



State of Ohio Environmental Protection Agency

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May 31, 2007

Stephen Rothblatt, Director  
U.S. EPA, Office of Air and Radiation  
77 W. Jackson Blvd.  
Chicago, IL 60604-3507

Re: 7.8 RVP Amendment to Dayton-Springfield  
Eight-hour Ozone Maintenance Plan

Dear Mr. Rothblatt:

On May 21, 2007, the U.S. EPA approval of Ohio EPA's request for 7.8 RVP fuel as part of the E-Check replacement program was signed. As a result, the Dayton-Springfield eight-hour ozone maintenance plan will be amended to include 7.8 RVP fuel in the 2018 maintenance projections.

Ohio EPA submitted the Dayton-Springfield eight-hour ozone redesignation and maintenance plan on November 7, 2006 and January 11, 2007 respectively. The tables from that package have been amended to reflect the addition of 7.8 RVP fuel.

Provided below are Table 8 and Table 13 from the revised March 8, 2007 submittal, amended tables showing the addition of 7.8 RVP fuel and tables showing the difference between the initial and amended totals.

Tables A, B and C show the comparisons between initial and amended 2018 emission inventory and on-road emissions.

These tables represent total emissions, including the actual projected on-road emissions with and without 7.8 RVP fuel. In the development of the Motor Vehicle Emission Budget (MVEB) for the Dayton-Springfield area, a portion of the safety margin was used to provide a cushion to the MVEB for future conformity work. U.S. EPA issued a Notice of Adequacy for the Dayton-Springfield MVEB. Ohio EPA is not requesting a revision to this approved budget. The net result of this approach will therefore be a slightly increased cushion within the MVEB and no change to the safety margin projected in the maintenance plan. The approved MVEB is provided in Table D.

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

**Table: 8**  
**Dayton-Springfield area VOC emission inventory**

VOC	2002 Base	2005 Attainment	2009 Interim	2018 Maintenance	Safety Margin
Clark	19.51	18.18	17.7	17.83	
Greene	14.04	12.47	11.39	9.87	
Miami	13.32	12.12	11.05	10.28	
Montgomery	54.38	48.26	43.47	39.22	
<b>COMBINED VOC TOTAL</b>	<b>101.25</b>	<b>91.03</b>	<b>83.61</b>	<b>77.2</b>	<b>13.83</b>

**Table: 13**  
**Dayton-Springfield area NO<sub>x</sub> emission inventory**

NO <sub>x</sub>	2002 Base	2005 Attainment	2009 Interim	2018 Maintenance	Safety Margin
Clark	18.91	15.84	12.59	6.44	
Greene	25.93	22.88	19.2	15	
Miami	13.95	11.85	11.49	7.09	
Montgomery	85.69	74.80	61.72	43.32	
<b>COMBINED NO<sub>x</sub> TOTAL</b>	<b>144.48</b>	<b>125.37</b>	<b>105</b>	<b>71.85</b>	<b>53.52</b>

**Amended Table: 8**  
**Dayton-Springfield area VOC emission inventory - 7.8 RVP included**

	2002	2005	2009 (RVP)	2018 (RVP)	Safety Margin*
Clark	19.51	18.18	17.30	17.61	
Greene	14.04	12.47	11.01	9.68	
Miami	13.32	12.12	10.78	10.13	
Montgomery	54.38	48.26	42.26	38.62	
<b>TOTAL</b>	<b>101.25</b>	<b>91.03</b>	<b>81.35</b>	<b>76.04</b>	<b>14.99</b>

**Amended Table: 13**  
**Dayton-Springfield area NO<sub>x</sub> emission inventory - 7.8 RVP included**

	2002	2005	2009 (RVP)	2018 (RVP)	Safety Margin*
Clark	18.91	15.84	12.54	6.41	
Greene	25.93	22.88	19.17	14.98	
Miami	13.95	11.85	11.46	7.08	
Montgomery	85.69	74.80	61.62	43.26	
<b>TOTAL</b>	<b>144.48</b>	<b>125.37</b>	<b>104.79</b>	<b>71.73</b>	<b>53.64</b>

\* The identified "safety margins" represent the difference between the actual 2005 and 2018 projected emissions prior to the transfer of a portion of the safety margin to supplement the mobile source budgets. This supplement was originally 15 percent for both VOC and NO<sub>x</sub>. Incorporating the 7.8 RVP reductions into the mobile source emission estimates, while maintaining the previously approved budgets, actually increases the percent supplement included in the budgets. The remaining safety margin, though, actually stays the same and is 11.92 tons per day VOC and 50.72 tons per day NO<sub>x</sub>.

**Table A: Comparison of initial and amended 2018 VOC and NO<sub>x</sub> emission totals (tons/day)**

	2018 initial VOC	2018 amended VOC	2018 initial NO <sub>x</sub>	2018 amended NO <sub>x</sub>
Clark	17.83	17.61	6.44	6.41
Greene	9.87	9.68	15	14.98
Miami	10.28	10.13	7.09	7.08
Montgomery	39.22	38.62	43.32	43.26
<b>TOTAL</b>	<b>77.2</b>	<b>76.04</b>	<b>71.85</b>	<b>71.73</b>

**Table B: On-Road Emissions Comparison of initial and amended 2018 VOC and NO<sub>x</sub> (tons/day)**

	2018 initial VOC	2018 amended VOC	2018 initial NO <sub>x</sub>	2018 amended NO <sub>x</sub>
Clark	2.40	2.18	3.76	3.73
Greene	2.15	1.96	3	2.98
Miami	1.63	1.48	2.39	2.38
Montgomery	6.64	6.04	9.47	9.41
<b>TOTAL</b>	<b>12.82</b>	<b>11.66</b>	<b>18.62</b>	<b>18.5</b>

**Table C: On-Road Emissions Difference between 2018 initial and 2018 amended VOC and NO<sub>x</sub> (tons/day)**

2018	HC (tons/day)	NO <sub>x</sub> (tons/day)
Clark	0.22	0.03
Greene	0.19	0.02
Miami	0.15	0.01
Montgomery	0.6	0.06
<b>TOTAL</b>	<b>1.16</b>	<b>0.12</b>

Please note: Due to rounding, numbers may differ slightly from those in the attached documentation.

**Table D: Mobile Vehicle Emissions Budgets for the Dayton-Springfield, OH area**

	<b>2005</b>	<b>*2018</b>
VOC (tons/day)	29.19	14.73
NO <sub>x</sub> (tons/day)	63.88	21.42

\* Includes a 16 percent cushion for NO<sub>x</sub> and a 26 percent cushion for VOC.

Thank you in advance for your prompt review and approval of the Dayton redesignation package, as amended. If you have any questions concerning this submittal, please contact Sam MacDonald of my staff at (614) 728-1743.

Sincerely,



Robert Hodanbosi, Chief  
Division of Air Pollution Control

Attachments

pc: Kathleen Dagostino, U.S. EPA, R5  
Sam MacDonald, Ohio EPA  
Dave Moore, Ohio DOT  
Ana Ramirez, MVRPC