ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[ EPA-R04-OAR-2014-0867; FRL-9922-95-Region 4 ]

Approval and Promulgation of Implementation Plans; Alabama:

Non-interference Demonstration for Federal Low-Reid Vapor Pressure Requirement for the

Birmingham Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve the State of Alabama’s November 14, 2014, State Implementation Plan (SIP) revision, submitted through the Alabama Department of Environmental Management (ADEM), in support of the State’s request that EPA change the Federal Reid Vapor Pressure (RVP) requirements for Jefferson and Shelby Counties (hereinafter referred to as the “Birmingham Area” or “Area”). Alabama’s November 14, 2014, SIP revision evaluates whether changing the Federal RVP requirements in this Area would interfere with the Area’s ability to meet the requirements of the Clean Air Act (CAA or Act). Specifically, Alabama’s SIP revision concludes that relaxing the Federal RVP requirement from 7.8 pounds per square inch (psi) to 9.0 psi for gasoline sold between June 1 and September 15 of each year in the Area would not interfere with attainment or maintenance of the national ambient air quality standards (NAAQS) or with any other CAA requirement. EPA has preliminarily determined that Alabama’s November 14, 2014, SIP revision is consistent with the applicable provisions of the CAA.
DATES: Written comments must be received on or before [insert date 21 days after date of publication in the Federal Register].

ADDRESSES: Submit your comments, identified by Docket ID Number EPA-R04-OAR-2014-0867 by one of the following methods:

1. www.regulations.gov: Follow the on-line instructions for submitting comments.

2. E-mail: R4-ARMS@epa.gov.

3. Fax: (404) 562-9019.

4. Mail: EPA-R04-OAR-2014-0867, Air Regulatory Managment Section (formerly the Regulatory Development Section), Air Planning and Implementation Branch (formerly the Air Planning Branch), Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960.

5. Hand Delivery or Courier: Ms. Lynorae Benjamin, Chief, Air Regulatory Management Section, Air Planning and Implementation Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Such deliveries are only accepted during the Regional Office’s normal hours of operation. The Regional Office’s official hours of business are Monday through Friday, 8:30 am to 4:30 pm, excluding Federal holidays.

Instructions: Direct your comments to Docket ID No. EPA-R04-OAR-2014-0867. EPA’s policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information
provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit through www.regulations.gov or e-mail, information that you consider to be CBI or otherwise protected. The www.regulations.gov website is an “anonymous access” system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through www.regulations.gov, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA’s public docket visit the EPA Docket Center homepage at http://www.epa.gov/epahome/dockets.htm.

**Docket:** All documents in the electronic docket are listed in the [www.regulations.gov](http://www.regulations.gov) index. Although listed in the index, some information is not publicly available, i.e., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Air Regulatory Management Section, Air Planning and Implementation Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection
Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. EPA requests that if at all possible, you contact the person listed in the FOR FURTHER INFORMATION CONTACT section to schedule your inspection. The Regional Office’s official hours of business are Monday through Friday, 8:30 am to 4:30 pm, excluding Federal holidays.

FOR FURTHER INFORMATION CONTACT: Richard Wong of the Air Regulatory Management Section, in the Air Planning and Implementation Branch, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960. Mr. Wong may be reached by phone at (404) 562-8726 or via electronic mail at wong.richard@epa.gov.

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I. What is Being Proposed?

