Air Quality
State Implementation Plan Revisions
Report

Submitted pursuant to the provisions of

C.R.S. 25-7-133

Submitted to the Colorado Legislature
by the Air Quality Control Commission
January 15, 2006

Introduction

The Colorado Air Quality Control Commission appreciates the opportunity to submit the following report describing the revisions made to the air quality State Implementation Plan (SIP), pursuant to the provisions of 25-7-133, C.R.S. This report describes eight actions taken to revise the State Implementation Plan in the period from January 2005 through December 2005. This report also lists the statutory language that identifies the requirements for making the report to the legislature and the requirements of the report's content.

Requirement

25-7-133. Legislative review and approval of state implementation plans and rules - legislative declaration.

(1) Notwithstanding any other provision of law but subject to subsection (7) of this section, by January 15 of each year the commission shall certify in a report to the chairperson of the legislative council in summary form any additions or changes to elements of the state implementation plan adopted during the prior year that are to be submitted to the administrator for purposes of federal enforceability. Such report shall be written in plain, nontechnical language using words with common and everyday meaning that are understandable to the average reader. Copies of such report shall be available to the public and shall be made available to each member of the general assembly. The provisions of this section shall not apply to control measures and strategies that have been adopted and implemented by the enacting jurisdiction of a local unit of government if such measures and strategies do not result in mandatory direct costs upon any entity other than the enacting jurisdiction.

(2) (a) By the February 15 following submission of the certified report under subsection (1) of this section, any member of the general assembly may make a request in writing to the chairperson of the legislative council that the legislative council hold a hearing or hearings to review any addition or change to elements of the SIP contained in the report submitted pursuant to subsection (1) of this section. Upon receipt of such request, the chairperson of the legislative council shall forthwith schedule a hearing to conduct such review. Any review by the legislative council shall determine whether the addition or change to the SIP element accomplishes the results intended by enactment of the statutory provisions under which the addition or change to the SIP element was adopted. The legislative council, after allowing a public hearing preceded by adequate notice to the public and the commission, may recommend the introduction of a bill or bills based on the results of such review. If the legislative council does not recommend introduction of a bill under this subsection (2), the addition or change to the SIP element may be submitted under paragraph (b) of this subsection (2). Any bill recommended for consideration under this subsection (2) shall not be counted against the number of bills to which members of the general assembly are limited by law or joint rule of

the Senate and the House of Representatives. If the legislative council does not recommend the introduction of a bill under this paragraph (a), and the member or members of the general assembly that requested such review will be introducing a bill under the provisions of paragraph (c) of this subsection (2), any such member shall provide written notice to the chairperson of the legislative council within three days after the action by the legislative council not to recommend introduction of a bill. If such member or members provide such written notice, the addition or change to the SIP or any element thereof that is the subject of any such bill may not be submitted to the administrator of the federal environmental protection agency until the expiration of the addition or change to the SIP has been postponed by the general assembly acting by bill or the member or members provide written notice to the chairperson of the executive committee of the legislative council that no bill will be introduced.

(b) Unless a written request for legislative council review of an addition or change to a SIP element is submitted by the February 15 following submission of the report under subsection (1) of this section, or a notice is provided by a member or members that they are introducing a bill under paragraph (c) of this subsection (2) within three days after legislative council action not to introduce a bill under paragraph (a) of this subsection (2), all other additions or changes to a SIP element described in such report shall be submitted to the administrator for final approval and incorporation into the SIP.

(c) Until such February 15 as provided in paragraph (b) of this subsection (2), the commission may only submit an addition or change to the SIP or any element thereof, as defined in section 110 of the federal act, any rule which is a part thereof, or any revision thereto as specified in subsection (1) of this section to the administrator for conditional approval or temporary approval. If legislative council review is requested as to any addition or change to a SIP element under paragraph (a) of this subsection (2), then no such SIP, revision, rule required by the SIP or revision, or rule related to the implementation of the SIP or revision so submitted to the administrator may take effect for purposes of federal enforceability, or enforcement of any kind at the state level against any person or entity based only on the commission's general authority to adopt a SIP under section 25-7-105 (1), unless expiration of the SIP, rule required for the SIP, or addition or change to a SIP element has been postponed by the general assembly acting by bill in the same manner as provided in section 24-4-103 (8) (c) and (8) (d), C.R.S. Any member of the general assembly may introduce a bill to modify or delete all or a portion of the SIP or any rule or additions or changes to SIP elements which are a component thereof. Any bill introduced under this paragraph (c) shall not be counted against the number of bills to which members of the general assembly are limited by law or joint rule of the senate and the house of representatives. Any committee of reference of the senate or the house of representatives to which a bill introduced under this paragraph (c) is referred shall conduct as part of consideration of any such bill on the merits the review provided for under paragraph (a) of

