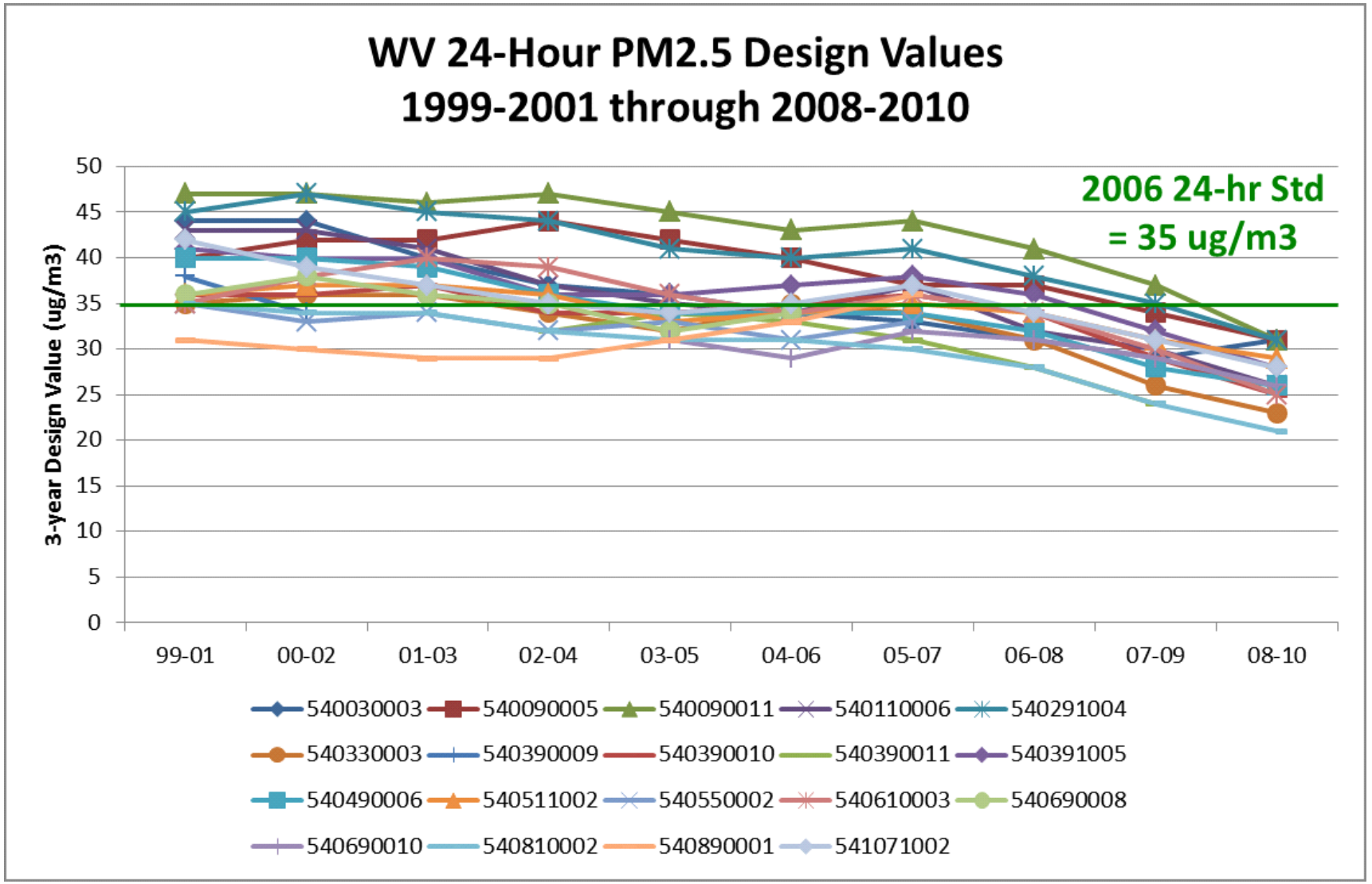
National monitoring for $PM_{2.5}$ began in 1999. There has been a clear downward trend in design values for all monitors in West Virginia and Ohio, as shown in Figures 2 and 3. Design values have also trended downward nationally, as shown in Figure 4.

On October 4, 2011 [76FR61291] EPA proposed to determine that the Steubenville-Weirton, OH-WV area had attained the 2006 24-hour $PM_{2.5}$ NAAQS [Clean Data Determination]. This proposed determination is based upon complete, quality assured, quality controlled, and certified ambient air monitoring data that showed that the area monitored attainment of the 2006 24-hour $PM_{2.5}$ NAAQS during the 2008-2010 monitoring period.

Preliminary $PM_{2.5}$ ambient air quality monitoring data for the recent three (3) year period 2009 through 2011, demonstrate that the air quality continues to meet the NAAQS for both the 2006 annual and 24-hour $PM_{2.5}$ in this nonattainment area. The NAAQS attainment, accompanied by decreases in emission levels discussed in Chapter Four, support a redesignation to attainment for the Weirton area based on the requirements in Section 107(d)(3)(E) of the CAA.

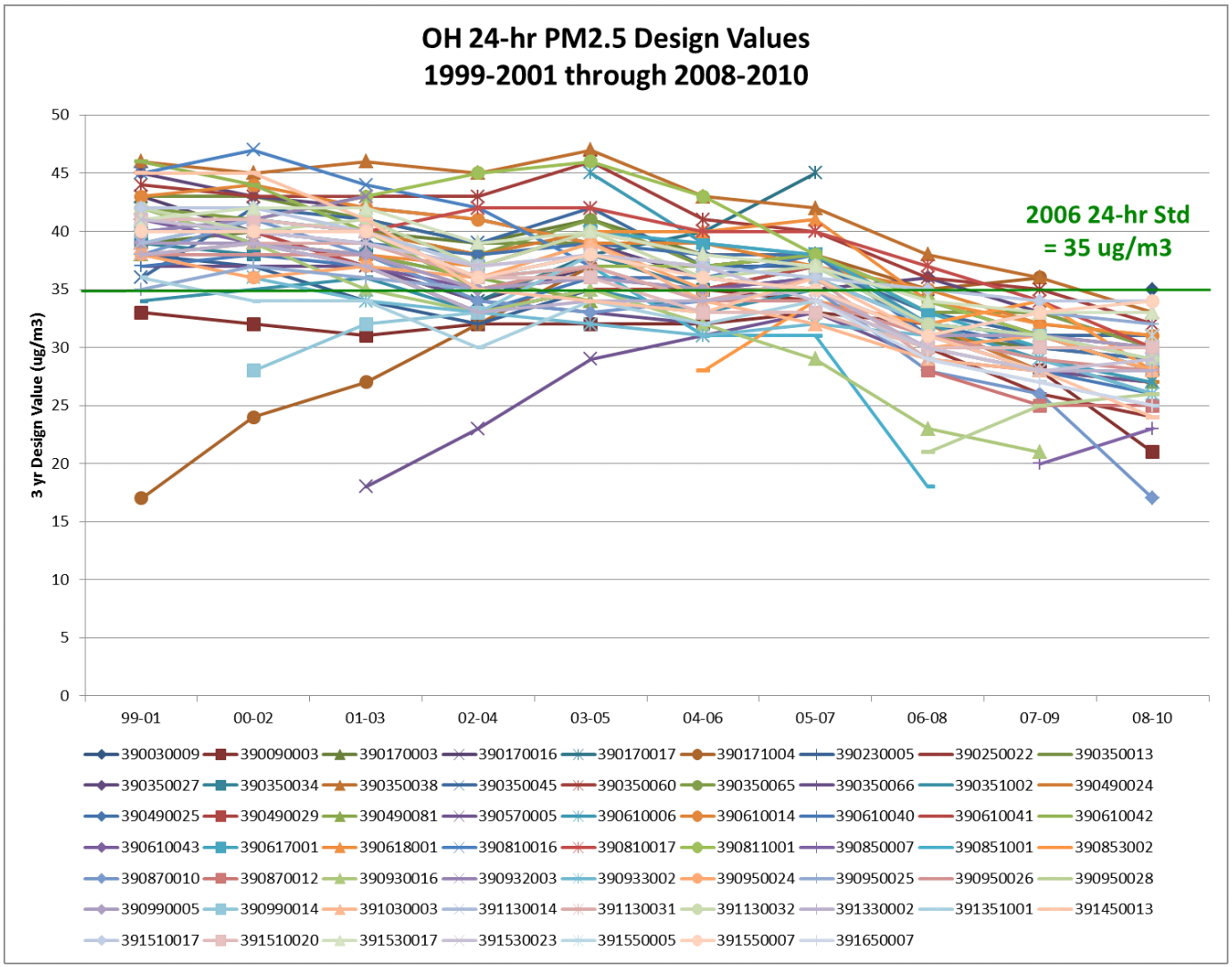
DAQ commits to continue monitoring $PM_{2.5}$ levels at the West Virginia sites indicated in Figure 1 and Table 1. DAQ will consult with EPA Region III prior to making changes to the existing monitoring network, should changes become necessary in the future. DAQ will continue to quality assure the monitoring data to meet the requirements of 40 CFR 58 and all other federal requirements. Connection to a central station and updates to the DAQ web site will provide real time availability of the data and knowledge of any exceedances. DAQ will enter all data into AQS on a timely basis in accordance with federal guidelines.

Figure 2: West Virginia 24-Hou $PM_{2.5}$ Design Values, 1999-2001 through 2008-2010.



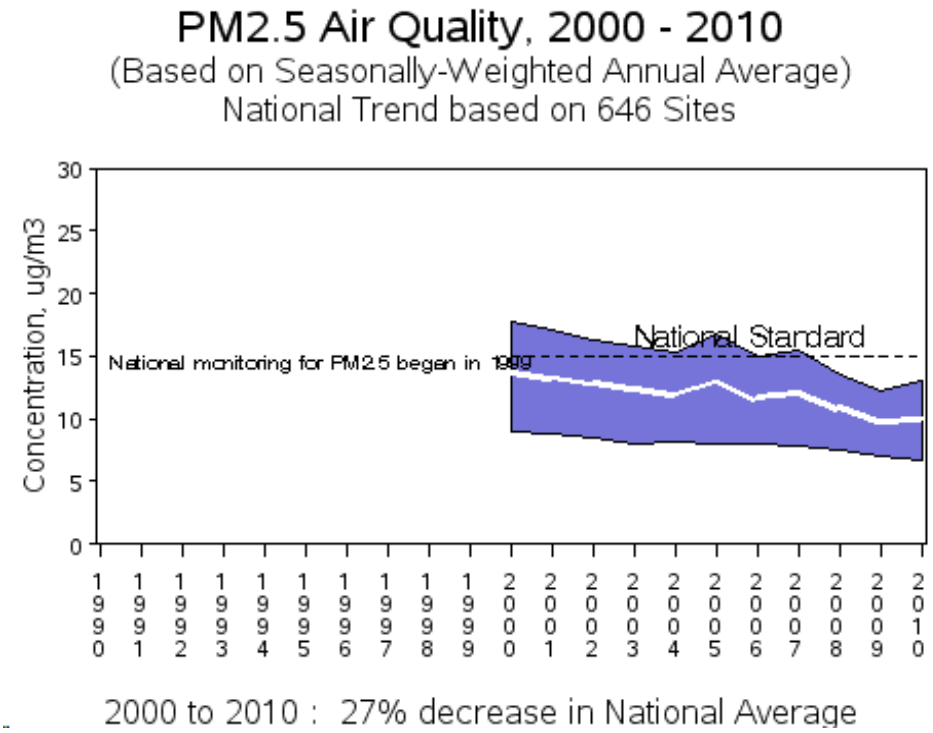
Data Source: http://www.epa.gov/airtrends/values.html, from Excel spreadsheet: PM25dv20082010Final.xls

Figure 3: Ohio 24-Hour $PM_{2.5}$ Design Values, 1999-2001 through 2007-2009.



Data Source: http://www.epa.gov/airtrends/values.html, from Excel spreadsheet: PM25dv20082010Final.xls

Figure 4: $PM_{2.5}$ Annual Mean National Trends



Source: http://www.epa.gov/airtrends/pm.html

B. The Weirton Area has a Fully Approved SIP Under Section 110(k) of the CAA

On November 13, 2009 EPA promulgated the initial $PM_{2.5}$ nonattainment area designations for the 2006 $PM_{2.5}$ standards across the country, including the Steubenville-Weirton OH-WV area. An effective date was set at December 14, 2009. The CAA Amendments require states with $PM_{2.5}$ nonattainment areas to submit a plan within three years of the effective date of the designations (December 14, 2009) detailing how the $PM_{2.5}$ standards would be attained, by December 14, 2012.

On October 4, 2011 [76FR61291]EPA proposed to determine that the Steubenville-Weirton, OH-WV area had attained the 2006 24-hour $PM_{2.5}$ NAAQS [Clean Data Determination]. This proposal is based upon complete, quality assured, quality controlled, and certified ambient air monitoring data that showed that the area monitored attainment of the 2006 24-hour $PM_{2.5}$ NAAQS during the 2008-2010 monitoring period. This Clean Data Determination when finalized will suspend the requirement for the state to submit an attainment demonstration, associated reasonably available control measures, a reasonable further progress plan, contingency measures, and other planning SIPs related to attainment of the standard for as long as the area continues to meet the 2006 $PM_{2.5}$ NAAQS.