This rulemaking proposes to approve Alabama’s noninterference demonstration, submitted on November 14, 2014, in support of the State’s request that EPA relax the Federal RVP requirement from 7.8 psi to 9.0 psi for gasoline sold between June 1 and September 15 of each year (i.e., during high ozone season) in the Area. Specifically, EPA is proposing to approve Alabama’s November 14, 2014, SIP revision which includes a technical demonstration that changing the federal RVP requirements in this Area from 7.8 psi to 9.0 psi will not interfere with attainment or maintenance of any NAAQS or with any other applicable requirement of the CAA.\(^1\) It should be noted that when Alabama requested that EPA redesignate the Birmingham Area to attainment for the 1997 8-hour ozone NAAQS, the 1997 annual fine particulate matter (PM\(_{2.5}\)) NAAQS, and the 2006 24-hour PM\(_{2.5}\) NAAQS, the State took a conservative approach for the associated maintenance demonstrations and modeled the 9.0 psi RVP requirement for this Area rather than the 7.8 psi RVP requirement currently in place. While the State had already accounted for the use of fuel with an RVP of 9.0 psi in the maintenance plans to support those redesignation requests, the State did not, at that time, request the removal of the 7.8 psi RVP requirement for the Birmingham Area. Alabama is now requesting the removal of the 7.8 psi RVP requirement for this Area and, as part of that request, has reevaluated whether removal of this requirement would interfere with air quality in the Area. To make this demonstration, Alabama completed a technical analysis to estimate the change in emissions that would result from a switch to 9.0 psi RVP fuel based on current conditions. EPA has reviewed this technical

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\(^1\) A separate rulemaking is required for relaxation of the current requirement to use gasoline with an RVP of 7.8 psi in the Area. Today’s action proposes EPA’s evaluation of the approvability of Alabama’s noninterference demonstration pursuant to section 110(l). The decision regarding removal of Federal RVP requirements pursuant to section 211(h) in the Area includes other considerations evaluated at the discretion of the Administrator. As such, the determination regarding whether to remove the Area from those areas subject to the section 211(h) requirements is made through a separate rulemaking action.
analysis and is proposing to find that Alabama’s technical demonstration supports the conclusion that the use of gasoline with an RVP of 9.0 psi throughout the Birmingham Area will not interfere with attainment or maintenance of any NAAQS or with any other applicable requirement of the CAA.

This preamble is hereinafter organized into five parts. Section II provides the background of the Birmingham Area designation status with respect to the various ozone NAAQS. Section III describes the applicable history of federal gasoline regulation. Section IV provides the Agency’s policy regarding relaxation of the volatility standards. Section V provides EPA’s analysis of the information submitted by Alabama to support a change for the conventional gasoline volatility standard in the Birmingham Area.

II. What is the Background of the Birmingham Area?

The Birmingham Area was originally designated as a 1-hour ozone nonattainment area by EPA on March 3, 1978 (43 FR 8962). The Birmingham nonattainment area at that time was geographically defined as Jefferson County, Alabama. On November 6, 1991, by operation of law under section 181(a) of the CAA, EPA classified the Birmingham nonattainment area as a marginal nonattainment area for ozone and added Shelby County to the nonattainment area. See 56 FR 56693. Among the requirements applicable to nonattainment areas for the 1-hour ozone NAAQS was the requirement to meet certain volatility standards (known as Reid Vapor Pressure or RVP) for gasoline sold commercially. See 55 FR 23658 (June 11, 1990). As discussed in section III, below, a 7.8 psi Federal RVP requirement first applied to the Area during the high ozone season given its status as a marginal nonattainment area for the 1-hour ozone standard. Subsequently, in order to comply with the 1-hour ozone NAAQS, Alabama opted to implement a
state RVP requirement of 7.0 psi for gasoline sold in the Birmingham Area during the high ozone season. EPA incorporated the state RVP requirement of 7.0 psi for gasoline sold in the Birmingham Area into the Alabama SIP on November 7, 2001. See 66 FR 56218.

ADEM originally requested a redesignation of the Birmingham Area to attainment for the 1-hour ozone NAAQS in 1997. EPA disapproved this request on September 19, 1997, due to a violation of the ozone NAAQS. See 62 FR 49154. Subsequently, the Area attained the 1-hour ozone NAAQS and was redesignated to attainment for the 1-hour ozone on March 12, 2004, based on 2001-2003 ambient air quality monitoring data. See 69 FR 11798. Alabama’s 1-hour ozone redesignation request did not include a request to remove the 7.0 psi state RVP requirement for the Birmingham Area from the SIP nor a request to relax the 7.8 psi Federal RVP standard.

