

Status of Development of Emission Control Strategies for Ozone

Strategies Under Development for 9/2008 Proposed Ozone Action Plan (including potential SIP measures)	<i>Potential Emission Reduction</i>	Strategies Still Under Discussion for Proposed Ozone Action Plan and SIP	Strategies Deferred for Future Consideration in Ozone Planning Process
Mobile Sources			
➤ More stringent Reg. 11 I/M cutpoints (Denver area) – effective May 1, 2008	~ 1 tpd VOC, ~3 tpd NOx, ~13 tpd CO	➤ Inspection/maintenance program in North Front Range (1-2 tpd VOC, 16-18 tpd CO, ~1 tpd NOx)	➤ Federal Reformulated Gasoline or 6.0 RVP base gasoline
➤ 7.0 RVP gasoline/maintain ethanol waiver – 2010-2012 timeframe	~ 10 tpd VOC	➤ 7.8 RVP gasoline/eliminate ethanol waiver (~10 tpd VOC reduction, ~360 tpd CO increase)	➤ Mandatory high-emitter program
➤ Mandatory high-emitter <u>pilot</u> program (Denver area) – began January 1, 2008	<i>unknown at this time</i>	➤ 7.8 RVP regulatory requirement in NFR (2-3 tpd regulatory benefit)	➤ Employer-based travel reduction pilot programs
➤ Tighten up collector plate requirements for older vehicles	< 1 tpd VOC ~ 7 tpd CO	➤ Stage II vapor recovery at gasoline service stations (2-4 tpd, further diminishing over time)	➤ CA Clean Car Standards (state)
➤ Federal requirements for Stage I vapor recovery at gasoline stations in full NAA and statewide	<i>unknown at this time</i>		➤ Promote anti-idling ordinances among local governments
Oil and Gas Sources			
➤ Increase condensate tank control (98%) <ul style="list-style-type: none"> ▪ for all new/modified tanks >2 tpy by 2009 ▪ for all existing tanks >10 tpy by 2010 ▪ for all existing tanks >5 tpy by 2011 ▪ for all existing tanks >2 tpy by 2012 	~ 60-75 tpd VOC	➤ Statewide Oil & Gas regulations – new tanks and pneumatic valves, existing engine retrofits	➤ Leak detection and maintenance at exploration/production sites and compressor stations
➤ Pneumatic valves controls - require low/no bleed valves on all new and existing valves by 2009 (exemptions for safety conditions)	~ 17 tpd VOC		➤ Well completions
			➤ Drill rigs (NOx)
			➤ Miscellaneous oil & gas equipment
Stationary Source Controls			
➤ Expand Reg. 7 (VOC control requirements) to entire NAA	<i>unknown at this time</i>	➤ Minor source BACT for VOC sources in Reg. 3	➤ Additional control requirements for major/minor VOC/NOx sources
➤ Remove current exemptions for selected small sources required to file air pollution emission notices and obtain permits (Reg. 3)	<i>unknown at this time</i>	➤ Large NOx sources (power plants, boilers, cement kilns)	
➤ Require Reasonably Available Control Technology (RACT) for minor sources in NAA (Reg. 3)	<i>unknown at this time</i>	➤ Additional controls for selected major VOC sources	
Area Sources			
➤ Federal Paints/Solvents/Consumer Products Rule (effective 2009)	~ 14 tpd VOC	➤ California Paints/Solvents/Consumer Products Rule	➤ Promote municipal ozone-beneficial tree planting guidelines

Note: All strategies apply to the entire Denver/North Front Range nonattainment area (NAA) unless otherwise noted