On December 17, 2004, EPA promulgated the initial $PM_{2.5}$ nonattainment areas designations for the 1997 $PM_{2.5}$ standards across the country, including the Steubenville-Weirton, OH-WV area. Modifications to those designations were made and an effective date was set at April 5, 2005. Unlike Subpart 2 of the CAA Amendments of 1990 which defined five ozone nonattainment classifications for the areas that exceed the NAAQS based on the severity of the ozone levels, $PM_{2.5}$ nonattainment designations are simply labeled "nonattainment." The CAA Amendments require states with $PM_{2.5}$ nonattainment areas to submit a plan within three years of the effective date of the designations (April 5, 2008) detailing how the $PM_{2.5}$ standards would be attained by April 5, 2010. The DEP submitted a revision to the SIP for the State of West Virginia to meet its obligations under the CAA and the Federal Clean Air Implementation Rule for the Steubenville-Weirton, OH-WV area on June 24, 2009. The submittal expressly addressed the pertinent requirements of the CAA, Part D and the associated requirements of the Fine Particle Implementation Rule beginning at 40 CFR 51.1000. EPA notified the DEP that the SIP submittal was technically and administratively complete by letter dated November 10, 2009. On September 14, 2011, in accordance with Section 179(c)(1) of the CAA, EPA determined that the Steubenville-Weirton, OH-WV $PM_{2.5}$ nonattainment area had attained the 1997 annual $PM_{2.5}$ NAAQS by the applicable attainment date of April 5, 2010 [76FR56641]. This Clean Data Determination suspended the requirement for the state to submit an attainment demonstration, associated reasonably available control measures, a reasonable further progress plan, contingency measures, and other planning SIPs related to attainment of the standard for as long as the area continues to meet the 1997 $PM_{2.5}$ NAAQS. Furthermore, on March 2, 2012 DEP submitted a proposed request to EPA to redesignate the area to attainment and concurrently approve, as a revision to the SIP, the related maintenance plan which demonstrates that the area will continue to meet the 1997 $PM_{2.5}$ NAAQS for at least ten more years. The DEP believes that all applicable requirements under CAA section 110(k) have been met.

C. The Weirton Area's Air Quality Improvement is Due to Permanent and Enforceable Emissions Reductions

Several federally enforceable control measures have been implemented during the past decade which contribute to the air quality improvement, and will continue to reduce emissions in the future. These are discussed in detail in Section V - Control Measures and Regulations.

D. The State has Developed a Maintenance Plan for the Weirton Area Which Ensures Attainment of the 2006 $PM_{2.5}$ Standard for at least 10 Years

Section 107(d)(3)(E) of the CAAA stipulates that for an area to be redesignated to attainment EPA must approve a maintenance plan that meets the requirements of Section 175A. A state may submit both the redesignation request and maintenance plan at the same time, and the plan adoption process, including rule-making or public hearing proceedings, may proceed on a parallel track. West Virginia is herein submitting a request to redesignate the Weirton area to attainment and is also requesting that EPA concurrently process this request and the accompanying maintenance plan.

E. The Weirton Area Has Met All Relevant Requirements under CAA Section 110 and Part D

For purposes of redesignation, a state must meet all requirements of Section 110 and Part D that were applicable prior to submittal of the complete redesignation request.

The March 2, 2012 *Implementation Guidance for the 2006 24-Hour Fine Particle ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS)* states:

> In April 2007, the U. S. Environmental Protection Agency issued a detailed implementation rule to assist states with the development of SIPs to demonstrate attainment with the annual and 24-hour 1997 $PM_{2.5}$ NAAQS (the "2007 $PM_{2.5}$ Implementation Rule"). We believe that the overall framework and policy of the 2007 $PM_{2.5}$ Implementation Rule continues to provide effective and appropriate guidance on the EPA's interpretation of the general statutory requirements that states should address in their SIPs. In general, the EPA believes that the interpretations of the statute in the framework of the 2007 $PM_{2.5}$ Implementation Rule are relevant to the statutory requirements for the 2006 24-hour $PM_{2.5}$ NAAQS, for which SIPs are due by December 14, 2012. . . .

Subpart 1 of Part D consists of general requirements applicable to all areas which are designated nonattainment based on a violation of the NAAQS. Subpart 4 of Part D consists of more specific requirements applicable to particulate matter (specifically to address PM_{10}). However, for the purpose of implementing the 1997 $PM_{2.5}$ standard, EPA's Implementation Rule stated that Subpart 1, rather than Subpart 4, is appropriate for the purpose of implementing $PM_{2.5}$ [72 FR 20589].

1. Section 110(a) requirements

Section 110(a) of Title I of the CAA contains the general requirements for a SIP. Section 110(a)(2) provides that the implementation plan submitted by a state must have been adopted by the state after reasonable public notice and hearing, and that, among other things, it must include enforceable emission limitations and other control measures, means or techniques necessary to meet the requirements of the CAA; provide for establishment and operation of appropriate devices, methods, systems and procedures necessary to monitor ambient air quality; provide for implementation of a source permit program to regulate the modification and construction of any stationary source within the areas covered by the plan; include provisions for the implementation of Part C, prevention of significant deterioration (PSD) and Part D, NSR permit programs; include criteria for stationary source emission control measures, monitoring, and reporting; include provisions for air quality modeling; and provides for public and local agency participation in planning and emission control rule development. In West Virginia's December 11, 2007, and October 1, 2009 infrastructure SIP submissions and March 18, 2010 certification, West Virginia verified that the State fulfills the requirements of Section 110(a)(2) of the Act.

Section 110(a)(2)(D) also requires State plans to prohibit emissions from within the State which contribute significantly to nonattainment or maintenance areas in any other State, or which interfere with programs under Part C to prevent significant deterioration of air quality or to achieve reasonable progress toward the national visibility goal for Federal class I areas (national

parks and wilderness areas). In order to assist States in addressing their obligations regarding regionally transported pollution, EPA finalized CAIR to reduce SO_2 and NO_x emissions from large electric generating units (EGU). West Virginia has met the requirements of the federal CAIR to reduce NO_x and SO_2 emissions contributing to downwind states. On August 4, 2009, EPA approved West Virginia's CAIR program [74FR38536], which were found in West Virginia's Code of State Rules at 45 CSR39, 45CSR40, and 45CSR41. On July 6, 2010, EPA proposed a replacement to the CAIR program, the Transport Rule [75 FR 45210]. The Transport Rule, or the Cross-State Air Pollution Rule (CSAPR) as it is now called, was finalized on July 6, 2011, and published in the Federal Register on August 8, 2011 [76FR48208]. Under the CSAPR, EPA adopted Federal Implementation Plans (FIPs) for each state covered by the rule, including West Virginia. The CSAPR further assists states in addressing their obligations regarding regionally transported pollution by providing reductions in NO_x and SO_2 emissions in 2012 and 2014. On December 30, 2011 the United States Court of Appeals for the District of Columbia stayed the implementation of CSAPR, indefinitely reinstating CAIR.

2. Section 172(c) requirements

Section 172(c) contains general requirements for nonattainment plans. The requirements for reasonable further progress, identification of certain emissions increases, and other measures needed for attainment will not apply for redesignations because they only have meaning for areas not attaining the standard. The requirements for an emission inventory will be satisfied by the inventory requirements of the maintenance plan. Sections III and V discuss these requirements in more detail.

3. Conformity

The state must work with EPA to show that its SIP provisions are consistent with the Section 176(c)(4) conformity requirements. The redesignation request should include conformity procedures, if the state already has these procedures in place. If a state does not have conformity procedures in place at the time that it submits a redesignation request, the state must commit to follow EPA's conformity regulation upon issuance, as applicable. EPA approved West Virginia's Transportation Conformity SIP detailing conformity procedures effective June 2, 2008 [73 FR 24175].Section IV discusses this requirement in more detail.

III. MAINTENANCE PLAN
(CAA Section 107(d)(3)(E)(iv))

Section 107(d)(3)(E) stipulates that for an area to be redesignated, EPA must fully approve a maintenance plan that meets the requirements of Section 175(A). The maintenance plan will constitute a SIP revision and must provide for maintenance of the relevant NAAQS in the area for at least 10 years after redesignation. Section 175 (A) further states that the plan shall contain such additional measures, if any, as may be necessary to ensure such maintenance.

In addition, the maintenance plan shall contain such contingency measures as the Administrator deems necessary to ensure prompt correction of any violation of the NAAQS. At a minimum, the contingency measures must include a requirement that the state will implement all measures contained in the nonattainment SIP prior to redesignation.

The March 2, 2012, *Implementation Guidance for the 2006 24-hour Fine Particle ($PM_{2.5}$) National Ambient Air Quality Standards (NAAQS)* memo from Stephen Page, Director of OAQPS, states:

> As mentioned earlier in this memorandum, statewide annual emission inventories are required under 40 CFR Part 51, Subpart A. We expect that for many nonattainment areas, these annual inventories will serve as an appropriate starting point for the emission inventories used for SIP development. In contrast with the 1997 annual $PM_{2.5}$ NAAQS, where states rely only on annual inventories in the implementation process, the 2006 24-hour $PM_{2.5}$ NAAQS is designed to protect against peak exposures. Thus, for the 2006 24-hour $PM_{2.5}$ NAAQS, there are some circumstances in which EPA believes that seasonal inventories may be useful for SIP Planning purposes. For example, we have observed that in some nonattainment areas, all of the highest fine particle concentrations over the course of a year occur in one season.
>
> If exceedances occur during only one season for each of the years on which the nonattainment designation is based, and this is the case for all subsequent years, we recommend that states develop a seasonal inventory and that they use this inventory for SIP planning purposes. . . .

West Virginia DAQ analyzed the $PM_{2.5}$ monitoring data for the Weirton area to determine whether the exceedances occurred in only one season. As can be seen in Figure 5 below, exceedances between 2006 and 2008, the years on which the nonattainment designation is based, occurred in the first, second, third and fourth quarters. During subsequent years, 2009 through 2011, exceedances have occurred in the first, third and fourth quarters. Based on this analysis and in consultation with EPA and Ohio EPA, it was determined that an annual inventory would be sufficient for SIP planning, and that a seasonal inventory would not be required.

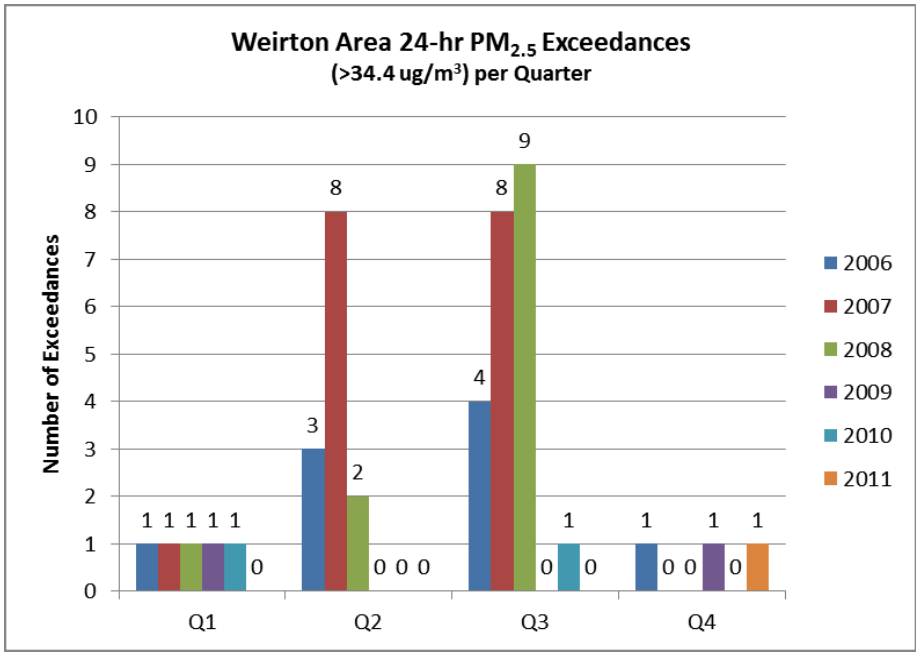


Figure 5: Analysis of Exceedances by Quarter

In consultation with EPA and Ohio EPA, West Virginia DAQ selected the year 2025 as the end year of the maintenance plan for this redesignation request. This document contains projected emissions inventories for 2015 and 2025. Although the three year time period 2006-2008 was the basis of the nonattainment designation, 2005 was selected as the nonattainment year, since the design value for 2005-2007 was also above the standard and a 2005 SIP quality inventory had already been developed and used for the 1997 $PM_{2.5}$ Redesignation Request and Maintenance Plan. Thus, the pertinent inventory years are: 2005 (nonattainment year), 2008 (attainment year and maintenance plan base year), 2015 (interim year) and 2025 (maintenance plan end year). Three specific emissions inventory demonstrations should be made:

1. The attainment year (2008) emissions of $PM_{2.5}$, NO_x and SO_2 must each be less than the corresponding emissions in the nonattainment year (2005). The reductions must be attributable to federally enforceable emission reductions (as discussed in Section III.E and Section V).