On April 30, 2004, EPA designated and classified areas for the 8-hour ozone NAAQS that was promulgated on July 18, 1997, as unclassifiable/attainment or nonattainment for the new 8-hour ozone NAAQS. See 69 FR 23857. The Birmingham Area was designated as nonattainment for the 1997 8-hour ozone NAAQS with a design value of 0.087 parts per million (ppm). Subsequently, the Area attained the 1997 8-hour ozone NAAQS with a design value of 0.084 ppm using three years of quality assured data for the years of 2003-2005. The Area was redesignated to attainment for the 1997 8-hour ozone NAAQS in a final rulemaking on May 12, 2006. See 71 FR 27631. Alabama’s 1997 8-hour ozone redesignation request did not include a request for the removal of the 7.8 psi Federal RVP standard, nor did it include a request to change the 7.0 psi state RVP requirement for the Birmingham Area. However, to support its request for redesignation to attainment for the 1997 8-hour ozone NAAQS, Alabama took a
conservative approach and estimated emissions using a 9.0 psi RVP in its modeling supporting the State’s maintenance demonstration.

On March 2, 2012, Alabama submitted a SIP revision requesting that EPA remove the State’s 7.0 psi RVP requirement for the Area from the SIP. EPA approved Alabama’s March 2, 2012, SIP revision on April 20, 2012. See 77 FR 23619. In EPA’s final rulemaking to remove the State RVP requirement, EPA noted that the action did not remove the 7.8 psi Federal RVP requirement for the Birmingham Area.

Effective July 20, 2012, EPA designated the Birmingham Area as unclassifiable/attainment for the 2008 8-hour ozone NAAQS. See 77 FR 30088 (April 30, 2012). Although the Birmingham Area is designated as attainment, the federal 7.8 psi RVP requirement remains in place.

Alabama is now requesting that EPA remove the federal 7.8 psi RVP requirement for the Birmingham Area, and it submitted a SIP revision on November 14, 2014, containing a noninterference demonstration to support its request.

III. What is the History of the Gasoline Volatility Requirement?

On August 19, 1987 (52 FR 31274), EPA determined that gasoline nationwide had become increasingly volatile, causing an increase in evaporative emissions from gasoline-powered vehicles and equipment. Evaporative emissions from gasoline, referred to as volatile organic compounds (VOCs), are precursors to the formation of tropospheric ozone and contribute to the nation’s ground-level ozone problem. Exposure to ground-level ozone can reduce lung function (thereby aggravating asthma or other respiratory conditions), increase
susceptibility to respiratory infection, and may contribute to premature death in people with heart and lung disease.

The most common measure of fuel volatility that is useful in evaluating gasoline evaporative emissions is RVP. Under section 211(c) of CAA, EPA promulgated regulations on March 22, 1989 (54 FR 11868), that set maximum limits for the RVP of gasoline sold during the high ozone season. These regulations constituted Phase I of a two-phase nationwide program, which was designed to reduce the volatility of commercial gasoline during the summer ozone control season. On June 11, 1990 (55 FR 23658), EPA promulgated more stringent volatility controls as Phase II of the volatility control program. These requirements established maximum RVP standards of 9.0 psi or 7.8 psi (depending on the State, the month, and the area’s initial ozone attainment designation with respect to the 1-hour ozone NAAQS during the high ozone season).

The 1990 CAA Amendments established a new section, 211(h), to address fuel volatility. Section 211(h) requires EPA to promulgate regulations making it unlawful to sell, offer for sale, dispense, supply, offer for supply, transport, or introduce into commerce gasoline with an RVP level in excess of 9.0 psi during the high ozone season. Section 211(h) prohibits EPA from establishing a volatility standard more stringent than 9.0 psi in an attainment area, except that EPA may impose a lower (more stringent) standard in any former ozone nonattainment area redesignated to attainment.