this subsection (2). If any bill is introduced under paragraph (a) of this subsection (2) or under this paragraph (c) to postpone the expiration of any addition or change to a SIP element described in a report submitted under subsection (1) of this section or paragraph (d) of this subsection (2), and any such bill does not become law, the addition or change to a SIP element addressed in such bill may be submitted to the administrator of the federal environmental protection agency for final approval and incorporation into the SIP under paragraph (b) of this subsection (2).

State Implementation Plan Revisions

1. Vehicle Emissions Inspection Program
   On February 17, 2005 the Commission considered and adopted a proposal to discontinue the implementation of the vehicle emissions testing program in the Colorado Springs Area and in the Fort Collins/Greeley/Loveland areas. The vehicle emissions testing program for these areas consisted of a vehicle tailpipe air pollutant emissions test at two engine speeds; idle and 2500 RPM. This program was originally adopted to help return these areas to compliance with the national air quality standard for carbon monoxide. It was demonstrated during the rulemaking hearing that implementation of the vehicle emissions testing program was no longer necessary to maintain long-term compliance with the national air quality standard for carbon monoxide. Analyses presented at the rulemaking hearing demonstrated that the national standard for carbon monoxide would be maintained at least through 2015 (future years were not analyzed). The vehicle fleet turnover that has occurred in the past several years has resulted in a greater prevalence of new car engine technologies, lower carbon monoxide emissions and reduced ambient concentrations of carbon monoxide in spite of increased vehicle miles traveled in these areas. The Commission considered the impacts to ambient concentrations of the air pollutant ozone and determined that the discontinuation of the vehicle emissions testing program may result in some increase in ozone precursor emissions, but that continued vehicle fleet turnover would keep total ozone precursor emissions on a downward trend for many years into the future. The Commission adopted an implementation date for this action of January 1, 2006.

2. Regulation Number 1: Particulate Matter, Smoke, Carbon Monoxide and Sulfur Oxides
   On July 21, 2005 the Commission considered and adopted a proposal by the Air Pollution Control Division to readopt provisions previously implemented at refineries and provisions, previously in the federally enforceable State Implementation Plan, for the smoke management program regarding the application for open burning permits. The Commission also considered and adopted a proposal by the U.S. Department of

the Army to increase the flexibility to an exemption for Fort Carson training operations and the use of smokes and other obscurants in field training exercises.

The provisions applicable at refineries changes a short-term sulfur dioxide emissions standard from 0.7 pounds of sulfur dioxide emitted per barrel of oil processed back to a previously adopted standard of 0.3 pounds of sulfur dioxide emitted per barrel of oil processed and allows no more than two tons of sulfur dioxide emissions per day at refineries without implementing the best available emission control technology at the source. The provisions applicable to obtaining an open burning permit had previously been removed from the federally enforceable State Implementation Plan and moved to another regulation in order to keep all requirements for the smoke management program in a single regulation. After their submission to EPA for review and approval, EPA demonstrated that these provisions are necessary to maintain long-term compliance with the national air quality standards and believes it is necessary for the State to maintain these provisions in the federally enforceable plan. The Commission had retained the open burning permit requirements as "State-Only" requirements. Therefore, the open burning permit requirements will not be a change to the requirements, but will reestablish them as federally enforceable.