2. The interim year (2015) emissions of each of the three pollutants should be less than the maintenance plan base year (2008).

3. The end year (2025) emissions of each of the three pollutants should be less than the maintenance plan base year (2008).

As can be seen in Table 2 below, West Virginia has seen a significant state-wide decline of the 467,081 tons of SO_2 and 159,481 tons of NO_x emitted by EGUs in 2005. In 2008 and 2009, facilities began preparing for and implementing control programs to address CAIR and consent orders. Significant reductions occurred regionally and nationally. Data available for 2010, show the SO_2 and NO_x reductions which were implemented under CAIR.

Table 2: Reductions in SO_2 and NO_x EGU Emissions Between 2008 and 2010

	SO_2			NO_x		
	2008	**2010**	**% Change**	**2008**	**2010**	**% Change**
West Virginia	301,574	106,088	-65%	97,331	51,393	-47%
Ohio	709,444	570,045	-20%	235,018	104,574	-56%
National	7,616,449	5,119743	-33%	2,996,594	2,061,062	-31%

Source: Clean Air Markets, Data and Maps, Quick Reports, State Level Emissions Quick Report and Program Level Emissions Quick Report, Acid Rain Program

Further, Tables 3- 18 clearly show total emissions from all sectors decreased in the period from 2005 to 2008 in the West Virginia and Ohio portions of the nonattainment area. As outlined below, the reductions are enforceable and should continue in the future.

On March 10, 2004, EPA promulgated the CAIR. Beginning in 2009, EPA's CAIR rule required EGUs in 28 eastern states and the District of Columbia to significantly reduce emissions of NO_x and SO_2. CAIR replaced the NO_x SIP Call for EGUs. The intent of the CAIR program was for national NO_x emissions to be cut from 4.5 million tons in 2004, to a cap of 1.5 million tons by 2009, and 1.3 million tons in 2018 in 28 states. States were required to submit a CAIR SIP as part of this effort. West Virginia DEP submitted a CAIR SIP to EPA on June 1, 2006. Revisions to the CAIR SIP were submitted on April 22, 2008. The revised CAIR SIP was approved on August 4, 2009 (74 FR 38536). As a result of CAIR, EPA projected that in 2009 emissions of NO_x would decrease from a baseline of 179,000 tons per year to 63,000 tons per year while in 2010 emissions of SO_2 would decrease from a baseline of 582,000 tons per year to 250,000 tons per year, within West Virginia. And by 2015, EPA projected emissions of NO_x would decrease to 44,000 tons per year while emissions of SO_2 would decrease to 118,000 tons per year, within West Virginia.

On December 23, 2008, EPA's CAIR program was remanded without vacatur by the D.C. Circuit Court.

The following was reported by EPA's Clean Markets Division:

> "Based on emissions monitoring data, EPA has observed substantial reductions in emissions from 2005 to 2010 as companies installed more controls, electric demand declined, and low natural gas prices made combined-cycle gas-fired units more competitive in several parts of the country. Thus, even after CAIR's vacatur and subsequent remand in late 2008, the controls in place generally have continued to operate, helping to drive continued progress in

> reducing emissions. However, allowance prices of SO_2 have been relatively low since 2008, raising concerns that coal-fired units could burn dirtier fuels, operate scrubbers at reduced efficiency, or even bypass scrubbers altogether, instead relying on banked allowances (because there is not an existing large bank of NO_x allowances, NO_x allowance prices have not been affected as significantly). For these reasons, EPA is tracking SO_2 and NO_x emissions closely each quarter to evaluate further progress and assess whether backsliding may be occurring and, if so, where it may be taking place." [http://www.epa.gov/airmarkets/background.htm]

On July 6, 2010, EPA proposed a replacement to the CAIR program, the Transport Rule [75 FR 45210]. On July 6, 2011, EPA finalized the Transport Rule, now commonly referred to as the Cross-State Air Pollution Rule (CSAPR) [76 FR 48208, 08 AUG 2011] in time for reductions to begin in 2012. As finalized, the CSAPR will preserve the initial reductions achieved under CAIR and provide more reductions in NO_x and SO_2 emissions in 2012 and 2014, ahead of the 2015 CAIR Phase 2.

West Virginia DAQ is in agreement with the analysis by U.S. EPA that the CAIR program provided real reductions. We believe these reductions have assisted with $PM_{2.5}$ attainment in this nonattainment area and throughout West Virginia. It is also the DAQ's belief that the CSAPR will continue to provide the necessary reductions, and likely even greater reductions, that will be necessary for maintenance of the annual $PM_{2.5}$ standard to continue. As stated by EPA regarding the final Transport Rule or CSAPR:

> This rule will prohibit all significant contribution to nonattainment and interference with respect to the annual and 24-hour $PM_{2.5}$. In addition, it will resolve air quality issues at most nonattainment and maintenance receptors identified by EPA. EPA projects that unresolved nonattainment and maintenance issues will remain in only a few downwind states after promulgation and implementation of the Transport Rule. For the annual $PM_{2.5}$ standard, EPA projects that this rule will help assure that all areas in the east fully resolve their nonattainment and maintenance concerns. This rule will also help a number of areas achieve the standard earlier than they may have otherwise. [76 FR 48247]

However, on December 30, 2011 the United States Court of Appeals for the District of Columbia stayed the implementation of CSAPR, indefinitely reinstating CAIR.

Although there are no electric generating units in the West Virginia portion of the Steubenville-Weirton, OH-WV area, the DAQ believes that CAIR, or any likely replacement for CAIR, will constrain nearby EGU NO_x and SO_2 emissions sufficiently to ensure that maintenance level emissions are not exceeded during the maintenance period.

As shown in Section VI - Supplemental Modeling Analyses, recent modeling -- CAIR, proposed Transport Rule, CSAPR (Final Transport Rule), including base cases where CAIR and CSAPR were not considered to be applicable requirements, and the VISTAS/ASIP modeling (which includes CAIR) -- all show that the Steubenville-Weirton, OH-WV area will continue to maintain the 2006 $PM_{2.5}$ NAAQS.

Emission projections for the Weirton area were performed using the following approaches:

- Emissions inventories are required to be projected to future dates to assess the influence of future growth and controls.

- NonEGU Point, Area, and Locomotive/Marine Source inventories for 2015 and 2025 were developed by DAQ based on the 2008 inventory using Workforce West Virginia economic forecasts (http://www.workforcewv.org/LMI/indproj/longterm/WV.htm). The Workforce WV projections were in terms of North American Industrial Classification System (NAICS) codes while the WV 2008 v1.5 data is in terms of SCCs. A list of SCCs contained in the 2008 WV inventory was compiled and the associated with each NAICS code for which there was a Workforce WV growth factor. Then directly proportional growth factors were calculated and applied to Workforce WV's 2018 growth factor to calculate 2015 and 2025 emissions. The final estimates reflect both positive and negative growth. The 2008 NEI data were downloaded from EPA's CHIEF webpage at http://www.epa.gov/ttn/chief/net/2008inventory.html.

- Nonroad mobile source inventories for those categories calculated by the model were developed by DAQ personnel using monthly NONROAD Model runs for 2015 and 2025, and summing the monthly data to obtain annual data.

- Ohio provided the emission estimates for the Ohio portion of the area, based on LADCO developed growth and control files for Point, Area, and Nonroad categories. Appendix D contains LADCO's technical support document detailing the analysis used to project emissions (Base M) [www.ladco.org/tech/emis/current/index.php].

- As performed by ODOT, Onroad mobile source emission projections are based on the EPA MOVES model. The analysis is described in more detail in Appendix C. All projections were made using federally approved interagency consultation procedures. As discussed in Section IV, DAQ determined that the mobile emission contribution as a percent of the total emission inventory from the area is not significant.

The detailed inventory information for the West Virginia portion of the Weirton area for 2005 is contained in Appendix B. Emission trends are an important gauge for continued compliance with the $PM_{2.5}$ standard. Therefore, West Virginia DAQ performed an initial comparison of the inventories for the base year and maintenance years.

Sectors included for West Virginia in the following tables are: Electrical Generating Unit (EGU); Non-Electrical Generating Units including Airports (Non-EGU); Non-road Mobile (Nonroad); Other Area (Area); Locomotive and Marine (LM); and Onroad Mobile (Onroad).

Sectors included for Ohio in the following tables are: Electrical Generating Unit (EGU); Non-Electrical Generating Unit (Non-EGU); Non-road Mobile (Nonroad); Other Area (Area); Marine; Aircraft; Rail (MAR); and Onroad Mobile (Onroad).

Maintenance is demonstrated when the future-year (2025) projected emission totals of each of the relevant pollutants are below the 2008 attainment year totals.

The West Virginia emissions data in the tables below are based on the following data sources:

- All On-Road data developed by ODOT for WWW.
- 2005 and 2008 EGU and non-EGU Point Source from certified data submitted by industry to West Virginia DAQ's 2005 and 2008 annual emissions inventory database and subsequently submitted to EPA.
- WV Nonroad data developed by DAQ using EPA's Nonroad Model v2008.1.0.
- All other West Virginia data developed by DAQ based on Workforce WV economic projections.
- All Ohio data provided by OEPA.

A. $PM_{2.5}$ Emissions Demonstrations

The 2005 and 2008 actual $PM_{2.5}$ EGU and NonEGU emissions data below reflects $PM_{2.5}$-primary emissions. Although some facilities reported both $PM_{2.5}$-pri and the PM fraction emissions, not all facilities reported $PM_{2.5}$-pri emissions. When $PM_{2.5}$-pri was not reported by sources, WV DAQ applied PM augmentation procedures in accordance with EPA procedures as documented in EPA's CSAPR technical support document (TSD), "*Emissions Inventory Final Rule TSD*, June 28, 2011" and discussed in more detail in Appendix B and with further technical support provided by EPA's Emission Inventory and Analysis Group (EIAG).

Table 3: Brooke County, WV $PM_{2.5}$ Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)

Sector	2005 (Base)	2008 Attainment	2015 Interim	2015 Safety Margin	2025 Maintenance	2025 Safety Margin
EGU	0	0	0	**0**	0	**0**
NonEGU	155	167	156	**11**	142	**25**
Area	208	220	218	**2**	216	**4**
LM	17	4	4	**0**	4	**0**
Nonroad	11	9	6	**3**	4	**6**
Onroad	19	14	7	**7**	4	**10**
TOTAL	**411**	**414**	**391**	**24**	**370**	**45**

Table 4: Hancock County, WV $PM_{2.5}$ Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
Sector	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
EGU	0	0	0	**0**	0	**0**
NonEGU	182	91	84	**7**	75	**16**
Area	314	233	230	**3**	230	**3**
LM	26	18	19	**0**	19	**0**
Nonroad	10	8	6	**3**	3	**5**
Onroad	19	14	7	**7**	4	**9**
TOTAL	**550**	**364**	**345**	**19**	**331**	**33**

Table 5: Jefferson County, OH $PM_{2.5}$ Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
Sector	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
EGU	1,308	1,373	1,405	**133**	1,450	**-77**
NonEGU	462	461	438	**24**	414	**48**
Area	110	111	108	**2**	106	**5**
MAR	8	7	5	**3**	1	**7**
Nonroad	24	23	17	**5**	11	**11**
Onroad	73	61	32	**29**	16	**44**
TOTAL	**1,985**	**2,036**	**2,005**	**30**	**1,998**	**38**

Table 6: Weirton Nonattainment Area $PM_{2.5}$ Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
County	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
Brooke, WV	411	414	391	24	370	45
Hancock, WV	550	364	345	19	331	33
WV $PM_{2.5}$ Total	**961**	**778**	**735**	**43**	**700**	**78**
Jefferson, OH	1,985	2,036	2,005	30	1,998	38
Combined $PM_{2.5}$ Total	**2,946**	**2,814**	**2,741**	**73**	**2,698**	**116**

B. NO_x Emissions Demonstrations

Table 7: Brooke County, WV NO_x Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
Sector	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
EGU	0	0	0	**0**	0	**0**
NonEGU	693	790	742	**48**	679	**110**
Area	311	119	118	**1**	116	**3**
LM	445	113	114	**-1**	115	**-2**
Nonroad	205	169	88	**81**	59	**110**
Onroad	540	412	175	**237**	62	**350**
TOTAL	**2,194**	**1,603**	**1,237**	**367**	**1,032**	**572**

Table 8: Hancock County, WV NO_x Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
Sector	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
EGU	0	0	0	**0**	0	**0**
NonEGU	1,181	575	525	**50**	463	**112**
Area	1,447	158	157	**1**	115	**3**
LM	695	535	538	**-3**	543	**-8**
Nonroad	135	119	75	**45**	51	**68**
Onroad	483	360	149	**211**	52	**308**
TOTAL	**3,942**	**1,747**	**1,443**	**304**	**1,264**	**483**

Table 9: Jefferson County, OH NO_x Emission Inventory Totals for 2005, 2008, and 2015 and 2025 (tpy)						
Sector	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
EGU	41,047	35,487	19,488	**15,999**	12,632	**22,855**
NonEGU	1,992	1,992	1,939	**53**	1,864	**128**
Area	251	253	252	**1**	252	**2**
MAR	317	301	203	**98**	71	**230**
Nonroad	234	208	131	**76**	97	**111**
Onroad	2,106	1,758	870	**888**	323	**1,435**
TOTAL	**45,947**	**39,999**	**22,884**	**17,115**	**15,238**	**24,761**