On December 12, 1991 (56 FR 64704), EPA modified the Phase II volatility regulations to be consistent with section 211(h) of the CAA. The modified regulations prohibited the sale of gasoline with an RVP above 9.0 psi in all areas designated attainment for ozone, beginning in 1992. For areas designated as nonattainment, the regulations retained the
original Phase II standards published on June 11, 1990 (55 FR 23658). A current listing of the RVP requirements for states can be found on EPA’s website at:


As explained in the December 12, 1991 (56 FR 64704), Phase II rulemaking, EPA believes that relaxation of an applicable RVP standard is best accomplished in conjunction with the redesignation process. In order for an ozone nonattainment area to be redesignated as an attainment area, section 107(d)(3) of the Act requires the state to make a showing, pursuant to section 175A of the Act, that the area is capable of maintaining attainment for the ozone NAAQS for ten years after redesignation. Depending on the area’s circumstances, this maintenance plan will either demonstrate that the area is capable of maintaining attainment for ten years without the more stringent volatility standard or that the more stringent volatility standard may be necessary for the area to maintain its attainment with the ozone NAAQS. Therefore, in the context of a request for redesignation, EPA will not relax the volatility standard unless the state requests a relaxation and the maintenance plan demonstrates, to the satisfaction of EPA, that the area will maintain attainment for ten years without the need for the more stringent volatility standard.

As noted above, Alabama did not request relaxation of the applicable 7.8 psi federal RVP standard when the Birmingham Area was redesignated to attainment for the either the 1-hour or the 1997 8-hour ozone NAAQS but did take a conservative approach in estimating emissions for the maintenance plan associated with its redesignation request for the 1997 8-hour ozone NAAQS by using a level of 9.0 psi.
IV. What are the Section 110(l) Requirements?

To support Alabama’s request to relax the federal RVP requirement in the Birmingham Area, the State must demonstrate that the requested change will satisfy section 110(l) of the CAA. Section 110(l) requires that a revision to the SIP not interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 171), or any other applicable requirement of the Act. EPA’s criterion for determining the approvability of Alabama’s November 14, 2014, SIP revision is whether the noninterference demonstration associated with the relaxation request satisfies section 110(l). Although the modeling associated with Alabama’s maintenance plans for the 1997 8-hour ozone NAAQS and the 1997 Annual PM$_{2.5}$ and 2006 24-hour PM$_{2.5}$ NAAQS are premised upon the 9.0 psi RVP requirements, no requests for a change in the federal RVP requirement were made at the time that EPA approved these plans. EPA’s approval of the maintenance plans was based on an evaluation of the air quality monitoring data at the time of the EPA actions, the information provided in the individual maintenance plans, and the maintenance plan requirements in the CAA.

EPA evaluates each section 110(l) noninterference demonstration on a case-by-case basis considering the circumstances of each SIP revision. EPA interprets 110(l) as applying to all NAAQS that are in effect, including those that have been promulgated but for which the EPA has not yet made designations. The degree of analysis focused on any particular NAAQS in a noninterference demonstration varies depending on the nature of the emissions associated with the proposed SIP revision. EPA’s analysis of Alabama’s November 14, 2014, SIP revision pursuant to section 110(l) is provided below.
EPA notes that in today’s action, it is only proposing to approve the State’s technical demonstration that the Area can continue to attain and maintain the NAAQS and meet other CAA requirements after switching to the sale of gasoline with an RVP of 9.0 psi in the Birmingham Area during the high ozone season and to amend the SIP to include this demonstration. Consistent with CAA section 211(h) and the Phase II volatility regulations, EPA will initiate a separate rulemaking to relax the current federal requirement to use gasoline with an RVP of 7.8 psi in the Birmingham Area.