The US Department of the Army proposal adopted by the Commission broadened an exemption previously adopted by the Commission for the use of smokes and obscurants during military training exercises at the Fort Carson and Pinon Canyon maneuver sites while maintaining the same level of air quality protection as the previous provision. The Department of the Army uses the Fort Carson and Pinon Canyon maneuver site for military readiness training exercises with man-made smokes and obscurants to reproduce actual live battle conditions. The Colorado air quality management program has maintained a requirement that visible emissions, such as smokes and obscurants, greater than 20% opacity be controlled and that visible emissions be prohibited from being transported off the site at which they are generated. The Commission had previously adopted an exemption to this rule to allow the Department of the Army to use smokes and obscurants in excess of 20% opacity up to 3 kilometers from its property boundary, but that within the 3-kilometer buffer zone, no smoke or obscurants would be generated. The Department of the Army in conjunction with the U.S. EPA and the Air Pollution Control Division demonstrated that the Department of the Army could maintain compliance with the "no off-property" transport of visible emissions with the use of a 1-kilometer buffer for mechanically generated smoke (300 meters for smoke grenades) by using trained spotters with authority to stop training exercises should smoke emissions appear as if they would cross property boundaries.

3. Regulation Number 3 and the Common Provisions Regulation
   On July 21, 2005 the Commission considered and adopted a proposal to revise the requirements of the permitting regulation (Regulation Number 3) to remove an air pollutant (ethylene glycol monobutyl ether) from the list of hazardous air pollutants. This revision translates the federal action of EPA to remove the same pollutant from the federal list of hazardous air pollutants. Ethylene glycol monobutyl ether is typically used as a cleaning solvent. The emissions of this pollutant will continue to be tracked and reported in Colorado's air pollutant emission inventories as a volatile organic compound and precursor to the air pollutant ozone. The proposal adopted by the Commission also removed four pollutants from the list of volatile organic compounds in the permitting regulation and placed them on the list of non-reactive volatile organic compounds in the Common Provisions Regulation. These pollutants were determined to have a reduced chemical reactivity such that they are no longer considered strong contributors to the formation of the pollutant ozone. This revision translates the federal action to remove the same four pollutants from the federal list of volatile organic compounds. At the rulemaking hearing in which these revisions were adopted, the Commission made changes to the emissions trading provisions of the permitting regulation, however, the changes to the emissions trading provisions are not a part of the State Implementation Plan.

4. Vehicle Emissions Inspection Program
   On November 17, 2005 the Commission considered and adopted a proposal to eliminate stricter emission limitations that were determined to be unnecessary to maintain compliance with the national ambient air quality standards for the Denver metropolitan area. The stricter emission limits, scheduled to take effect on January 1, 2006, would have reduced by 50% the existing emission limits for 1996 and newer vehicles. The Commission determined that the existing tailpipe emission limits for hydrocarbons, carbon monoxide and oxides of nitrogen were adequate to maintain long-term compliance with the national air quality standards for the area. The Commission also adopted provisions to allow vehicles that are within the new vehicle, four model year test exemption period to forego an emissions test upon the change of vehicle ownership if the vehicle has more than twelve months remaining in the four model year exemption period. Previously, a test was required if the new vehicle was sold during the same time period. The change of ownership revisions were set forth by the Colorado Legislature in 2005 House Bill 1214.

5. Denver PM10 & Denver/Longmont Carbon Monoxide Maintenance Plan Revisions
   On December 15, 2005, the Commission considered and adopted a proposal by the Denver Regional Air Quality Council and Air Pollution Control Division to remove the vehicle emissions inspection program from the federally enforceable air quality

plan for demonstrating long-term compliance with the national air quality standard for the pollutant PM10 in the Denver metropolitan area and from the federally enforceable plans for demonstrating long-term compliance with the pollutant carbon monoxide in Denver metropolitan and Longmont areas. The Commission made no changes to the vehicle emissions testing program because it is relied upon in the demonstration of long-term compliance with the national air quality standard for the pollutant ozone. As proposed by the Denver Regional Air Quality Council and the Air Pollution Control Division, the Commission removed the oxygenated fuels program from the federally enforceable plan for maintaining long-term compliance with the national standard for carbon monoxide in the Denver metropolitan and Longmont areas. The proposal demonstrated that the oxygenated fuels program was no longer needed to ensure that the Denver metropolitan and Longmont areas complied with the long-term requirements to meet the national air quality standards for the pollutant carbon monoxide. The Commission retained the oxygenated fuels program as a "State-Only" requirement as set forth in the proposal.