Table 10: Weirton Nonattainment Area NO_x Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
County	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
Brooke, WV	2,194	1,603	1,237	367	1,032	572
Hancock, WV	3,942	1,747	1,443	304	1,264	483
WV NO_x Total	**6,136**	**3,350**	**2,680**	**671**	**2,296**	**1,055**
Jefferson, OH	45,947	39,999	22,884	17,115	15,238	24,761
Combined NO_x Total	**52,083**	**43,349**	**25,563**	**17,786**	**17,533**	**25,816**

C. SO_2 Emissions Demonstrations

Table 11: Brooke County, WV SO_2 Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
Sector	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
EGU	0	0	0	**0**	0	**0**
NonEGU	621	797	718	**48**	655	**112**
Area	168	164	157	**7**	146	**17**
LM	20	6	6	**0**	6	**0**
Nonroad	12	2	0	**2**	0	**2**
Onroad	7	2	2	**1**	1	**1**
TOTAL	**828**	**941**	**883**	**58**	**809**	**132**

Table 12: Hancock County, WV SO_2 Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
Sector	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
EGU	0	0	0	**0**	0	**0**
NonEGU	1,481	613	573	**40**	520	**93**
Area	729	249	237	**11**	221	**27**
LM	32	31	32	**0**	32	**0**
Nonroad	10	2	0	**2**	0	**1**
Onroad	7	2	1	**1**	1	**1**
TOTAL	**2,258**	**897**	**843**	**54**	**774**	**123**

Table 13: Jefferson County, OH SO_2 Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
Sector	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
EGU	225,595	135,507	72,203	**63,304**	45,073	**90,434**
NonEGU	850	783	758	**25**	693	**90**
Area	111	109	102	**2**	92	**19**
MAR	26	22	13	**9**	0	**21**
Nonroad	17	3	0	**3**	0	**3**
Onroad	18	6	4	**2**	4	**2**
TOTAL	**226,617**	**136,429**	**73,080**	**63,344**	**45,862**	**90,568**

Table 14: Weirton Nonattainment Area SO_2 Emission Inventory Totals for 2005, 2008, 2015 and 2025 (tpy)						
County	**2005 (Base)**	**2008 Attainment**	**2015 Interim**	**2015 Safety Margin**	**2025 Maintenance**	**2025 Safety Margin**
Brooke, WV	828	941	883	**58**	809	**132**
Hancock, WV	2,258	897	843	**54**	774	**123**
WV SO_2 Total	**3,086**	**1,838**	**1,726**	**111**	**1,583**	**254**
Jefferson, OH	226,617	136,431	73,087	**63,344**	45,862	**90,568**
Combined SO_2 Total	**229,703**	**138,268**	**74,813**	**63,455**	**47,446**	**90,823**

D. Summary of $PM_{2.5}$, NO_x, and SO_2 Emission Reductions

Table 15: West Virginia Portion of the Weirton Area Comparison of 2008 attainment year and 2015 and 2025 projected emission estimates (tpy)					
	2008 Attainment	**2015 Interim**	**2015 Projected Decrease**	**2025 Maintenance**	**2025 Projected Decrease**
$PM_{2.5}$	778	735	43	700	78
NO_x	3,350	2,680	671	2,296	1,055
SO_2	1,838	1,726	111	1,583	254

Table 16: Ohio Portion of the Weirton Area Comparison of 2008 attainment year and 2015 and 2025 projected emission estimates (tpy)					
	2008 Attainment	**2015 Interim**	**2015 Projected Decrease**	**2025 Maintenance**	**2025 Projected Decrease**
$PM_{2.5}$	2,036	2,005	30	1,998	38
NO_x	39,999	22,884	17,115	15,238	24,761
SO_2	136,431	73,087	63,344	45,862	90,568

Table 17: Weirton Area Comparison of 2008 attainment year and 2015 and 2025 projected emission estimates (tpy)					
	2008 Attainment	**2015 Interim**	**2015 Projected Decrease**	**2025 Maintenance**	**2025 Projected Decrease**
$PM_{2.5}$	2,814	2,741	73	2,698	116
NO_x	43,349	25,563	17,786	17,533	25,816
SO_2	138,268	74,813	63,455	47,446	90,823

As shown in the table above (Table 17), $PM_{2.5}$ emissions in the nonattainment area are projected to decrease by 73 tons in 2015 and 116 tons in 2025. NO_x emissions in the nonattainment area are projected to decrease by 17,786 tons in 2015 and 25,816 tons in 2025. SO_2 emissions in the nonattainment area are projected to decline by 63,455 tons in 2015 and 47,446 tons in 2025.

The Weirton area shows a net reduction in $PM_{2.5}$, NO_x and SO_2 emissions, cleaner vehicles and fuels are expected to be in place in 2015 and 2025, and the CAIR Replacement Rule should be implemented by 2015 and these programs should cause an overall drop in all three pollutants emissions. Decreases from EPA rules covering Tier 2 Motor Vehicle Emissions Standards and Gasoline Sulfur Control Requirements [65FR6698,10FEB2000], Highway Heavy-Duty Engine Rule [62FR54694, 21OCT1997], and the Non-Road Diesel Engine Rule [63FR56968, 23OCT1998] are factored into the changes.

E. Air Quality Improvement is Based on Permanent and Enforceable Emission Reductions

A demonstration that improvement in air quality between the year violations occurred and the year attainment was achieved is based on permanent and enforceable emission reductions and not on temporary adverse economic conditions or unusually favorable meteorology.

Ambient air quality data from all monitoring sites indicate the air quality met the 2006 NAAQS for $PM_{2.5}$ in 2008-2010 and preliminary data for 2009-2011 indicate the air quality continues to meet the NAAQS. EPA's redesignation guidance (Policy Memo from John Calcagni, Director, Air Quality Management Division to Regional Air Directors: *Air Procedures for Processing Requests to Redesignate Areas to Attainment*), dated September 4, 1992 (p. 9) states: "A state may generally demonstrate maintenance of the NAAQS by either showing that future emissions of a pollutant or its precursors will not exceed the level of the attainment inventory, or by modeling to show that the future mix of sources and emissions rates will not cause a violation of the NAAQS."

Permanent and enforceable reductions of $PM_{2.5}$, NO_x, and SO_2 emissions have contributed to the attainment of the annual $PM_{2.5}$ standard. Some of these reductions were realized due to the application of tighter federal standards on highway heavy-duty engines (Control of Emissions of Air Pollution from Highway Heavy Duty Engines) and Nonroad diesel engines (Control of Emissions of Air Pollution from Nonroad Diesel Engines), the application of tighter federal standards on new

vehicles (Control of Air Pollution from New Motor Vehicles: Tier 2 Motor Vehicle Emission Standards and Gasoline Sulfur Control Requirements), Title IV of the CAA, the NO_x SIP Call, CAIR, CSAPR, and federal consent decrees requiring reductions of SO_2 and NO_x emissions from utility sources. Reductions achieved are discussed in greater detail under Section V.

Table 18: Weirton Area Comparison of 2005 Base Year and 2008 Attainment Year Reductions by Sector

	2005	2008	Decrease
EGU NO_x	41,047	35,487	5,560
EGU $PM_{2.5}$	1,308	1,373	(65)
EGU SO_2	225,595	135,507	90,088
Onroad NO_x	3,129	2,530	599
Onroad $PM_{2.5}$	111	89	22
Onroad SO_2	32	10	22
Nonroad NO_x	575	496	78
Nonroad $PM_{2.5}$	45	40	5
Nonroad SO_2	39	7	32

F. Emissions Tracking

Provisions for future annual updates of the inventory to enable tracking of the emission levels, including an annual emission statement from major sources.

In West Virginia, major point sources in all counties are required to submit air emissions information annually. West Virginia DAQ prepares a new periodic inventory for all $PM_{2.5}$ precursor emission sectors every three years in accordance with EPA's Air Emissions Reporting Requirements (AERR). These $PM_{2.5}$ precursor inventories will be prepared for future years as necessary to comply with the inventory reporting requirements established in the CFR. Emissions information will be compared to the 2005 base year and the 2025 projected maintenance year inventories to assess emission trends, as necessary, and to assure continued compliance with the annual $PM_{2.5}$ standard.

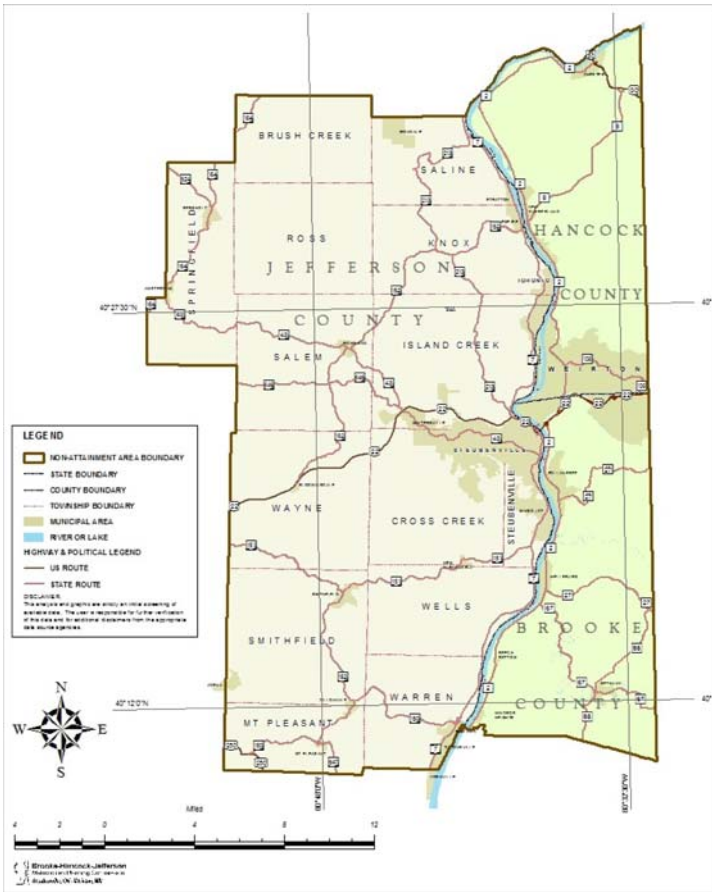
IV. TRANSPORTATION ANALYSIS

A. Onroad Emission Estimations

The air quality analyses and underlying planning assumptions were developed by the Ohio Department of Transportation (ODOT), Division of Transportation System Development-Modeling and Forecasting Section and the Brooke-Hancock-Jefferson Metropolitan Planning Commission (BHJMPC or BHJ), in coordination with the Ohio Environmental Protection Agency (OEPA) and West Virginia Department of Environmental Protection (WVDEP). This evaluation represents the latest population and land use data available that calibrated the modeling process used to calculate the vehicle emissions for the mobile emissions budgets as well as the input values for U.S. EPA's most recent emissions software (MOVES) for this attainment demonstration.

The BHJ Region is comprised of the counties of Brooke and Hancock in the north panhandle of West Virginia and Jefferson in east-central Ohio. The BHJMPC serves as the Metropolitan Planning Organization (MPO). The MPO submitted the necessary Travel Demand Model networks along with all land use and social-economic demographics. The ODOT Modeling and Forecasting section performed the MOVES runs to generate travel demand model based emission factors as well as the complete air quality analyses for the metropolitan area.

Figure 6: Steubenville-Weirton, OH-WV non-attainment area



B. Onroad Mobile Emissions Summary

A Travel Demand Model (TDM) is the traditional forecasting tool used to examine potential changes in future travel patterns for a specific study area, in this case the Brooke-Hancock-Jefferson Metropolitan Area. The BHJ MPO, with the assistance of ODOT Modeling & Forecasting, maintains a validated region-wide TDM that employs a four-step modeling process consisting of trip generation, trip distribution, mode choice, and route assignment performed with the Cube Voyager software package. The model Outputs generated from the TDM are link-by-link directional 24-hour traffic volumes for simulating Base Year and Horizon Year travel patterns generated by the LRTP transportation network.

The current BHJ TDM Validation Year is 2000. The model uses comparable Average Daily Traffic count data, updated social-economic variables for each of the analysis years by either updating existing or known land use commitment for 2008, 2009, and 2014, or projected 2014 and 2020 variables based on a straight-line extrapolation between 2009 set of variables and the Horizon Year 2030 variables. These networks represent all planned federal-aid projects as well as any regionally significant projects found in the BHJ TIP and LRTP expected to be open for traffic by the end of each respective analysis year. The interagency consultation process, as previously discussed, established the following model years for Brooke and Hancock counties, WV and Jefferson County, OH that reflected the most recent correspondence from the U.S. EPA:

Analysis Year 2005 – Baseline Emissions
Analysis Year 2008 – Attainment Year (Also maintenance plan base year)
Analysis Year 2015 – Interim Year
Analysis Year 2025 – Maintenance Plan End Year

Identifying projected growth centers and understanding urban and rural population changes are essential to determine future transportation needs in a given study area. Critical elements include an understanding of the past and anticipated future shifts in the region's economy, population, land use patterns, and other environmental factors over time. In turn, these factors are useful for predicting future transportation patterns and justify transportation improvements over the next twenty years.. Travel forecasting procedures require the user delineate the TDM study area into geographic areas called Traffic Analysis Zones (TAZs). Typically, TAZs are based on factors such as land use, area types (urban, suburban or rural), or political government units such as cities, villages, or townships. TAZs represent centers of travel generators or attractors based on a set of demographic variables. The BHJ MPO collects and reviews the TDM independent variables that characterize current and future estimates of the metropolitan area' social and economic activity that may influence land-use development patterns. In all, there are 376 TAZs in the BHJ model represented by 60 TAZs for Brooke County, 78 TAZs for Hancock County, and 237 TAZs for Jefferson County.