V. What is EPA’s Analysis of Alabama’s Submittal?

a. Overall Preliminary Conclusions Regarding Alabama’s Noninterference Analyses

On November 14, 2014, ADEM submitted a noninterference demonstration to support the State’s request to modify the RVP summertime gasoline requirement from 7.8 psi to 9.0 psi for the Birmingham Area. This demonstration includes an evaluation of the impact that the removal of the 7.8 psi RVP requirement would have on maintenance of the 1997 and 2008 ozone standards and on the maintenance of the other NAAQS.\(^2\) Alabama focused its analysis on the impact of the change in RVP to attainment and maintenance of the ozone, PM\(^3\), and NO\(_2\) NAAQS because RVP requirements do not affect lead, sulfur dioxide (SO\(_2\)), or carbon monoxide (CO) emissions; because VOC and NOx emissions are precursors for ozone\(^4\) and PM; and

\(^2\) The six NAAQS for which EPA establishes health and welfare based standards are CO, lead, NO\(_2\), ozone, PM, and SO\(_2\).

\(^3\) PM is composed of PM\(_{2.5}\) and PM\(_{10}\).

\(^4\) EPA notes that the Birmingham Area is located within a NOx-limited region. A NOx-limited region is one in which the concentration of ozone is limited by the amount of NOx emissions. NOx and VOC are precursors to the formation of ozone in the atmosphere. In a NOx-limited area, high prevailing concentrations of VOC from naturally-occurring sources are present in the atmosphere to contribute to ozone formation. Consequently, reduction of manmade, or anthropogenic, sources of VOC emissions generally do not generally result in reduced ozone
because NO$_2$ is a component of NOx.

ADEM’s noninterference analysis utilized EPA’s 2010b Motor Vehicle Emissions Simulator (MOVES) emission modeling system to estimate emissions for mobile sources.$^5$

These mobile source emissions are used as part of the evaluation of the potential impacts to the NAAQS that might result exclusively from changing the high ozone season RVP requirement from 7.8 psi to 9.0 psi. As summarized in Table 1, below, the MOVES model predicted minor increases in mobile source NOx and VOC emissions from the switch to 9.0 psi RVP fuel and much larger decreases in emissions resulting from fleet turnover.$^6$ When considered together, these changes are projected to decrease mobile source NOx and VOC emissions. The modeling results summarized in Table 1 also demonstrate that the projected increase in mobile source NOx and VOC emissions due to relaxation of the RVP requirement is negligible when compared with total NOx and VOC emissions in the Area projected for 2015 (approximately 0.1% and 0.7%, respectively).

$^5$ The 2010b MOVES model was the latest EPA mobile source model available to the State at the time that it developed its SIP revision. ADEM’s modeling using 2010b MOVES conforms with EPA’s modeling guidance.

$^6$ Fleet turnover refers to the phenomenon where older vehicles built to less stringent emission standards are replaced in the fleet by newer vehicles built in compliance with more stringent standards. ADEM estimated mobile source emissions using the fleet turnover assumptions included in EPA’s 2010b MOVES model.
Table 1 – Effects on NOx and VOC Emissions from RVP Relaxation and Fleet Turnover for Jefferson and Shelby Counties

<table>
<thead>
<tr>
<th></th>
<th>Mobile Emissions Increase (2015) with RVP change of 7.8 to 9.0 (tons)*</th>
<th>Mobile Emissions Decrease from 2014 to 2015 Fleet Turnover (tons)*</th>
<th>Net Mobile Emissions (tons)*</th>
<th>2015 Emissions from all sources (tons)</th>
<th>% Emissions from RVP Change compared from All Emissions Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>24</td>
<td>-489</td>
<td>-465</td>
<td>16,857</td>
<td>0.14 %</td>
</tr>
<tr>
<td>VOC</td>
<td>80</td>
<td>-156</td>
<td>-76</td>
<td>11,791</td>
<td>0.68 %</td>
</tr>
</tbody>
</table>

* Emissions increases with RVP change are estimated for the period June 1 through September 15, 2015.

Tables 2 and 3, below, show that overall 24-hour and annual mobile emissions of NOx and VOC are projected to continue to decrease in the Birmingham Area using a 9.0 psi RVP for years 2015 through 2024 and the fleet turnover assumptions contained in EPA’s 2010b MOVES model.

