

# Early Action Ozone Reduction Strategies

Recommended by

**A Coalition of Colorado’s Local Governments  
and  
Environmental Groups<sup>1</sup>**

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The following table lists regulatory and voluntary ozone reduction strategies. **Table 1** lists regulatory measures that we recommend for immediate adoption. **Table 2** lists voluntary measures that can be implemented before the 2008 ozone season across the North Front Range (“NFR”) area. More detailed information on each measure is attached in the accompanying document, “Early Action Measures to Help Protect Human Health from Ozone Pollution.”

**Table 1: We Recommend the Following Regulatory Strategies for Immediate Adoption**

Strategy	Brief Description	Benefits	Implementation	Cost/Other Considerations
<b>Colorado Clean Car Program</b>	Adopt the Colorado low-emission vehicle II and greenhouse gas motor vehicle emission standards	<p>Immediate VOC reductions of up to 7% increasing over time<sup>2</sup></p> <p>Immediate NOx reductions of up to 12% increasing over time<sup>3</sup></p> <p>Additional co-benefits such as GHG reductions of 22% by 2012 and additional air toxic reductions of 7-19%<sup>4</sup></p>	Adoption of the clean car standards in 2008 with implementation beginning in 2010	<p>15 states have already adopted or are in the process of adopting the clean car standards, including numerous western states; CAA § 209 waiver pending review by EPA</p> <p>Cost-effective</p> <p>Consumers save money over the life of vehicle use</p> <p>Assuming fuel prices of \$3.00 a gallon, consumers will save an estimated \$20.37 to \$25.68 per month in 2016<sup>5</sup></p>

<sup>1</sup> The coalition includes the following members: Boulder County Public Health; Denver Environmental Health; City of Fort Collins Air Quality Program; Jefferson County Environmental Health; Environmental Defense; and Rocky Mountain Clean Air Action.

<sup>2</sup> NESCAUM study on emissions in MA, NY, VT and ME

<sup>3</sup> Id.

<sup>4</sup> Governor’s Vehicle Emissions Workgroup Report, State of Oregon (November 2005) pp. 24-27

<sup>5</sup> Id. at 34.

<b>Strategy</b>	<b>Brief Description</b>	<b>Benefits</b>	<b>Implementation</b>	<b>Cost/Other Considerations</b>
<b>Amendment of Regulation 11 Cutpoints for HC and VOCs</b>	Adopt EPA's Final cutpoints for HC and NOx, phased in over the next three years	<p>Colorado's current cutpoints are less protective than EPA's and do not reflect modern technology</p> <p>Strengthening cutpoints to allowable federal levels will significantly reduce HC and NOx emissions due to one of the most significant causes of ozone pollution: cars</p>	AQCC amendment of regulation 11 in early 2008 and implementation before 2008 ozone season	<p>Minimal administrative time</p> <p>May result in additional costs to the public stemming from increased repair costs</p>
<b>Green Completions for Oil and Gas Wells</b>	Reduce VOC emissions by through the use of green completions or other approved methods for all well completions, recompletions and workover activities for gas wells	Green completions are capable of yielding flowback gas recovery in excess of 90% and a net reduction of over 28,000 tpy of VOCs	State administrative adoption in early 2008 for implementation by 2008 ozone season	<p>Cost-effective</p> <p>Results in a net gain to oil and gas operators of \$8-\$9 per dollar spent on green completions</p> <p>Technology is readily available and has been demonstrated on a broad scale</p> <p>90% control is currently required in Wyoming</p> <p>Will significantly reduce methane as well as hazardous air pollutants</p>