The Commission also considered and adopted proposed limits on the allowable levels of mobile source related emissions of PM10 for the Denver metropolitan area and for carbon monoxide in the Denver metropolitan and Longmont areas. These allowable levels of mobile source related emissions are referred to as "emission budgets" and are used in the computer modeling exercises of the local governments to ensure that transportation planning activities do not adversely impact long-term compliance with the national air quality standards for these pollutants. The mobile source emission budgets are contained in the Commission's Ambient Air Quality Standards regulation. As part of the proposed changes to the Ambient Air Quality Standards regulation, the Commission adopted a proposal to allow the back and forth trading between PM10 and oxides of nitrogen that are emitted as a gas then form PM10 after chemical reactions with the ambient air to meet the emission budget for PM10 in the Denver metropolitan area. This trading scheme was reviewed and given preliminary approval by the U.S. EPA.

6. Ozone Action Plan
On December 15, 2005 the Commission considered and adopted a proposal to modify the federally enforceable plan to return the Denver metropolitan area, Greeley and Fort Collins to compliance with the "8-hour" national ambient air quality standard for the pollutant ozone. The modification adopted by the Commission requires the Air Pollution Control Division to conduct periodic assessments of the effectiveness of the emission control strategies adopted in the original Ozone Action Plan. EPA requires the assessments to be conducted to ensure the emission control strategies selected will return the area to compliance with the national standard; if it is determined that they

are not achieving the intended outcome, additional controls can be added to the plan. The revision to the plan also requires the Air Pollution Control Division to report the findings of the assessment to the U.S. EPA. While EPA requires that the assessments be conducted, there is not a schedule set forth for conducting the assessments. The requirement to make periodic assessments of emission control strategy effectiveness is a regular provision that EPA requires in all long-term plans. The inclusion of this provision was overlooked in the original adoption of the Ozone Action Plan and was identified by EPA during its review of the plan after it was submitted in 2004.

7. Smoke Management Program

   On December 15, 2005 the Commission considered and adopted a proposal to its permitting regulation; Regulation Number 3, Stationary Source Permitting and Air Pollutant Emission Notice Requirements to re-adopt provisions in the rule regarding requirements for individuals and organizations conducting open burning activities. These requirements were inadvertently deleted from the rule prior to a previous submission to EPA for inclusion in the federally enforceable portion of the Smoke Management Program. The provisions re-adopted by the Commission add the Colorado State Forest Service and the US Department of Interior, National Park Service to the list of organizations among which the cost of the program is distributed. The Commission also readopted a provision providing an exemption from the requirement to get a permit for "air curtain destructors" burning only yard waste, wood waste, clean lumber or any mixture thereof generated as a result of projects to reduce the risk of wildfire. During the same public rulemaking hearing, the Commission considered and adopted a proposal to increase the fees charged to "significant users" of prescribed fire, or landholders that burn more than 10,000 acres per year due to the increased costs of administering the program. These revisions to the fees charged for implementation of the Smoke Management Program are not required to be made federally enforceable and are not submitted for inclusion in the State Implementation Plan.

8. New Source Review Permitting

   On December 15, 2005 the Commission considered a proposal to revise its Regulation Number 3; Stationary Source Permitting and Air Pollutant Emission Notice Requirements, to repeal provisions of the rule that were invalidated or remanded to EPA through a legal challenge to the federal program. The federal program revisions were adopted on December 31, 2002 and subsequently adopted by the Commission on April 16, 2004. These provisions modified and added to the requirements for permitting large stationary industrial sources of air pollutants. The requirements for permitting large stationary industrial sources are typically referred to as "New Source Review". The December 15, 2005 action of the Commission repealed the clean unit

exclusion provisions, the pollution control project provisions and some record keeping provisions. The Clean Unit Exclusion provisions allowed a facility to forego the analysis and installation of the best available emission control technology in cases where it had previously installed this type of emission control equipment in the past ten years. The Pollution Control Project provisions allowed sources to conduct pollution control projects that would achieve a decrease in one pollutant and not require the mitigation of any corresponding increases in another pollutant. The record keeping provisions would have required sources to maintain records of emissions calculations used to determine if the source would have a reasonable possibility of causing significant emissions increases due to changes made at the source. These requirements were new program provisions that were intended to create added flexibility for stationary industrial sources. The program provisions that were adopted by the Commission on April 16, 2004 and, subsequently invalidated by the court, had not yet taken effect in Colorado.