Table 2 – 24-hour NOx and VOC Mobile Emissions (tons per year (tpy))

<table>
<thead>
<tr>
<th>County</th>
<th>2009</th>
<th>2012</th>
<th>2015</th>
<th>2018</th>
<th>2021</th>
<th>2024</th>
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<tbody>
<tr>
<td>Jefferson</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOx</td>
<td>59.26</td>
<td>46.31</td>
<td>35.62</td>
<td>28.05</td>
<td>23.46</td>
<td>20.75</td>
</tr>
<tr>
<td>VOC</td>
<td>25.94</td>
<td>20.82</td>
<td>16.92</td>
<td>13.97</td>
<td>12.25</td>
<td>10.76</td>
</tr>
<tr>
<td>Shelby</td>
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<td></td>
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<tr>
<td>NOx</td>
<td>12.72</td>
<td>10.14</td>
<td>7.60</td>
<td>5.98</td>
<td>5.01</td>
<td>4.40</td>
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<tr>
<td>VOC</td>
<td>4.85</td>
<td>3.97</td>
<td>3.15</td>
<td>2.60</td>
<td>2.28</td>
<td>1.99</td>
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</table>

Table 3 – Annual Mobile NOx and VOC Emissions (tpy)

<table>
<thead>
<tr>
<th>County</th>
<th>2009</th>
<th>2012</th>
<th>2015</th>
<th>2018</th>
<th>2021</th>
<th>2024</th>
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<td></td>
<td></td>
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</tr>
<tr>
<td>NOx</td>
<td>20364.40</td>
<td>15957.15</td>
<td>12237.62</td>
<td>9631.63</td>
<td>8053.95</td>
<td>7140.21</td>
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<tr>
<td>VOC</td>
<td>8974.65</td>
<td>7243.40</td>
<td>5882.42</td>
<td>4869.55</td>
<td>4232.64</td>
<td>3771.41</td>
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<td>Shelby</td>
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<tr>
<td>NOx</td>
<td>4428.17</td>
<td>3518.57</td>
<td>2641.41</td>
<td>2079.50</td>
<td>1741.02</td>
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<tr>
<td>VOC</td>
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<td>1100.43</td>
<td>909.52</td>
<td>789.92</td>
<td>701.11</td>
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</table>
b. Noninterference Analysis for the Ozone NAAQS

As discussed above, the Birmingham Area is currently designated as attainment for both the 1997 8-hour ozone NAAQS and the 2008 8-hour ozone NAAQS. Although the Area was previously designated as nonattainment for the 1997 8-hour ozone NAAQS, the Birmingham Area was redesignated to attainment for that NAAQS on May 12, 2006. See 71 FR 27631. Because the 2008 8-hour ozone NAAQS is more stringent than the 1997 8-hour standard, Alabama’s November 14, 2014, noninterference demonstration for the ozone NAAQS is focused on the 2008 8-hour standard. The 2008 8-hour ozone NAAQS is met when the annual fourth-highest daily maximum 8-hour average concentration, averaged over 3 years is 0.075 ppm or less. As shown in Table 4, all ozone monitors in the Birmingham Area are currently well below the 2008 8-hour ozone standard.

<table>
<thead>
<tr>
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<td>Hoover</td>
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<tr>
<td>North Birmingham</td>
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<td>0.070</td>
<td>0.074</td>
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<td>Tarrant</td>
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<td>0.074</td>
<td>0.080</td>
<td>0.076</td>
<td>0.070</td>
</tr>
</tbody>
</table>

------ indicates no data available

7 EPA redesignated the Area to attainment for the 1-hour ozone standard on March 12, 2004 (69 FR 11798), and revoked the 1-hour ozone standard on April 30, 2004 (69 FR 23858).