C. Emissions Model

MOVES (Motor Vehicle Emissions Simulator) is a computer program designed by the EPA to estimate air pollution emissions from highway mobile sources. EPA published a Federal Register notice of availability [75 FR 9411] on March 2, 2010, to approve MOVES2010, hereafter referred to as MOVES. Upon publication of the Federal Register notice, MOVES became EPA's approved motor vehicle emission factor model for use by state and local agencies to estimate VOCs, NO_x, CO, PM_{10} and $PM_{2.5}$ and other pollutants and precursors from cars, trucks, motorcycles, and buses. MOVES replaces EPA's previous emissions model, MOBILE6.2. MOVES can be used to estimate exhaust and evaporative emissions as well as brake and tire wear emissions from all types of on-road vehicles. An updated version of this software, MOVES2010a, was used for this analysis. MOVES2010a is a minor update to MOVES2010. MOVES2010a includes general performance improvements to MOVES2010, and also allows users to account for emissions under new car and light truck energy and greenhouse gas standards.

EPA believes that MOVES should be used in ozone, carbon monoxide, PM, and nitrogen dioxide SIP development as expeditiously as possible. The CAA requires that SIP inventories and control measures be based on the most current information and applicable models that are available when a SIP is developed.

The MOVES model generated the emission factor files for base year-2005 and attainment year-2008 representing the transportation improvement programs implemented in the BHJ Region. The model also generated emission factors for two future year scenarios 2015 and 2025. Table 19 summarizes the settings used in the MOVES run specification file and the MOVES County-Data Manager.

D. Temperature and Relative Humidity

Meteorological conditions, especially temperature and humidity, significantly affect on-road vehicle emissions. A series of Inter-Agency Consultation (IAC) conference calls were held during the winter of 2010/2011 which established two important conclusions, among others. First, this redesignation effort required the use of MOVES software for all mobile source emission analyses. And second, the annual emission estimates would be based upon a single-season temperature/ humidity approach. The single season approach for temperature and relative humidity uses weather data collected by the National Oceanic and Atmospheric Administration (NOAA) National Climatic Data Center (NCDC). The data used in this report, taken from the Pittsburgh International Airport collection center, is representative of 12 months in 2009.

Other factors which may significantly affect vehicle emissions are roadway attributes, fleet characteristics and operational conditions. The appropriate inputs for such parameters were determined through the IAC process and are detailed in Appendix C.

Table 19: MOVES Inputs

RunSpec Parameter Settings	
MOVES Version	2010/08/26
Scale	Custom Domain
MOVES Modeling Technique	Emission Factor Method Rates per Distance, Rates per Vehicle
Time Span	Time Aggregation: Hour 1 Month representing average annual temperatures All hours of day selected 16 speed bins, Weekdays only
Geographic Bounds	Brooke, Hancock, and Jefferson counties
Vehicles/Equipment	All source types, gasoline and diesel
Road Type	All road types including off-network
Pollutants and Processes	NO_x, All $PM_{2.5}$ categories, SO_2, Total Energy Consumption
Strategies	None
General Output	Units = grams, joules and miles
Output Emissions	Time = hour, Location = custom area, on-road emission rates by road type and source use type.
County Data Manager Sources	
Source Type Population	Combination of local and default data Local data (Ohio and West Virginia) from motor vehicle registration Default data used for source types 51, 52, 53, 61, and 62 Future year growth rate based on MPO model Household growth rate.
Vehicle Type VMT	Combination of local and default data HPMSVTypeYear VMT = daily VMT from travel demand model monthVMTFraction = default dayVMTFraction=default hourVMTFraction=local
I/M Program	None
Fuel Formulation	Default
Fuel Supply	Default
Meteorology Data	Local data obtained from NOAA National Climatic Data Center Data will consist of monthly high and low temperatures and daily relative humidity for 2002.
Ramp Fraction	Using the base year travel demand model for VHT fractions.
Road Type Distribution	Use ODOT and WV Division of Highways county summary VMT categorized by federal functional classes
Age Distribution	Combination of local and default data. Local data (Ohio and West Virginia) from motor vehicle registration Default data used for source types 41, 42, 43, 51, 52, 53, 61, and 62 The same age distribution will be used for all analysis years
Average Speed Distribution	Default
Alternative Fuel Type	Default

E. Onroad Mobile Emission Estimations

Tables 20 through 24 contain the results of the emissions analysis for the appropriate years. All emissions estimations are expressed in tons per year (tpy).

Table 20: Brooke County, WV Emissions Estimations for Onroad Mobile Sources				
	2005	**2008**	**2015**	**2025**
NO_x (tpy)	540.40	412.02	174.71	62.47
$PM_{2.5}$ (tpy)	19.41	14.42	6.97	4.34
SO_2 (tpy)	7.01	2.11	1.51	1.26
Annual VMT	212,244,639	212,778,859	219,881,355	216,619,184

Table 21: Hancock County, WV Emissions Estimations for Onroad Mobile Sources				
	2005	**2008**	**2015**	**2025**
NO_x (tpy)	482.75	360.25	149.00	52.09
$PM_{2.5}$ (tpy)	18.63	13.51	6.53	4.10
SO_2 (tpy)	6.58	1.92	1.36	1.10
Annual VMT	180,767,718	177,219,697	180,298,107	174,534,361

Table 22: Summary of West Virginia Emissions Estimations for Onroad Mobile Sources				
	2005	**2008**	**2015**	**2025**
NO_x (tpy)	1,023.15	772.27	323.71	114.56
$PM_{2.5}$ (tpy)	38.04	27.93	13.50	8.44
SO_2 (tpy)	13.59	4.03	2.87	2.36
Annual VMT	393,012,357	389,998,556	400,179,462	391,153,545

Table 23: Jefferson County, OH Emissions Estimations for Onroad Mobile Sources				
	2005	**2008**	**2015**	**2025**
NO_x (tpy)	2,105.85	1,758.04	870.17	322.71
$PM_{2.5}$ (tpy)	73.17	60.97	31.88	16.49
SO_2 (tpy)	18.18	5.65	3.93	3.56
Annual VMT	562,071,084	557,286,295	544,597,475	572,657,778

Table 24: Emissions Estimate Totals for the Onroad Mobile Source Sector for the Steubenville-Weirton, OH-WV Area				
	2005	**2008**	**2015**	**2025**
NO_x (tpy)	3,129.00	2,530.31	1,193.88	437.27
$PM_{2.5}$ (tpy)	111.22	88.89	45.37	24.93
SO_2 (tpy)	31.77	9.68	6.79	5.91
Annual VMT	955,083,441	947,284,851	944,776,937	963,811,323

The following table shows the emissions totals, by sector, for each county in the nonattainment area. For a more detailed analysis see Appendix C.

Table 25: Percentage of Steubenville-Weirton, OH-WV Emissions Attributable to Mobile Sources in 2005, 2008, 2015 and 2025

			NOx				PM2.5				SO2			
NAA	County	Sector	2005	2008	2015	2025	2005	2008	2015	2025	2005	2008	2015	2025
Weirton	Brooke Co., WV	Point - EGU	0	0	0	0	0	0	0	0	0	0	0	0
	Brooke Co., WV	Point - NonEGU	693	790	742	679	155	167	156	142	621	767	718	655
	Brooke Co., WV	Area	311	119	118	116	208	220	218	216	168	164	157	146
	Brooke Co., WV	LM	445	113	114	115	17	4	4	4	20	6	6	6
	Brooke Co., WV	NonRoad	205	169	88	59	11	9	6	4	12	2	0	0
	Brooke Co., WV	OnRoad	540	412	175	62	19	14	7	4	7	2	2	1
	Brooke Co., WV	**Subtotal**	**2,194**	**1,603**	**1,237**	**1,032**	**411**	**414**	**391**	**370**	**828**	**941**	**883**	**809**
	Hancock Co., WV	Point - EGU	0	0	0	0	0	0	0	0	0	0	0	0
	Hancock Co., WV	Point - NonEGU	1,181	575	525	463	182	91	84	75	1,481	613	573	520
	Hancock Co., WV	Area	1,447	158	157	155	314	233	230	230	729	249	237	221
	Hancock Co., WV	LM	695	535	538	543	26	18	19	19	32	31	32	32
	Hancock Co., WV	NonRoad	135	119	75	51	10	8	6	3	10	2	0	0
	Hancock Co., WV	OnRoad	483	360	149	52	19	14	7	4	7	2	1	1
	Jefferson Co., OH	**Subtotal**	**3,942**	**1,747**	**1,443**	**1,264**	**550**	**364**	**345**	**331**	**2,258**	**897**	**843**	**774**
WV Portion of NAA		**Total**	**6,136**	**3,350**	**2,680**	**2,296**	**961**	**778**	**735**	**700**	**3,086**	**1,838**	**1,726**	**1,583**
WV Onroad Percentage			**16.68%**	**23.05%**	**12.08%**	**4.99%**	**3.96%**	**3.59%**	**1.84%**	**1.21%**	**0.44%**	**0.22%**	**0.17%**	**0.15%**
Steubenville	Jefferson Co., OH	Point - EGU	41,047	35,487	19,488	12,632	1,308	1,373	1,405	1,450	225,595	135,507	72,203	**45,073**
	Jefferson Co., OH	Point - NonEGU	1,992	1,992	1,939	1,864	462	461	438	414	850	783	758	**693**
	Jefferson Co., OH	Area	251	253	252	252	110	111	108	106	111	109	102	**92**
	Jefferson Co., OH	MAR	317	301	203	71	8	7	5	1	26	22	13	**0**
	Jefferson Co., OH	NonRoad	234	208	131	97	24	23	17	11	17	3	0	**0**
	Jefferson Co., OH	OnRoad	2,106	1,758	870	323	73	61	32	16	18	6	4	**4**
	Jefferson Co., OH	**Subtotal**	**45,947**	**39,999**	**22,884**	**15,238**	**1,985**	**2,036**	**2,005**	**1,998**	**226,617**	**136,429**	**73,080**	**45,862**
OH Portion Onroad Percentage			**4.58%**	**4.40%**	**3.80%**	**2.12%**	**3.69%**	**3.00%**	**1.59%**	**0.83%**	**0.01%**	**0.00%**	**0.01%**	**0.01%**
Steubenville-Weirton, OH-WV NAA		**Onroad Subtotal**	**3,129**	**2,530**	**1,194**	**437**	**111**	**89**	**45**	**25**	**32**	**10**	**7**	**6**
Steubenville-Weirton, OH-WV NAA		**Total**	**52,083**	**43,349**	**25,563**	**17,533**	**2,946**	**2,814**	**2,741**	**2,698**	**229,704**	**138,267**	**74,807**	**47,446**
Steubenville-Weirton, OH-WV NAA Onroad Percentage			**6.01%**	**5.84%**	**4.67%**	**2.49%**	**3.77%**	**3.16%**	**1.66%**	**0.92%**	**0.01%**	**0.01%**	**0.01%**	**0.01%**

Onroad mobile source SO_2 constitutes less than one tenth of one percent (<0.1%) of the area's total SO_2 emissions in the 2015 and 2025 horizon years.

Onroad mobile source NO_x constitutes less than five percent(<5%) of the area's total NO_x emissions in the 2015 and 2025 horizon years.

Onroad mobile source $PM_{2.5}$ constitutes less than two percent (<2%) of the area's total $PM_{2.5}$ emissions in the 2015 and 2025 horizon years.

The federal Transportation Conformity rule allows pollutants/precursors to be exempt from conformity analysis under certain circumstances.

> 40CFR93.109(k) *Areas with insignificant motor vehicle emissions.* Notwithstanding the other paragraphs in this section, an area is not required to satisfy a regional emissions analysis for §93.118 and/or §93.119 for a given pollutant/precursor and NAAQS, if EPA finds through the adequacy or approval process that a SIP demonstrates that regional motor vehicle emissions are an insignificant contributor to the air quality problem for that pollutant/precursor and NAAQS. The SIP would have to demonstrate that it would be unreasonable to expect that such an area would experience enough motor vehicle emissions growth in that pollutant/precursor for a NAAQS violation to occur. Such a finding would be based on a number of factors, including the percentage of motor vehicle emissions in the context of the total SIP inventory, the current state of air quality as determined by monitoring data for that NAAQS, the absence of SIP motor vehicle control measures, and historical trends and future projections of the growth of motor vehicle emissions. . . [emphasis added]

For the reasons outlined below, the DEP is herein making a finding that regional highway emissions of $PM_{2.5}$, NO_x and SO_2 are insignificant contributors to the nonattainment problem for the Weirton area. The finding will become final if EPA concurs and approves this SIP.

