

Fuels and Mobile Source Ozone Reduction Strategies

Recommended by

**A Coalition of Colorado's Local Governments
and
Environmental Groups¹**

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The following table lists ozone reduction strategies related to fuels and mobile sources. More detailed information on each measure is attached in the accompanying document, "Fuels and Mobile Source Ozone Reduction Strategies to Help Protect Human Health from Ozone Pollution."

Table 1: Fuels Strategies

Strategy	Brief Description	Benefits	Implementation	Cost/Other Considerations
Lower Volatility Fuels	Adopt 7.0 psi RVP fuel immediately on voluntary basis followed by regulatory action as part of ozone SIP	Significant VOC reductions	Initial voluntary participation by fuel suppliers	Includes participation by fuel suppliers to Front Range
Removal of Ethanol Waiver	Removal of the 1.0 psi ethanol waiver	Ensures that all gasoline, with or without ethanol, meets 7.0 psi RVP standard Reduces VOCs	Request removal of waiver in December 2008 SIP	Still allows refiners to blend ethanol into fuel
Enhanced Stage II Vapor Recovery (Large Stations)	Implement a program to install Enhanced Stage II recovery systems at gas stations with 10 or more terminals	Captures gasoline vapors when a vehicle is being fueled and returns them to the petroleum storage tank	Inclusion in December 2008 SIP	Costs range from approximately \$17,000 for two dispensers to \$50,000 for twelve with economies of scale for multi-installation Addresses older vehicles lacking On-board Refueling Vapor Recovery (ORVR) Systems and questions about the useful life of ORVR

¹ 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.

Table 2: Mobile Source Strategies

Strategy	Brief Description	Benefits	Implementation	Cost/Other Considerations
Amendment of Regulation 11 Cutpoints for HC and VOCs	Adopt EPA’s Final cutpoints for HC and NOx, phased in over the next three years	Colorado’s current cutpoints are less protective than EPA’s and do not reflect modern technology 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	AQCC amendment of regulation 11 in early 2008 and implementation before 2008 ozone season	Minimal administrative time May result in additional costs to the public stemming from increased repair costs
Implement North Front Range I/M Program	Extend IM program to Northern Front Range Area	5.8% reduction in VOC emissions 1.2% reduction in NOx emissions	Extension of IM program as part of 2008 ozone SIP	
Colorado Clean Car Program	Adopt the Colorado low-emission vehicle II and greenhouse gas motor vehicle emission standards	Immediate VOC reductions of up to 7% increasing over time ² Immediate NOx reductions of up to 12% increasing over time ³ Additional co-benefits such as GHG reductions of 22% by 2012 and additional air toxic reductions of 7-19% ⁴	Adoption of the clean car standards in 2008 with implementation beginning in 2010	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 Cost-effective; Consumers save money over the life of vehicle use Assuming fuel prices of \$3.00 a gallon, consumers will save an estimated \$20.37 to \$25.68 per month in 2016 ⁵

² NESCAUM study on emissions in MA, NY, VT and ME

³ Id.

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

⁵ Id. at 34.

Strategy	Brief Description	Benefits	Implementation	Cost/Other Considerations
Model Idling Law and Incentive Programs	<p>Adopt EPA's model state idling law and technology incentive programs:</p> <p><u>Anti-Idling Regulation</u></p> <ol style="list-style-type: none"> 1. Allow 5 minutes of idling during a 60 minute period unless necessary for health, safety, necessary repairs or other specified exemptions 2. Allow 30 minute idling during loading and unloading at specified load/unload facilities <p><u>Voluntary Measures</u></p> <ol style="list-style-type: none"> 1. Auxiliary power units 2. Phase-change system 3. Install Phase-change system 4. Cab insulation <p><u>Financing Support</u></p> <p><u>State Diesel Retrofits</u></p>	<p>Average idling truck emits 140 g/hr of NO_x, 12 g/hr HC, 8200 g/hr CO₂. 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_x, 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>
Feebate	<p>Implement a financing mechanism to encourage the purchase of high fuel efficiency vehicles. Provide lower vehicle registration fees and a surcharge on less efficient vehicles</p>	<p>Relatively efficient way of promoting the purchase of more fuel efficient vehicles or the use of public transportation</p> <p>A national feebate program could reduce CO₂ emissions from vehicles by 20% (ACEEE, 2005)</p>	<p>Implement through the existing vehicle registration process</p>	
Evaluate Fleet Emission Standards⁶	<p>Investigate standards for fleets</p>			

⁶ We have only recently included this strategy. Accordingly, more detailed information regarding the costs and benefits of fleet emission standards is not included in this table or accompanying document.