8 The Pinson and Providence monitors shut down after the 2012 monitoring season. There was not enough data at these locations to calculate a 3-year average design value.
Table 4 also shows that there is an overall downward trend in ozone concentrations in the Birmingham Area. This decline can be attributed to federal and State programs that have led to significant emissions reductions in ozone precursors. Given this downward trend, the current ozone concentrations in the Area, and the results of Alabama’s mobile source modeling, EPA has preliminarily determined that a change to 9.0 psi RVP fuel in the Birmingham Area would not interfere with maintenance of the 1997 or 2008 ozone NAAQS in the Area.

c. Noninterference Analysis for the PM NAAQS

Over the course of several years, EPA has reviewed and revised the PM$_{2.5}$ NAAQS a number of times. On July 16, 1997, EPA established an annual PM$_{2.5}$ NAAQS of 15.0 micrograms per cubic meter ($\mu$g/m$^3$), based on a 3-year average of annual mean PM$_{2.5}$ concentrations, and a 24-hour PM$_{2.5}$ NAAQS of 65 $\mu$g/m$^3$, based on a 3-year average of the 98th percentile of 24-hour concentrations. See 62 FR 36852 (July 18, 1997). On September 21, 2006, EPA retained the 1997 Annual PM$_{2.5}$ NAAQS of 15.0 $\mu$g/m$^3$ but revised the 24-hour PM$_{2.5}$ NAAQS to 35 $\mu$g/m$^3$, based again on a 3-year average of the 98th percentile of 24-hour concentrations. See 71 FR 61144 (October 17, 2006). On December 14, 2012, EPA retained the 2006 24-hour PM$_{2.5}$ NAAQS of 35 $\mu$g/m$^3$ but revised the annual primary PM$_{2.5}$ NAAQS to 12.0 $\mu$g/m$^3$, based again on a 3-year average of annual mean PM$_{2.5}$ concentrations. See 78 FR 3086 (January 15, 2013).

EPA promulgated designations for the 1997 Annual PM$_{2.5}$ NAAQS on January 5, 2005 (70 FR 944), and April 14, 2005 (70 FR 19844). Jefferson and Shelby Counties in their entireties, and a portion of Walker County (hereinafter referred to as the “1997 Annual PM$_{2.5}$ Birmingham Area”) were designated nonattainment for the 1997 Annual PM$_{2.5}$ standards, and all
other counties (or portions thereof) in Alabama were designated unclassifiable/attainment. On November 13, 2009 (74 FR 58688), EPA designated the same counties (or portions thereof) in the State that were nonattainment for the 1997 Annual PM$_{2.5}$ standards as nonattainment for the 2006 24-hour PM$_{2.5}$ standards (hereinafter referred to as the “2006 24-hour PM$_{2.5}$ Birmingham Area”). On January 22, 2013, EPA redesignated the 1997 Annual PM$_{2.5}$ Birmingham Area to attainment for the 1997 Annual PM$_{2.5}$ NAAQS. Additionally, on January 25, 2013, EPA redesignated the 2006 24-hour PM$_{2.5}$ Birmingham Area to attainment for the 2006 24-hour PM$_{2.5}$ NAAQS. See 78 FR 5306.

As mentioned above, EPA revised the Annual PM$_{2.5}$ NAAQS in December 2012. EPA completed designations for the 2012 Annual PM$_{2.5}$ NAAQS for most areas on December 14, 2015, and designated the Birmingham Area as unclassifiable/attainment. See 80 FR 2206 (January 15, 2015).

The main precursor pollutants for PM$_{2.5}$ are NO$_x$, SO$_2$, VOC, and ammonia. As mentioned earlier in this rulemaking, the Federal RVP requirements only result in emissions benefits for VOC and NO$_x$. Therefore, Alabama focused on these two PM$_{2.5}$ precursors in its analysis of the potential impact of changing the RVP requirements for the Birmingham Area on the PM$_{2.5}$ NAAQS.

The PM$_{2.5}$ monitoring data summarized in Table 5 shows that the PM$_{2.5}$ annual and 24-hour design values are well below the NAAQS and have been decreasing overall since 2008.