First, the regional highway pollutant/precursor emissions constitute a relatively small fraction (<10%) of the overall emissions in all cases, as shown in Table 25, above. Therefore, DEP believes that the low contribution of both precursors and PM to the emissions inventory, in concert with the considerations detailed below, clearly warrants an insignificance finding with respect to transportation conformity.

Another consideration is the significant emission decreases that are projected not only for the highway sector but also for the total emissions inventory. As the charts below clearly demonstrate, all three pollutants decrease over the period of the maintenance plan and the percent contribution of highway emissions decrease as well.

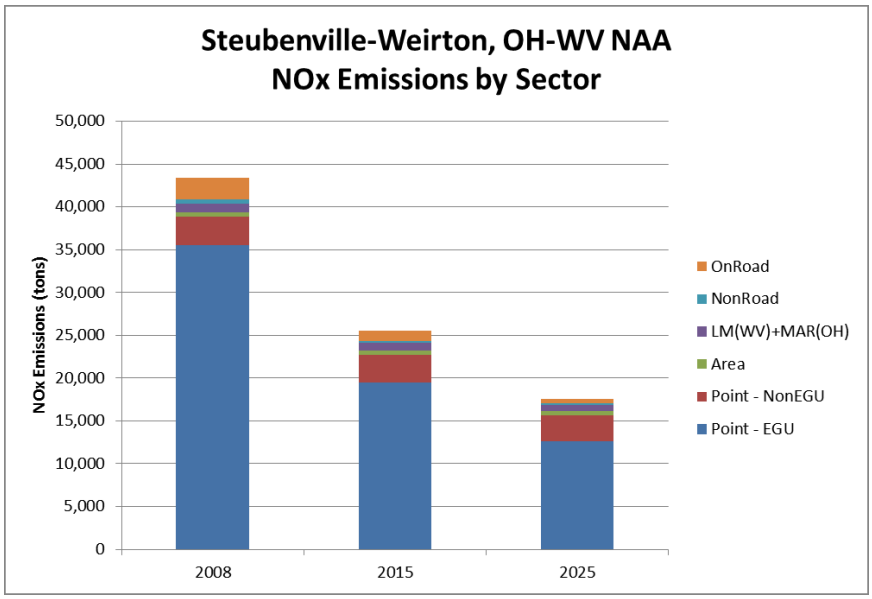


Figure 7: Steubenville-Weirton, OH-WV NAA NO_x Emissions by Sector

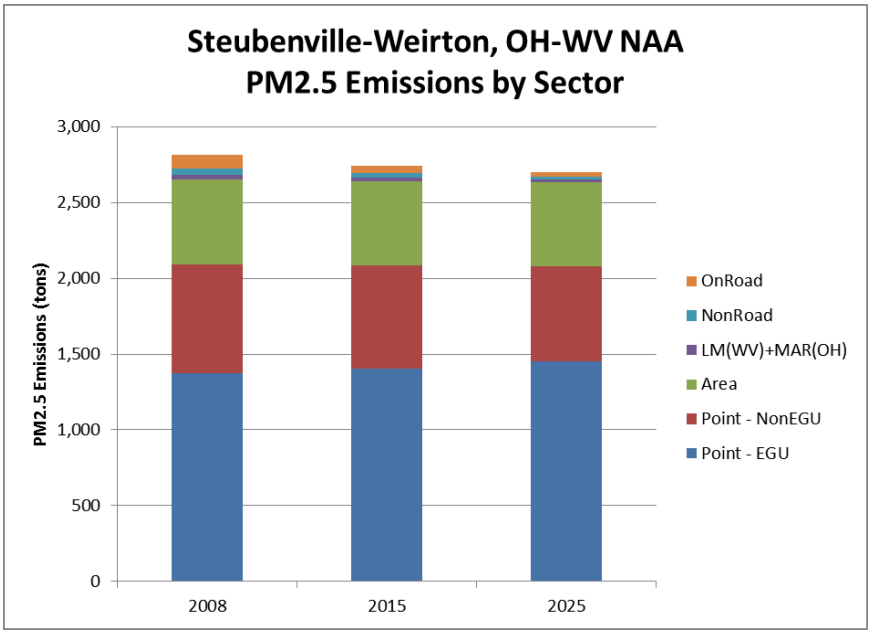


Figure 8: Steubenville-Weirton, OH-WV NAA $PM_{2.5}$ Emissions by Sector

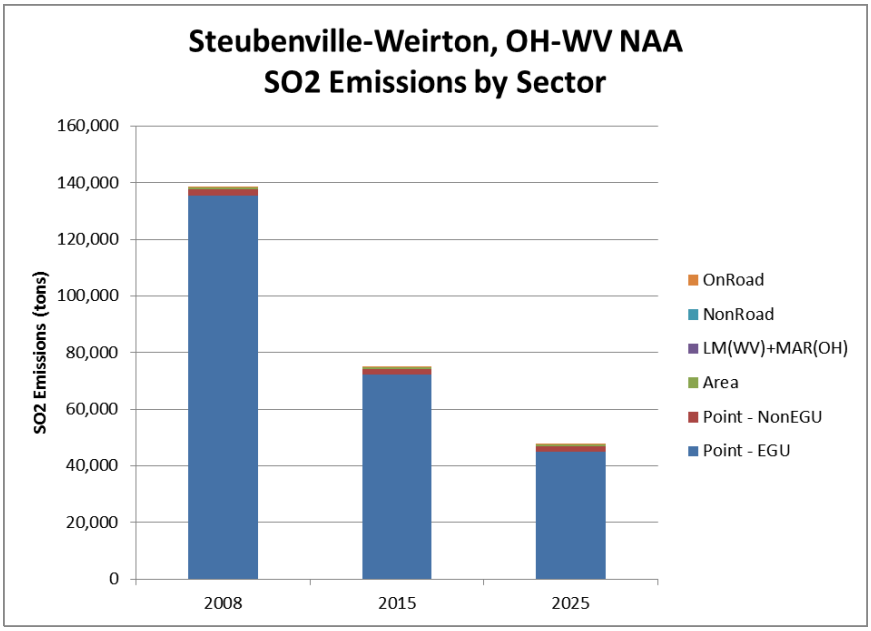


Figure 9: Steubenville-Weirton, OH-WV NAA SO_2 Emissions by Sector

Second, the current air quality (CY 2011) is represented by a design value of 29 ug/m^3. This value is significantly lower than the 41 ug/m^3 design value (2006-2008) upon which the nonattainment designation was based, and is comfortably below the NAAQS. Figure 2 on page 6 shows the general improvement of $PM_{2.5}$ concentrations from the year 2001 to date. The design values went from 41 µg/m^3 (2006-2008) to 37 µg/m^3 (2007-2009) to 31 µg/m^3 (2008-2010) and reached a low of 29 µg/m^3 (2009-2011). This air quality improvement may be attributed to an overall decrease in sulfates from SO_2 reductions mandated by the Acid Rain Program, and preliminary implementation of controls to meet CAIR and is expected to continue under the CAIR replacement rule, CSAPR. Overall, the PM concentrations have improved since the beginning of the decade, as shown in Figure 2. EPA has proposed to determine [76 FR 61291, 04OCT2012] that based on 2008-2010 ambient air quality data, the Steubenville-Weirton nonattainment area has attained the 2006 24-hour $PM_{2.5}$ NAAQS. This determination, in accordance with 40 CFR 52.1004(c). DAQ submitted a proposed Redesignation Request and Maintenance Plan for the area on March 2, 2012 for the 1997 $PM_{2.5}$ NAAQS. The area is designated as attainment for all other criteria pollutants.

Given the relatively small contribution of the highway emissions to the total SIP inventory, highway emissions are not likely to contribute significantly to the local $PM_{2.5}$ mass concentrations. Among other factors, this is largely due to the dominance of sulfates in the overall PM mass, coupled with the very low contribution of highway sources to those sulfate totals.

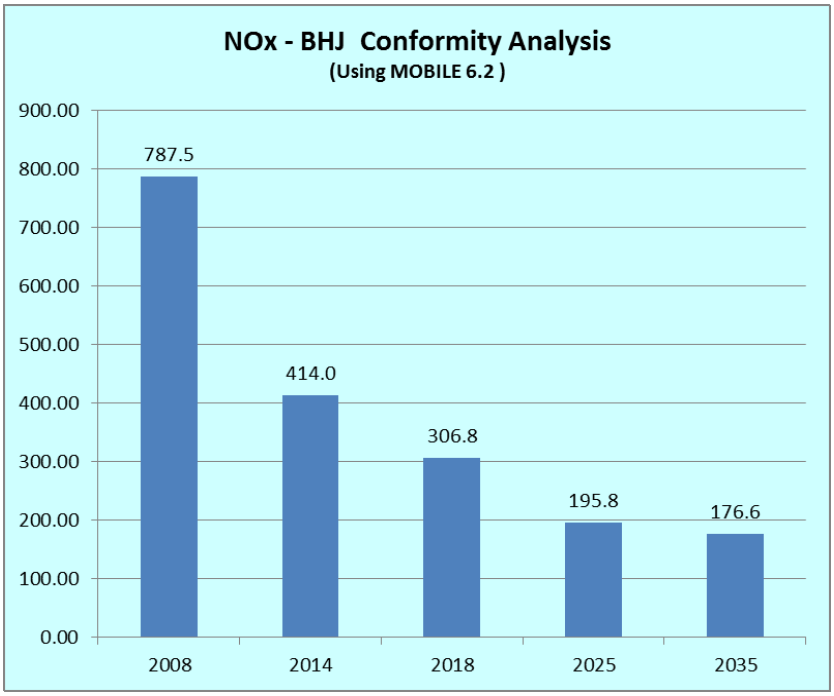
Third, historically there have been no West Virginia SIP requirements for motor vehicle control measures. The Weirton area is subject to Transportation Conformity for the 8-hour ozone standard, with SIP-approved, seasonal budgets for NO_x and Volatile Organic Compounds (VOC). Further, the entire nonattainment area is currently subject to Transportation Conformity for the $PM_{2.5}$ standard.

Emissions analysis has been mandatory for annual highway emissions of direct PM and NO_x. However, upon a positive adequacy review or approval of this SIP submittal, no highway emissions analysis will be required under the annual $PM_{2.5}$ standard. Highway analysis of seasonal ozone precursors would continue to be mandatory. And, $PM_{2.5}$ hot-spot analyses would continue to apply for required projects under 40CFR93.116 and 93.123(b) of the Transportation Conformity Rule.

Fourth, BHJ has extensively researched the area local historical trends and growth patterns to develop the LRTP/TIP and support transportation conformity evaluations. There is no reason to expect highway motor vehicle emissions growth that would lead to a $PM_{2.5}$ NAAQS violation. BHJ and ODOT have estimated emissions out, at least, to the calendar year 2035 confirming this, based on federally approved conformity determinations. The conformity analysis for the Weirton area took into account all the regional capacity projects, which are scheduled for implementation through the transportation plan horizon year and the four year TIP.

The air quality analysis contained in the report was the basis for the most recent federally approved conformity determination. The PM conformity tests were performed for calendar years 2008, 2014, 2018, 2025 and 2035. For each of those years, vehicle miles traveled (VMT) and Speed were developed by the Federal Functional Class codes, which are derived from the regional traffic model assignments that are made for each of those years. Pursuant to the Transportation Conformity interim tests, NO_x and direct PM were evaluated. The analysis employed the MOBILE6.2 emissions factor model. West Virginia (Brooke & Hancock Counties) NOx emissions decrease dramatically from 787.5 tons/year [2008] to 414.0 tpy [2014] to 306.8 tpy [2018] to 195.9 tpy [2025]. The decrease continues to the last value to to 176.6 [2035], which is less than one-fourth of the 2008 level. Direct PM dropped from 13.8 to 5.78 tpy [2035]. DEP believes this result solidly demonstrates that highway emissions will remain insignificant in the future.

Figure 10: Onroad NO_x Emissions Tons per Year



V. CONTROL MEASURES AND REGULATIONS

CAA Section107 (d)(3)(E)(ii), 107(d)(3)(iv), and 107(d)(3)(E)(v)

A. Reasonably Available Control Measures (RACM) and Reasonably Available Control Technology (RACT)

Section 172(c)(1) of the 1990 Clean Air Act Amendments (CAA) requires states with nonattainment areas to implement reasonably available control measures (RACM) and reasonably available control technology (RACT). States with nonattainment areas must submit a SIP providing for implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonable available control technology).

EPA's $PM_{2.5}$ Implementation Rule [72FR20586, 29APR2007] interprets this requirement in great detail. Under EPA's approach, RACT is determined as part of the broader RACM analysis and identification of all measures (for stationary, mobile, and Area sources) that are technically and economically feasible, and that would collectively contribute to advancing the attainment date (i.e. by one year or more). States are required to use a combined approach to RACT and RACM, that (1) identifies potential measures that are reasonable, (2) uses modeling to identify the attainment date that is as expeditious as practicable, and (3) selects the appropriate RACT and RACM.