Strategy	Brief Description	Benefits	Implementation	Cost/Other Considerations
<b>Oil and Gas Leak Inspection and Maintenance Program</b>	<p>Implement EPA New Source Performance Standards for equipment leaks (subpart KKK) for new and existing natural gas processing plants and compressor stations</p> <p>Includes enhanced monitoring, repair and replacement of leaking valves at facilities with emissions of over 20tpy VOCs or 8 tpy HAPS</p> <p>Includes a directed inspection and maintenance program for pipelines to detect leaking valves, connectors, compressor seals and lines</p>	<p>Emissions reductions estimated at approximately 2500-4000 tpy VOCs, based on EPA Natural Gas STAR pilot program</p>	<p>State administrative adoption in early 2008 for implementation by 2008 ozone season</p>	<p>Cost-effective</p> <p>Best management practice that requires little or no capital investment and has shown a payback period of less than 1 year</p> <p>Allows for recovery of methane losses and will reduce air toxics</p>
<b>Employer Trip Reduction Programs</b>	<p>Implement programs aimed at decreasing employee vehicle miles traveled for commuting through incentive based programs targeted at businesses with 100 or more employees</p> <p>Program options may include:</p> <ul style="list-style-type: none"> <li>• Parking cashout</li> <li>• On-site showers</li> <li>• Telecommuting programs</li> <li>• Vanpool leasing programs</li> </ul>	<p>Single occupancy vehicle commuting remains a significant problem and source of ozone pollution in the NFR</p> <p>It is important, therefore, to provide additional incentives to commuters to use alternative forms of transportation or ride-share</p>	<p>Administrative adoption in early 2008 for 2008 ozone season. <u>See</u> UT Admin. Code § R307-320 (2007)</p>	<p>Many employers already have some form of an employer trip reduction program to build on for smooth implementation</p> <p>Program provides employers with flexibility in devising program; costs and administrative burdens are low</p>

**Table 2: Voluntary Measures that can be Implemented by the 2008 Ozone Season**

Strategy	Brief Description	Benefits	Implementation	Cost/Other Considerations
<b>Model Idling Law</b>	<p>Adopt EPA’s model state idling law and encourage local, municipal and county governments across the Front Range to opt-in voluntarily</p> <p>Key components include:</p> <p>(1) Allows 5 minutes of idling during a 60 minute period unless necessary for health, safety, necessary repairs or other specified exemptions</p> <p>(2) Allows 30 minute idling during loading and unloading at specified load/unload facilities</p>	<p>Average idling truck emits 140 g/hr of NO<sub>x</sub>, 12 g/hr HC, 8200 g/hr CO<sub>2</sub>. 2-4x greater reductions in HC and CO from light duty vehicles</p> <p>Uniformity in idling laws throughout the NFR will greatly assist in enforcement and compliance resulting in a decrease of multiple pollutants including hydrocarbons, NO<sub>x</sub>, PM, CO, and GHG</p>	<p>ACQQ adoption of EPA model rule in 2008, with support from the RAQC; program can be implemented by local, municipal and county governments across the Front Range</p>	<p>Significant fuel savings</p>
<b>Lower Volatility Fuels</b>	<p>Adopt 7.0 psi RVP fuel on voluntary basis</p>	<p>Significant VOC reductions</p>	<p>Voluntary participation by fuel suppliers</p>	<p>Includes participation by fuel suppliers to Front Range</p>
<b>Green Certification for Lawn Care Operations</b>	<p>Create and implement green certification (such as “Green Seal”) program for lawn care companies that choose to use electric, or low-emission gasoline, lawn and garden equipment</p> <p>Develop certification criteria and public recognition program for “green” certified lawn care companies as part of RAQC’s “Ozone Aware” campaign</p> <p>Encourage procurement preferences by local governments; recognize private businesses that rely on green lawn care</p>	<p>Gasoline lawnmowers and garden equipment, on a gallon for gallon basis, discharge 93 times more ozone-forming emissions than model year 2006 cars</p> <p>Replacement of older, dirtier equipment on a large-scale (such as by lawn care companies) could significantly reduce HC emissions during the critical summer months</p>	<p>Focus on working with medium and large lawn care companies in the NFR</p>	<p>Transition to electric, low-emitting, equipment employs initial capital investment from lawn care companies</p> <p>Certified companies recoup investment costs as consumers increasingly are choosing “green” products</p> <p>Recognition by RAQC of green-certified operations will likely increase additional business for participating companies</p>