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9 Walker County is not subject to the Federal RVP requirement because it is not part of the ozone Area.

10 In anticipation of a future request to change the Federal RVP requirement, Alabama used an RVP of 9.0 psi in its modeling to support the maintenance plans for the 1997 Annual PM$_{2.5}$ NAAQS and the 2006 24-hour PM$_{2.5}$ NAAQS.
Table 5 – PM\textsubscript{2.5} Design Values

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<tr>
<td>North Birmingham</td>
<td>29</td>
<td>27</td>
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</table>

1997 Annual PM\textsubscript{2.5} NAAQS: 15 \(\mu\text{g/m}^3\)
2006 24-hour PM\textsubscript{2.5} NAAQS: 35 \(\mu\text{g/m}^3\)

Given the current PM\textsubscript{2.5} concentrations and downward trend of these concentrations in the Area and the results of Alabama’s mobile source modeling, EPA has preliminarily determined that a change to 9.0 psi RVP fuel in the Birmingham Area would not interfere with maintenance of the 1997 Annual PM\textsubscript{2.5} NAAQS or the 2006 24-hour PM\textsubscript{2.5} NAAQS in the Area\textsuperscript{11}.

d. Noninterference Analysis for the 2010 NO\textsubscript{2} NAAQS

On February 17, 2012, EPA designated all counties in Alabama as unclassifiable/attainment for the 2010 NO\textsubscript{2} NAAQS. See 77 FR 9532. Based on the technical analysis in Alabama’s November 14, 2014, SIP revision, the potential increase in NOx emissions associated with the change to 9.0 psi RVP fuel in the Birmingham Area is approximately 24 tons during high ozone season. As discussed in section V.a, above, the slight projected increase in

\textsuperscript{11} EPA has also preliminarily determined that a change to 9.0 psi RVP fuel in the Birmingham Area would not interfere with maintenance of the Annual PM\textsubscript{10} NAAQS of 150 \(\mu\text{g/m}^3\) given the results of Alabama’s mobile source modeling and the fact that the Area is currently attaining the PM\textsubscript{10} standard. Because PM\textsubscript{2.5} is a component of PM\textsubscript{10}, this preliminary determination is further supported by the downward trend in PM\textsubscript{2.5} identified above.
mobile source NOx emissions due to the fuel switch will be negated by a decrease in tailpipe emissions due to fleet turnover. Given the current unclassifiable/attainment designation and the results of Alabama’s mobile source modeling, EPA has preliminarily determined that a change to 9.0 psi RVP fuel in the Birmingham Area would not interfere with maintenance of the 2010 NO2 NAAQS in the Area.

VI. Proposed Action

EPA is proposing to approve the State of Alabama’s noninterference demonstration, submitted on November 14, 2014, in support of the State’s request that EPA change the Federal RVP requirements for the Birmingham Area from 7.8 psi to 9.0 psi. Specifically, EPA is proposing to find that this change in the RVP requirements for the Birmingham Area will not interfere with attainment or maintenance of any NAAQS or with any other applicable requirement of the CAA.

EPA has preliminarily determined that Alabama’s November 14, 2014, SIP revision, containing the noninterference demonstration associated with the State’s request for the change of the Federal RVP requirements is consistent with the applicable provisions of the CAA. EPA is not proposing action today to remove the Birmingham Area from the Federal 7.8 psi RVP requirement. Any such proposal will occur in a separate and subsequent rulemaking.

VII. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submittal that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA’s role is to approve state choices, provided
that they meet the criteria of the CAA. Accordingly, this proposed action merely proposes to approve state law as meeting Federal requirements and does not propose to impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, October 7, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
• does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000) nor will it impose substantial direct costs on tribal governments or preempt tribal law.
List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements and Volatile organic compounds.

Authority: 42 U.S.C. 7401 et seq.


V. Anne Heard,

Acting Regional Administrator,
Region 4.