Since the area attained the standard in 2008-2010, well in advance of the attainment date of December 14, 2014, there is no need for additional measures to advance the attainment date, therefore the RACM/RACT requirements do not apply.

Furthermore, EPA states on their website regarding the Clean Data Policy [www.epa.gov/airquality/urbanair/sipstatus/policy_details.html]:

> Under EPA's Clean Data Policy and the regulations that embody it, 40 CFR 51.918 (1997 8-hour ozone) and 51.1004(c) (PM-2.5), an EPA rulemaking determination that an area is attaining the relevant standard suspends the area's obligations to submit an attainment demonstration, reasonable available control measures (RACM), reasonable further progress, contingency measures and other planning requirements related to attainment for as long as the area continues to attain. EPA's statutory interpretation of the Clean Data Policy is described in the "Final Rule to Implement the 8-hour Ozone National Ambient Air Quality Standard—Phase 2" (Phase 2 Final Rule). 70 FR 71612, 71644-46 (Nov. 29, 2005) (ozone); See also 72 FR 20585, 20665 (Apr. 25, 2007) (PM-2.5). EPA believes that the legal bases set forth in detail in our Phase 2 Final rule, our May 10, 1995 memorandum from John S. Seitz, entitled "Reasonable Further Progress, Attainment Demonstration, and Related Requirements for Ozone Nonattainment Areas Meeting the Ozone National Ambient Air Quality Standard," and our December 14, 2004 memorandum from Stephen D. Page entitled "Clean Data Policy for the Fine Particle National Ambient Air Quality Standards" are equally pertinent to all NAAQS. EPA has codified the Clean Data Policy for 1997 8-hour ozone and PM-2.5, and has also applied it in individual rulemakings for 1-hour ozone and PM-10.
>
> Under the Clean Data Policy, EPA may issue a determination of attainment (known informally as a Clean Data Determination) after notice and comment rulemaking determining

that a specific area is attaining the relevant standard. For such areas the requirement to submit to EPA those SIP elements related to attaining the NAAQS is suspended for so long as the area continues to attain the standard. These planning elements include reasonable further progress (RFP) requirements, attainment demonstrations, RACM, contingency measures, and other state planning requirements related to attainment of the NAAQS. The determination of attainment is not equivalent to a redesignation, and the state must still meet the statutory requirements for redesignation in order to be redesignated to attainment. A determination of attainment for purposes of the Clean Data Policy/regulations is also not linked to any particular attainment deadline, and is not necessarily equivalent to a determination that an area has attained the standard by its applicable attainment deadline, e.g., under section 181(b).

On October 4, 2011, in accordance with Section 179(c)(1) of the CAA, EPA proposed to determine that the Steubenville-Weirton, OH-WV $PM_{2.5}$ nonattainment area had attained the 2006 24-Hour $PM_{2.5}$ NAAQS, this proposal [76 FR 61291] is based upon three years of complete, quality assured, quality-controlled data for the 2008-2010. Preliminary data for 2009 through 2011, demonstrate that the air quality continues to meet the NAAQS for annual $PM_{2.5}$ in this nonattainment area. Therefore, once the Clean Data Determination is finalized RACM, including RACT, will longer apply.

B. Inventory of Actual Emissions

Section 172(c)(3) requires states to submit a comprehensive inventory of actual emissions in the area, including the requirement for periodic revisions as determined necessary. 40 CFR 51.1008 requires such inventory to be submitted within three years of designation and requires a baseline emission inventory for calendar year 2002 or other suitable year to be used for attainment planning.

In accordance with the Consolidated Emissions Reporting Rule (CERR), West Virginia 2002 and 2005 statewide comprehensive emissions inventories were submitted to EPA's CDX site on April 29, 2005 and June 1, 2007, respectively. The West Virginia 2008 comprehensive emissions inventory was submitted to the CDX on May 30, 2010 consistent with the requirements of the Air Emissions Reporting Requirements (AERR). We are hereby resubmitting the 2005, and 2008 comprehensive inventories for the Weirton nonattainment area.

West Virginia will continue to provide updates to future inventories in accordance with EPA's AERR rule. As discussed in Section III.F, West Virginia DAQ submits, and commits to submit, emission inventories every three years.

C. Evidence that control measures required in past $PM_{2.5}$ SIP revisions have been fully implemented.

1. NO_x SIP Call, CAIR and CSAPR

The EPA NO_x SIP Call required 22 states to pass rules that would result in significant emission reductions from large EGUs, industrial boilers, and cement kilns in the eastern United States. West Virginia passed this rule in 2002. NO_x SIP Call requirements are incorporated into permits along with monitoring, recordkeeping, and reporting necessary to ensure ongoing compliance. West Virginia DAQ also has an active enforcement program to address violations discovered by field office staff. Compliance is tracked through the Clean Air Markets data monitoring program. In West Virginia, this rule accounted for a reduction from 2003 levels of approximately 57

percent of NO_x emissions by 2008 from sources subject to the rule. The other 21 states also adopted these rules.

On March 10, 2004, the EPA promulgated the CAIR. Beginning in 2009, EPA's CAIR rule required EGUs in 28 eastern states and the District of Columbia to significantly reduce emissions of NO_x and SO_2. CAIR replaced the NO_x SIP Call for EGUs. National NO_x emissions were expected to be cut from 4.5 million tons in 2004, to a cap of 1.5 million tons by 2009, and 1.3 million tons in 2018 in 28 states. States were required to submit a CAIR SIP as part of this effort. West Virginia submitted an initial CAIR SIP on June 1, 2006. Subsequently, WV submitted an abbreviated CAIR SIP on June 8, 2007, which requested authority to allocate CAIR allowances. Final revisions to the CAIR SIP were submitted on April 22, 2008. The revised CAIR SIP was approved in a direct final action on August 2, 2009 (74FR38536).

On July 6, 2010, EPA proposed a replacement to the CAIR program, the Transport Rule [75 FR 45210]. On July 6, 2011, EPA finalized the Transport Rule, now commonly referred to as the Cross-State Air Pollution Rule (CSAPR) [76FR48208, 08AUG2011] in time for reductions to begin in 2012. As finalized, the CSAPR would have preserved the initial reductions achieved under CAIR and provided more reductions in NO_x and SO_2 emissions in 2012 and 2014, ahead of the 2015 CAIR Phase 2.

EPA states on their Cross-State Air Pollution Rule homepage: "By 2014, power plants in states common to both the Cross-State Air Pollution Rule and CAIR will achieve annual SO_2 emissions around 1.8 million tons lower and annual NO_x emissions around 76,000 tons lower than what would have been achieved at that time under CAIR." (www.epa.gov/airtransport/basic.html)

Controls for EGUs under the NO_x SIP Call formally commenced May 31, 2004. Emissions covered by this program have been generally trending downward since 1998 with larger reductions occurring in 2002 and 2003. Data taken from the EPA Clean Air Markets web site, quantify the gradual NOx reductions that have occurred in West Virginia as a result of Title IV of the 1990 CAA Amendments and the beginning of the NO_x SIP Call Rule. West Virginia developed the NO_x Budget Trading Program rules in 45CSR 1 and 26 in response to the SIP Call. 45CSR1 regulated EGUs and 45CSR26 regulated certain non-EGUs under a cap and trade program based on an 77 percent reduction of NO_x emissions from EGUs and a 60 percent reduction of NO_x emissions from non-EGUs, compared to historical levels. This cap was in place through 2008, at which time the CAIR program superseded it as discussed above. Section III above discussed the reductions West Virginia has seen as a result of CAIR.

On April 21, 2004, EPA published Phase II of the NO_x SIP Call that established a budget for large (greater than 1 ton per day emissions) stationary internal combustion engines. 45CSR1 addresses stationary internal combustion engines, all used in natural gas pipeline transmission. EPA approved this revision to the SIP on November 27, 2006. An 82 percent NO_x reduction from 1995 levels was anticipated. Approval of the compliance plans occurred by August 4, 2006, and March 1, 2007 and the compliance demonstration began May 1, 2007.

2. Tier II Emission Standards for Vehicles and Gasoline Sulfur Standards
[65FR6698, 10FEB2000]

In February 2000, EPA published a federal rule to significantly reduce emissions from cars and light trucks, including sport utility vehicles (SUVs). Under this proposal, automakers will be required to sell cleaner cars, and refineries will be required to make cleaner, lower sulfur gasoline. This rule applies nationwide. The federal rules phased in between 2004 and 2009. EPA estimated that NO_x emission reductions will be approximately 77 percent for passenger cars, 86 percent for smaller SUVs, light trucks, and minivans, and 65 to 95 percent reductions for larger SUVs, vans, and heavier trucks. The sulfur content of gasoline is estimated to be reduced by up to 90 percent. VOC emission reductions will be approximately 12 percent for passenger cars, 18 percent for smaller SUVs, light trucks, and minivans, and 15 percent for larger SUVs, vans, and heavier trucks.

3. Heavy-Duty Diesel Engines
[65FR59896, 06OCT2000]

In October 2000, EPA published a final rule for Highway Heavy Duty Engines, a program which includes low-sulfur diesel fuel standards, which were phased in from 2004 through 2007. This rule applies to heavy-duty gasoline and diesel trucks and buses. This rule resulted in a 40 percent reduction in NO_x from diesel trucks and buses, a large sector of the mobile sources NO_x inventory. It also estimated the level of sulfur in highway diesel fuel would be reduced by 97 percent by mid-2006.

4. Clean Air Non-road Diesel Rule
[69FR38958, 29JUN2004]

In June 2004, EPA published the Clean Air Non-road Diesel Rule. This rule applies to diesel engines used in industries such as construction, agriculture, and mining. It also contains a cleaner fuel standard similar to the highway diesel program. The new standards will cut emissions from non-road diesel engines by more than 90 percent. Non-road diesel equipment, as described in this rule, currently accounts for 47 percent of diesel particulate matter (PM) and 25 percent of NO_x from mobile sources nationwide. Sulfur levels will be reduced in non-road diesel fuel by 99 percent from 2004 levels, from approximately 3,000 parts per million (ppm) to 15 ppm in 2009. New engine standards took effect, based on engine horsepower, starting in 2008. Together, these rules will substantially reduce local and regional sources of $PM_{2.5}$ precursors.

D. Assurance that existing control measures will remain in effect

West Virginia commits to maintaining the aforementioned control measures after redesignation. West Virginia hereby commits that any changes to its rules or emission limits applicable to $PM_{2.5}$, SO_2, and NO_x as required for maintenance of the annual $PM_{2.5}$ standard in the Weirton area, will be submitted to EPA for approval as a SIP revision.

West Virginia, through the Division of Environmental Protection, DAQ, has the legal authority and necessary resources to actively enforce any violations of its rules or permit provisions. After redesignation, it intends to continue enforcing all rules that relate to the emission of $PM_{2.5}$ precursors in the Weirton Area.

VI. SUPPLEMENTAL MODELING ANALYSES

Although EPA's Redesignation Guidance does not require modeling nonattainment areas seeking redesignation, extensive modeling has been performed covering the Steubenville-Weirton, OH-WV area to determine the effect of national emission control strategies on $PM_{2.5}$ concentrations. These modeling analyses determined that the Steubenville-Weirton, OH-WV area is significantly impacted by regional transport of $PM_{2.5}$ and its precursors, and that regional SO_2 and NO_x reductions are an effective way to attain the annual standards for $PM_{2.5}$ in this area. Future year modeled 24-hour $PM_{2.5}$ concentrations are expected to be reduced by 11% to 36% from baseline design values. Examples of these modeling analyses are described below.

A. EPA Modeling for the Cross State Air Pollution Rule (Final Transport Rule)

EPA performed modeling to support the emission reductions associated with the Final Transport Rule or the Cross State Air Pollution Rule (CSAPR), as it is currently called. EPA used the Comprehensive Air Quality Model with Extension (CAMx) version 5.3 applied to the 2005 meteorology as processed by the Mesoscale Model (MM5), Version 3.7.4. Emissions input into the CAMx included SO_2, NO_x, VOC, NH_3 and direct $PM_{2.5}$ for 2005. The modeling was based on the annual fine particle design values calculated from 2003 through 2005, 2004 through 2006, and 2005 through 2007. Future year modeling was conducted, and the future year design values for 2012 and 2014 were evaluated for attainment of the 24-hour NAAQS for $PM_{2.5}$ of 35 $\mu g/m^3$, as shown in Table 26. The Brooke County monitors (54-019-0005, 54-009-0011) and the Hancock County monitor (54-029-1004) represent the Weirton area.

As indicated in the Air Quality Modeling Technical Support Document (TSD) for the CSAPR, air quality modeling was performed for several emissions cases: a 2003-2007 base year, a 2012 "no CAIR" base case, a 2014 "no CAIR" base case, and the 2014 remedy case.

Modeling results for the Weirton area (Brooke County monitor, 54-009-0011) show a 6.4 $\mu g/m^3$ (14.6%) decrease in the average 24-hour $PM_{2.5}$ concentration for 2012 and a 7.8 $\mu g/m^3$ (17.8%) decrease in the average concentration for 2014, without accounting for CAIR or reductions required by the Transport Rule or CSAPR. A reduction of 15.6 $\mu g/m^3$ (35.5%) from the 2003-2007 baseline is expected for 2014 with the implementation of the CSAPR. It should also be noted that the base year design value used by EPA in their modeling was taken from 2003 through 2007 and is higher than the current 2009 through 2011 design value of 29 $\mu g/m^3$ in the area. Furthermore, the monitored design values for 2008-2010 and 2009-2011 of 31 and 29 $\mu g/m^3$, respectively, are less than the modeled base case design vales for 2012 and 2014. Figures 2 and 3 (in Section II) show the downward trend of the design values from 1999 through 2010 for the $PM_{2.5}$ monitors in West Virginia and Ohio.

Table 26: CSAPR 24-Hour $PM_{2.5}$ Design Values (µg/m3)									
Site ID	**County**	**2003-2007 Average Ambient Value**	**2003-2007 Maximum Ambient Values**	**2012 Base Case Average Values**	**2012 Base Case Maximum Values**	**2014 Base Case Average Values**	**2014 Base Case Maximum Values**	**2014 Remedy Average Values**	**2014 Remedy Maximum Values**
54-003-0003	Berkeley	34.5	35.8	30.6	31.1	29.8	30.3	25.9	27.2
54-009-0005	Brooke	39.4	41.5	31.9	33.4	30.4	31.6	24.5	25.5
54-009-0011	Brooke	43.9	44.9	37.5	38.3	36.1	37.0	28.3	29.1
54-011-0006	Cabell	35.1	36.6	30.9	32.2	29.3	30.7	21.0	22.2
54-029-1004	Hancock	40.6	41.2	32.5	32.7	30.7	31.1	22.5	23.3
54-033-0003	Harrison	33.5	34.6	31.3	32.2	30.1	31.0	18.5	18.8
54-039-0010	Kanawha	34.7	35.5	29.8	30.4	28.4	29.0	19.9	20.9
54-039-0011	Kanawha	33.1	33.1	28.4	28.4	27.1	27.1	19.8	19.8
54-039-1005	Kanawha	36.9	37.7	32.0	32.6	30.5	31.0	22.4	23.2
54-049-0006	Marion	33.6	33.7	30.9	31.0	29.7	29.7	18.4	18.5
54-051-1002	Marshall	33.9	34.8	28.1	28.3	27.0	27.2	19.3	19.6
54-061-0003	Monongalia	35.6	36.2	30.3	31.0	28.3	28.9	17.2	17.9
54-069-0010	Ohio	32.0	32.0	26.3	26.3	25.1	25.1	18.1	18.1
54-081-0002	Raleigh	30.6	31.3	25.7	26.3	24.5	25.0	17.2	17.4
54-089-0001	Summers	31.2	31.2	26.4	26.4	25.1	25.1	17.4	17.4
54-107-1002	Wood	35.4	36.7	30.1	31.2	27.5	28.5	20.2	21.2

Source: Air Quality Modeling Final Technical Support Document for the Final Cross-State Air Pollution Rule , pages B-90 - B-91. (www.epa.gov/airtransport/techinfo.html)

B. EPA Modeling for Proposed Transport Rule 2010

EPA performed modeling to support the emission reductions associated with the Proposed Transport Rule. EPA used the Comprehensive Air Quality Model with Extension (CAMx Version 5), applied to the 2005 meteorology as processed by the Mesoscale Model (MM5), Version 3.7.4. Emissions input into the CAMx included SO_2, NO_x, VOC, NH_3 and direct $PM_{2.5}$ for 2005. The modeling was based on the annual fine particle design values calculated from 2003 through 2005, 2004 through 2006, and 2005 through 2007. Future year modeling was conducted, and the future year design values for 2012 and 2014 were evaluated for attainment of the 24-hour NAAQS for $PM_{2.5}$ of 35 µg/m^3, as shown in Table 27. The Brooke County monitors (54-009-0005, 54-009-0011) and the Hancock County monitor (54-029-1004) represent the Weirton area.

EPA stated in the preamble to the proposed Transport Rule that the "baseline analysis takes into account emissions reductions associated with the implementation of all federal rules promulgated by December 2008 and assumes that CAIR is not in effect." [75FR 45233, 02AUG2010]

Modeling results for the Weirton area (Brooke County monitor, 54-009-0011) show a 4 µg/m^3 (9.1%) decrease in the $PM_{2.5}$ concentration for 2012 and a 4.7 µg/m^3 (10.7%) decrease in the concentration for 2014, without accounting for CAIR or reductions required by the Transport Rule. A reduction of 7.5 µg/m^3 (17.1%) from the 2003-2007 baseline is expected for 2014 with the implementation of the Transport Rule. It should also be noted that the base year design value used by EPA in their modeling was taken from 2003 through 2007 and is higher than the current 2009 through 2011 design value of 29 µg/m^3 in the area. Furthermore, the monitored design values for 2007-2009, 2008-2010 and 2009-2011 of 37, 31 and 29 µg/m^3, respectively, are less than the modeled base case design vales for 2012 and 2014.; the monitored values for 2008-2010 and 2009-2011 are less than the 2014 Remedy Average Values. Figures 2 and 3 (in Section II) show the downward trend of the design values from 1999 through 2010 for the $PM_{2.5}$ monitors in West Virginia and Ohio.

Table 27: Proposed Transport Rule 24-Hour $PM_{2.5}$ Design Values (µg/m3)									
Site ID	**County**	**2003-2007 Average Ambient Value**	**2003-2007 Maximum Ambient Values**	**2012 Base Case Average Values**	**2012 Base Case Maximum Values**	**2014 Base Case Average Values**	**2014 Base Case Maximum Values**	**2014 Remedy Average Values**	**2014 Remedy Maximum Values**
54-003-0003	Berkeley	34.5	35.8	32.0	32.7	31.6	32.2	29.3	30.0
54-009-0005	Brooke	39.4	41.5	33.9	36.1	33.0	35.2	28.9	30.6
54-009-0011	Brooke	43.9	44.9	39.9	40.8	39.2	40.1	36.4	37.1
54-011-0006	Cabell	35.1	36.6	32.1	33.6	30.8	32.2	23.3	24.6
54-029-1004	Hancock	40.6	41.2	34.3	34.6	32.7	33.2	26.0	26.6
54-033-0003	Harrison	33.5	34.6	33.0	34.0	31.3	32.3	20.2	20.5
54-039-0010	Kanawha	34.7	35.5	32.2	32.9	30.9	31.6	22.2	22.9
54-039-0011	Kanawha	33.1	33.1	30.8	30.8	29.6	29.6	21.5	21.5
54-039-1005	Kanawha	36.9	37.7	34.3	35.1	33.0	33.7	24.5	25.5
54-049-0006	Marion	33.6	33.7	34.3	34.4	32.8	32.8	20.1	20.2
54-051-1002	Marshall	33.9	34.8	30.0	30.9	28.7	29.6	22.9	23.9
54-061-0003	Monongalia	35.6	36.2	33.7	34.3	31.2	31.7	20.4	21.2
54-069-0010	Ohio	32.0	32.0	27.9	27.9	26.9	26.9	24.0	24.0
54-081-0002	Raleigh	30.6	31.3	27.8	28.3	26.7	27.2	19.6	19.9
54-089-0001	Summers	31.2	31.2	27.9	27.9	26.6	26.6	19.2	19.2
54-107-1002	Wood	35.4	36.7	32.7	33.9	31.1	32.2	23.0	23.4

Source: Technical Support Document for the Proposed Transport Rule, page B-78. (www.epa.gov/airquality/transport/pdfs/TR_AQModeling_TSD.pdf)

VII. CONTINGENCY MEASURES

CAA Section 107(d)(3)(E)(v)

A. Maintenance Plan Review

West Virginia hereby commits to review its maintenance plan eight years after redesignation, as required by Section 175(A) of the CAA.

B. Corrective Actions

West Virginia hereby commits to adopt and expeditiously implement necessary corrective actions in the following circumstances:

1. Warning Level Response

A warning level response shall be prompted whenever the 98th percentile 24-hour $PM_{2.5}$ concentration of 35.5 µg/m^3 occurs in a single calendar year within the maintenance area. A warning level response will consist of a study to determine whether the $PM_{2.5}$ value indicates a trend toward higher $PM_{2.5}$ values or whether emissions appear to be increasing. The study will evaluate whether the trend, if any, is likely to continue and, if so, the control measures necessary to reverse the trend taking into consideration ease and timing for implementation as well as economic and social considerations. Implementation of necessary controls in response to a warning level response trigger will take place as expeditiously as possible, but in no event later than 12 months from the conclusion of the most recent calendar year.

Should it be determined through the warning level study that action is necessary to reverse the noted trend, the procedures for control selection and implementation outlined under "action level response" shall be followed.

2. Action Level Response

An action level response shall be prompted whenever a two-year average of the 98th percentile 24-hour $PM_{2.5}$ concentration of 35 µg/m^3 or greater occurs within the maintenance area. A violation of the standard (three-year average of the 98th percentile of 35 µg/m^3 or greater) shall also prompt an action level response. In the event that the action level is triggered and is not found to be due to an exceptional event, malfunction, or noncompliance with a permit condition or rule requirement, West Virginia DAQ in conjunction with the metropolitan planning organization or regional council of governments, will determine additional control measures needed to assure future attainment of the 2006 $PM_{2.5}$ NAAQS. In this case, measures that can be implemented in a short time will be selected in order to be in place within 18 months from the close of the calendar year that prompted the action level. West Virginia DAQ will also consider the timing of an action level trigger and determine if additional, significant new regulations not currently included as part of the maintenance provisions will be implemented in a timely manner and will constitute our response.

3. Control Measure Selection and Implementation

Adoption of any additional control measures is subject to the necessary administrative and legal process. This process will include publication of notices, an opportunity for public hearing, and other measures required by West Virginia law for rulemaking.

If a new measure/control is already promulgated and scheduled to be implemented at the federal or State level, and that measure/control is determined to be sufficient to address the upward trend in air quality, additional local measures may be unnecessary. Furthermore, West Virginia DAQ will submit to EPA an analysis to demonstrate the proposed measures are adequate to return the area to attainment.

C. Potential Contingency Measures

Contingency measures to be considered will be selected from a comprehensive list of measures deemed appropriate and effective at the time the selection is made. The selection of measures will be based on cost-effectiveness, emission reduction potential, economic and social considerations or other factors that West Virginia DAQ deems appropriate. West Virginia DAQ will solicit input from all interested and affected persons in the maintenance area prior to selecting appropriate contingency measures. Because it is not possible at this time to determine what control measures will be appropriate at an unspecified time in the future, the list of contingency measures outlined below is not exhaustive.

1) Diesel reduction emission strategies.
2) Alternative fuel (e.g., liquid propane and compressed natural gas) and diesel retrofit programs for fleet vehicle operations.
3) Tighter $PM_{2.5}$, SO_2, and NO_x emissions offsets for new and modified major sources.
4) Concrete manufacturing - upgrade wet suppression.
5) Additional NO_x RACT statewide.

No contingency measure shall be implemented without providing the opportunity for full public participation during which the relative costs and benefits of individual measures, at the time they are under consideration, can be fully evaluated.

D. $PM_{2.5}$, SO_2, and NO_x sources potentially subject to future additional control requirements.

The following is a list of $PM_{2.5}$, SO_2, and NO_x sources potentially subject to future controls.

- ICI Boilers - SO_2 and NO_x controls;
- EGUs;
- process heaters;
- internal combustion engines;
- combustion turbines;
- other sources greater than 100 tons per year;
- Fleet vehicles;
- Concrete manufacturers;
- Aggregate processing plants.

VIII. PUBLIC PARTICIPATION

West Virginia published notification for a public hearing and solicitation for public comment concerning the draft redesignation petition and maintenance plan in the West Virginia Register and the Wheeling Intelligencer on April 13, 2012.

The public hearing to receive comments on the redesignation request is scheduled for 6:00 p.m. Tuesday, May 15, 2012, at the West Virginia Division of Environmental Protection Headquarters located at 601 57th Street, SE, Charleston, WV. The public comment period closes on May 15, 2012. Appendix F includes a copy of the public notice.

IX. CONCLUSIONS

The Weirton $PM_{2.5}$ nonattainment area has attained the 2006 annual and 24-hour NAAQS for $PM_{2.5}$ and complied with the applicable provisions of the 1990 Amendments to the CAA regarding redesignations of $PM_{2.5}$ nonattainment areas. Documentation to that effect is contained herein. West Virginia DAQ has prepared a redesignation request and maintenance plan that meet the requirements of Section 110 (a)(1) of the 1990 CAA.

Based on this presentation, the West Virginia portion of the Weirton $PM_{2.5}$ nonattainment area meets the requirements for redesignation under the CAA and EPA guidance. West Virginia has performed an analyses showing the air quality improvements are due to permanent and enforceable measures. Furthermore, because this area is subject to significant transport of pollutants, significant regional SO_2 and NO_x reductions will ensure continued compliance (maintenance) with the standard with an increasing margin of safety.

The State of West Virginia hereby requests that the Weirton 2006 $PM_{2.5}$ nonattainment area be redesignated to attainment simultaneously with EPA approval of the CAA section 175A maintenance plan provisions contained herein.